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COMMISSION STAFF WORKING DOCUMENT

Monitoring of EU-level recommendations 2025

Accompanying the document

**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee, the Committee of the Regions**

**State of the Digital Decade 2026: Closing structural gaps and mobilising investments for
2030 and beyond**

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State of the Digital Decade 2026:

Monitoring of EU-level
recommendations 2025

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Executive summary

This staff working document reviews progress made by the European Commission and Member States between **June 2025 and April 2026 in implementing the EU-level recommendations from the 2025 State of the Digital Decade report**, as required under Article 6 of the Digital Decade Policy Programme Decision (Decision (EU) 2022/2481), which requires the Report on the Digital Decade to include information on progress regarding recommended policies, measures or actions.

The 58 recommendations have been streamlined across 21 thematic areas and assessed using a qualitative scale – no, limited, notable, or significant progress – based on a review of tangible measures and policy steps such as legislative initiatives, dedicated funding, adoption of strategies, and implementation of joint projects.

Given the cooperative nature of the Digital Decade Policy Programme, the scope covers both joint actions involving the Commission and the Member States and actions undertaken by Member States with significant EU-wide impact. Actions initiated solely by the Commission were considered only where they have a clear link to joint implementation with Member States or directly support the development of national measures.

Overall, progress reflects strong collective effort but a clear imbalance between EU-level action and national implementation. **Of the 42 consolidated recommendations assessed**, none show no progress; **19 (45.2%) indicate limited progress; 22 (52.4%) show notable progress; and only 1 (2.4%) demonstrates significant progress.** Over the past year, the EU has developed an extensive policy and regulatory framework across artificial intelligence, cybersecurity, connectivity, digital health, media freedom, and digital rights.

Significant progress has been achieved in the deployment of the EU Digital Identity Wallet, the only area to reach this assessment level. All Member States are developing national wallets ahead of the December 2026 deadline, large-scale pilots in 2025 involved over 300 organisations across more than 20 Member States, and a certification framework is being progressively established.

Notable progress is strongest in the areas of skills, technology deployment, and public services. In AI/high-performance computing (HPC), digitalisation of SMEs, uptake of advanced technologies, basic digital skills, ICT specialists, digital public services, and simplification, all recommendations assessed made notable progress.

Major investments are underway in AI and high-performance computing, including AI factories and the operational launch of the JUPITER exascale system; the European digital innovation hubs network now spans all Member States and associated countries; and progress is also visible in connectivity infrastructure, cloud and edge computing, and the strengthening of the digital-defence policy framework. In cybersecurity and electronic health records, progress is mixed, with half of the recommendations achieving notable progress and half remaining at limited.

Several structural challenges remain, as reflected in the limited progress made across key areas. Information integrity and the green and digital transitions are the most concerning, with all recommendations in both areas assessed as having made limited progress. National strategies to counter foreign information manipulation remain underdeveloped in most countries, and environmental sustainability metrics for digital infrastructure are at an early stage. Cities and regions are also lagging behind, with two thirds of the recommendations having made limited progress, reflecting uneven territorial implementation. Limited progress likewise affects quantum technologies.

Across unicorns, technological leadership, cloud and edge computing, semiconductors, protection of minors, and efficiency of budget, progress is split evenly between limited and notable, pointing to areas where momentum exists but national follow-through remains inconsistent.

Looking ahead, the EU's policy architecture is largely in place and the priority for 2026-2027 is effective implementation at Member State level, relying on updated national Digital Decade strategic road maps, new EU funding instruments, and stronger coordination through governance structures such as the Digital Decade Board. These findings underpin the 2026 state of the Digital Decade recommendations: areas with limited progress will require reinforced action, those with notable progress will focus on scaling and uptake, and the EU Digital Identity Wallet – as the sole area of significant progress – will shift towards broader adoption and integration across public and private services.

Table 1: Overview of the recommendation assessments per area

Recommendations ¹	No progress: (-)	Limited progress: 19 (45.2%)	Notable progress: 22 (52.4%)	Significant progress: 1 (2.4%)
Reinforcing technological sovereignty, digital leadership, security and competitiveness				
Technological leadership (2)	-	1 (50.0 %)	1 (50.0 %)	-
Unicorns (5)	-	4 (80.0 %)	1 (20.0 %)	-
Connectivity infrastructure (3)	-	1 (33.3 %)	2 (66.7 %)	-
Cloud and Edge Infrastructure (2)	-	1 (50.0 %)	1 (50.0 %)	-
Semiconductors (2)	-	1 (50.0 %)	1 (50.0 %)	-
Quantum technologies/HPC (1)	-	1 (100.0 %)	-	-
AI/HPC (1)	-	-	1 (100.0 %)	-
Digitalisation of SMEs (1)	-	-	1 (100.0 %)	-
Uptake of advanced technologies (3)	-	-	3 (100.0 %)	-
Cybersecurity (4)	-	2 (50.0 %)	2 (50.0 %)	-
Protecting and empowering people, reducing burdens and harnessing digitalisation for sustainability				
Basic digital skills (1)	-	-	1 (100.0 %)	-
ICT specialists (2)	-	-	2 (100.0 %)	-
Digital public services (1)	-	-	1 (100.0 %)	-
EU Digital Identity Wallet (1)	-	-	-	1 (100.0 %)
Electronic Health record (2)	-	1 (50.0 %)	1 (50.0 %)	-

¹ As part of the 2025 State of the Digital Decade report, 58 EU-level recommendations were issued. For the purpose of this assessment, these recommendations have been streamlined and, where appropriate, grouped thematically in order to reduce reporting burden and improve the clarity and consistency of the analysis. The resulting set of 42 recommendations reflects this consolidation and does not alter the substance or scope of the original recommendations.

Recommendations¹	No progress:	Limited progress:	Notable progress:	Significant progress:
	(-)	19 (45.2%)	22 (52.4%)	1 (2.4%)
Protection of minors (2)	-	1 (50.0 %)	1 (50.0 %)	-
Information integrity (2)	-	2 (100.0 %)	-	-
Green and digital (1)	-	1 (100.0 %)	-	-
Simplification (1)	-	-	1 (100.0 %)	-
Cities and regions (2)	-	2 (66.7 %)	1 (33.3 %)	-
Funding the Digital Decade				
Efficiency of budget (2)	-	1 (50.0 %)	1 (50.0 %)	-

Reinforcing technological sovereignty, digital leadership, security and competitiveness

1 Technological leadership

1.1 Member States should increase their public digital R&I expenditure, prioritising R&I investment in digital technologies that play a strategic role in the EU's competitiveness, resilience and sovereignty

In November 2024, the European Council reaffirmed its commitment to increasing R&D spending (first included in the 2002 Lisbon Strategy) by adopting the **Budapest Declaration on the New European Competitiveness Deal**. Through the declaration, Member States recognise the need to boost Europe's R&I investments, especially in disruptive technologies. For this reason, EU Member States committed to reach the target of 3% of GDP expenditure for R&I by 2030.

According to the most recent (2024) Eurostat data, the 3% objective is still some way off for several Member States; only 6 countries reached the 3% target: Sweden (3.6%), Belgium (3.4%), Austria (3.3%) and Finland (3.3%), followed by Germany (3.1%) and Denmark (3.0%). At the same time, 7 EU countries registered R&I expenditure of below or equal to 1%: Romania and Malta (0.5% each), Cyprus (0.7%), Bulgaria (0.8%), Latvia (0.9%), and Luxembourg and Slovakia (1.0%).

Overall, European R&I intensity² decreased slightly, by 0.2%, from 2.26% in 2023 to 2.24% in 2024³.

This European R&D intensity remains lower than all main international competitors, with South Korea leading the way with an estimated 4.96% in 2023, 1.52 percentage points higher than the United States (3.44% R&I intensity in 2023)⁴.

A positive trend was detected on the estimated **European government budget allocations for research and development (GBARD)**: in 2024 it stood at EUR 127 916 million, equivalent to 0.71% of EU GDP. This signals a 3.4% positive increase from 2023, when estimated GBARD stood at EUR 123 675 million⁵.

According to Eurostat, in the breakdown of GBARD by socio-economic objectives, 9.4% of government budget allocations for R&D were spent on industrial production and technology in 2024⁶. This represents a 53% increase in EU spending per inhabitant in the 'Industrial production and technology' socio-economic objective between 2014 and 2024. The EU countries that spent the most per inhabitant in this objective in 2024 were Belgium, Germany, Luxembourg and Austria (more than double the EU average). This demonstrates an upward trend in European governments' prioritisation of R&D resources towards technology.

However, as already highlighted by the Draghi report, the vast gap between European Union (EU) and international counterparts in R&D intensity comes from the source of R&D funding and, specifically, private spending on R&D.

Gross expenditure on R&D (relative to GDP) in the European government and higher education sectors (0.72%) is similar to its main international counterparts (China 0.57%, Japan 0.68%, South Korea 0.93%,

² Calculated as Member States gross domestic expenditure on R&D, identifying the portion of the economy dedicated to R&D.

³ [R&D expenditure, Eurostat, Statistics Explained](#), Eurostat, November 2025.

⁴ See note 3, page 8.

⁵ [EU governments increased R&D allocations by 3% in 2024](#), Eurostat, 29 July 2025.

⁶ [Government budget allocations for R&D \(GBARD\)](#), Eurostat, January 2026.

United States 0.64%). However, 2024 R&D expenditure by the business enterprise sector in the EU was equal to 1.49% of GDP (– 1 percentage point from 2023), whereas this share was as high as 3.93% in South Korea (2023 data), 2.72% in Japan (2023 data), 2.70% in the United States (2023 data), and 2.23% in Switzerland (2023 data).

The same trend is confirmed by the 2025 EU Industrial R&D Investment Scoreboard⁷, which looked at the growth rate of nominal R&D investment by EU-headquartered companies included in the report (among the 2 000 worldwide with the highest annual R&D spending)⁸. In 2024 the growth registered was 2.9% down from the 9.3% recorded in 2023. This was well below the US (7.8%) and Japan (7.1%).

To conclude, there have been some positive trends, especially in the budget allocated by EU governments to research and innovation. At the same time, the 3% of R&D intensity is still a hard-to-reach target for several Member States. As the data shows, the key difference remains business enterprise expenditure: those MSs with a higher R&D intensity also recorded higher shares of business enterprise expenditure on R&D relative to GDP⁹. To reach the 3% target, Member States would need to facilitate private companies' R&D expenditure, while continuing to increase government support for R&D, which would be essential to encourage private investments and direct them towards common strategic priorities.

SUMMARY ASSESSMENT: *Limited progress*

⁷ [The 2025 EU Industrial R&D Investment Scoreboard, IRI](#), European Commission, 22 December 2025.

⁸ The minimum R&D investment needed to enter the scoreboard ranking this year was EUR 63 million.

⁹ Sweden (2.61%), Belgium (2.43%), Austria (2.25%), Finland (2.19%), Germany (2.14%), and Denmark (1.89%).

1.2 Member States should strengthen their support to innovative actors, including start-ups proposing disruptive digital applications and services. (b) Member States should boost the development of digital infrastructures that contribute to societal resilience in crisis contexts. (c) Member States should better connect the defence and digital innovation communities, foster a new mindset towards preparedness and security culture across the digital sector, identify synergies between defence and digital programmes, investments, and applications.

The period under review has seen a significant acceleration in EU-level policy activity at the intersection of digital innovation and defence, driven by deteriorating geopolitical conditions and growing recognition of the role of technological edge in deterrence. Evidence of systematic national-level action specifically connecting digital and defence innovation communities remains, however, limited, and Member States have yet to provide comprehensive reporting on dedicated digital-defence strategies or measures.

The **Defence Readiness Road Map 2030** (16 October 2025) identified innovation and dual-use technologies as critical enablers and established cyber, AI and electronic warfare as one of nine priority capability areas, calling on Member States to form capability coalitions across all nine areas by Q1 2026. Austria took the lead on the capability coalition on AI, which is a concrete example of Member State ownership in the digital-defence space. The following month, the **Defence Industry Transformation Road Map** (19 November 2025) reinforced this direction, framing software-defined warfare, dual-use spin-in, and engagement with new defence actors (particularly SMEs and start-ups) as cornerstones of Europe's defence industrial transformation.

On the legislative side, the **mid-term review of cohesion policy** (October 2025) opened the possibility of channelling unused cohesion funds into defence and security projects with 100% EU cofinancing. The **Regulation on incentivising defence-related investments in the EU budget** (December 2025) broadened the scope of the Digital Europe Programme to dual-use across all objectives, extended the EIC Accelerator to dual-use and defence companies, and opened the STEP Scale-Up Scheme to defence, creating structured pathways for digital and deep tech actors to access funding.

At programme level, **SAFE** (adopted May 2025) includes artificial intelligence and electronic warfare among eligible procurement categories. Of the 19 Member States that applied for financial assistance, the national investment plans of eight were approved by the Council in early 2026, covering EUR 38 billion of the EUR 150 billion available, with first disbursements expected in the course of 2026. The **European Defence Industry Programme (EDIP)**, adopted at the end of 2025, establishes a framework to strengthen the defence industrial base. From March 2026 its first work programme is expected to contain measures relevant to digital and innovative defence actors. Within the **European Defence Fund**, the EU Defence Innovation Scheme accounts for approximately 23% of the 2026 work programme and is the primary instrument through which the Commission supports innovative digital-defence actors.

Most recently, the Commission tabled the **AGILE programme proposal** (25 March 2026), designed to provide rapid and flexible support to new defence actors (particularly SMEs, including those transitioning from dual-use) to develop and deploy mission-driven technologies in response to urgent needs identified by Member States.

Progress at EU institutional level has been substantial: the policy architecture linking innovation support, programme synergies and rapid response mechanisms is now largely in place. Key gaps remain, however. National-level reporting on digital-defence strategies and on the effective uptake of the synergies created by recent regulatory changes is limited, as these have still to be implemented in the relevant work programmes of the European Innovation Council (EIC) and the Digital Europe Programme (DEP). The structural separation between civilian digital and defence communities persists, and the promotion of security culture across the digital sector remains difficult to assess in the absence of systematic Member State reporting. Translating the EU-level enabling framework into concrete and measurable national actions remains the primary challenge for the period ahead.

SUMMARY ASSESSMENT: *Notable progress*

2 Unicorns

2.1 Member States should support coordinated action across the single market to address financial, regulatory, and administrative barriers and mobilise public policies tackling a comprehensive range of domains.

Progress on **administrative barriers** by Member States is systematically measured by the European Startup Nations Alliance (ESNA) through its tracking of Member State action to address the ‘Fast startup creation, smooth market entry’ and ‘Digital first’ startup nations standards (SNSs) monitored by ESNA. These standards set goals of minimising, for example, administrative barriers and costs faced by entrepreneurs when establishing a start-up while maximising the use of digital services that start-ups can use to interact with public sector actors.

By the end of 2025, the ‘Fast startup creation, smooth market entry’ SNS had reached a 77% implementation rate across Member States, up from 70% in 2024. Businesses can be set up in one day for less than EUR 100 in five countries. While no country has yet reached full implementation, Malta (98%), Netherlands (96%) and Spain (94%) are close to completing this standard. For example, in 2025 over 500 companies were able to register following the introduction in December 2024 of a new legal form – the variable capital company (VCC) – by the Bulgarian authorities. Also in Czechia, full digitalisation of the trade licensing register cut out redundant steps in company registration.

In 2025 the ‘Digital first’ SNS reached a 75% implementation rate across Member States, a 4 percentage-point increase from 2024. Businesses can be set up in one day for less than EUR 100 in five countries. Two Member States (LU, MT) achieved full implementation, while seven others are at 95%, so close to completing this standard. One example is Czechia’s ‘eDoklady’ mobile app, which provides digital official documents.

Financial barriers are addressed by the ‘Access to finance’ startup nations standard, which reached a 77% implementation rate across Member States in 2025, up from 72% in 2024. Examples of new initiatives in this area are presented in this report in the section on the analysis of the recommendation that ‘Member States should increase the amount and diversity of private capital available for co-investing in high-growth start-ups’.

Regulatory barriers are reflected by the ‘Innovation of regulation’ startup nations standard, which is also monitored by ESNA. By contrast, progress in implementing the ‘Innovation in regulation’ standard had reached only 55% by the end of 2025. This is the lowest level of implementation of all eight startup nations standards, confirming that this is an area where Member States need to double down. Examples of new initiatives of relevance to this standard include the Irish government’s commitment to systematically apply SME testing in all new legislation; in Belgium, the Flemish government’s ‘Regelrecht’ aims to reduce regulatory pressure through public consultation with citizens, businesses and other stakeholders; in Germany, a draft ‘Regulatory Sandboxes Act’ was adopted by the Federal Cabinet. However, by the end of 2025, it had still not been finalised.

SUMMARY ASSESSMENT: *Limited progress*

2.2 Member States should promote tech transfer, facilitate the creation of spin-offs from universities and research centres.

Progress in tech transfer is systematically measured by the European Startup Nations Alliance (ESNA) through its 'Existence of policies for smooth tech transfer' indicator. The indicator – which includes a broad scope of institutional initiatives, including tech transfer offices, dedicated funding schemes, and legislation aimed at reforming intellectual property ownership – revealed an average score among countries surveyed in 2025 of 96%, a 19-percentage point improvement on 2024. The progress was driven primarily by Bulgaria, Estonia, and Poland (which improved from 0% to 100%) and Germany and Italy, which doubled their score from 50% to full implementation. Romania showed a negative trend, decreasing from full implementation in 2024 to 0% in 2025.

Nevertheless, there is significant diversity in approaches. Some Member States focus on a university network of tech transfer offices to manage IP rights and spin-off activities, while others have implemented legislative reforms to clarify IP ownership of publicly funded research. Some have established funding programmes for early-stage start-ups and institutional support for academic research transitioning into entrepreneurship.

2025 saw some Member States adopt reforms aimed at facilitating technology transfer and spin-off creation. For example, in 2025 Poland launched 'Science4Business', a programme aimed at enhancing synergies/cooperation between scientific research and business stakeholders that will receive PLN 296.7 million in funding between now and 2029.

Other examples include:

- Harmonisation by the Netherlands of its IP framework, with Dutch universities updating the national IP deal term principles to provide transparent, fair, and market-aligned agreements between researchers, universities, and enterprises.
- The launch by Germany of its High-Tech Agenda, which aims to strengthen the ability to translate research innovation into commercial use cases. For example, AI spin-offs are supported through EXIST, a federal programme that provides funding for academics to develop and commercialise their research.

In parallel, Member States should continue working with ESNA to compare the IP policy and spin-off frameworks they have in place with other Member States, to see if they are aligned with best policy practices, and update their frameworks accordingly.

SUMMARY ASSESSMENT: <i>Notable progress</i>
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2.3 Member States should mobilise public procurement budget to procure innovative products and services from start-ups.

Public procurement remains an important lever in driving innovation across the EU. Annually, Member States spend 14% of their GDP on goods and services, creating a powerful mechanism for stimulating demand for innovative products and services from start-ups while improving the quality of public services. Nonetheless, only 10% of public procurement funds across the EU are designated for innovative products and services, compared to 20% in the United States and 25% in South Korea¹⁰. According to the 2025 EU Startup Nations Standards Report¹¹, the average score for the ‘existence of incentives for public buyers and procurement services to procure innovation from startups’ indicator among the countries surveyed was 83%, up 26% year-on-year. These include innovation partnerships, pre-commercial procurement, competitive dialogues, design contests and other measures designed to promote innovation procurement. Czechia, Italy and Slovenia, in particular, have managed to raise their score from 0% to 100% since 2024. Currently, 18 Member States explicitly promote public procurement from start-ups, up from 11 in 2024.

In the Netherlands, under the Dutch Startup in Residence Intergov programme, civil servants and entrepreneurs co-create solutions to pressing challenges facing public administrations. The programme offers simplified innovative tenders worth EUR 25 000, with the potential for continued collaboration, thereby creating a path for sustainable growth through procurement.

Germany, under its High-Tech Agenda, has committed to streamlining innovative public procurement procedures and to leveraging the dynamic capabilities of start-ups to drive economic growth and improve public service quality. For instance, the agenda proposes a special direct order value threshold of EUR 100 000 to reduce the administrative burden on start-ups.

In its 2026 budget, the Spanish Centre for the Development of Industrial Technology¹² (CDTI) allocated EUR 75 million for innovative public procurement, including pre-commercial procurement for high-tech prototypes and demonstrators across digital health, autonomous mobility, clean energy, and food security.

A major reason for the slow uptake of innovation procurement in the public sector in Europe is the lack of strategic planning. The 2015 opinion¹³ of the European Research Area and Innovation Committee (ERAC) – an advisory committee of the Council of the European Union – to create EU and national action plans for innovation procurement has not yet been fully implemented. EU-wide benchmarking shows that research and innovation programme support for innovation procurement is growing but still limited. Only a few Member States have incorporated innovation procurement as a strategic objective in their R&I policies. Existing procurement frameworks often remain rigid, risk-

¹⁰ [Commission staff working document – The EU Startup and Scaleup Strategy: Choose Europe to start and scale](#), European Commission, SWD(2025) 138 final, 28 May 2025.

¹¹ [EU Startup Nations Standards Report 2025](#), Europe Startup Nations Alliance (ESNA), February 2026.

¹² [From science to market: CDTI Innovation will allocate up to EUR 1.817 million in 2026 in grants, venture capital investment, public procurement and soft loans for business R&D&I, transfer and scaling](#), CDTI Innovación (Ministry of Science, Innovation and Universities, Spain), 16 February 2026.

¹³ [Commission staff working document – The EU Startup and Scaleup Strategy: Choose Europe to start and scale](#), European Commission, SWD(2025) 138 final, 28 May 2025.

averse, and burdensome, posing significant barriers to the participation of emerging firms. Recent research highlights issues such as insufficient use of innovation-friendly criteria, and limited procurement literacy among start-ups as bottlenecks. A lack of financial incentives for public buyers is another reason holding back innovation procurement in Europe. Existing solutions are typically cheaper than innovative ones, as the latter are not yet produced at large scale¹⁴¹⁵¹⁶. Furthermore, procurement procedures frequently do not accommodate emerging technologies, leading to exclusionary tender conditions that reinforce the status quo. Overspecification in tender documents remains a significant barrier to innovation. Public buyers often reuse specifications from previous procurements, which tend to favour established solutions. By prescribing specific outcomes rather than defining the problem to be solved, such practices limit the ability of suppliers with innovative alternatives to compete.

Identifying innovation procurement opportunities remains challenging for innovative companies. Although public buyers can flag relevant tenders as ‘innovation procurements’, this option is underused in practice, making it particularly difficult for smaller firms to navigate the vast volume of annual tender notices. Public buyers often design their calls for tenders without fully exploring market capabilities, particularly regarding innovative solutions.

SUMMARY ASSESSMENT: *Limited progress*

¹⁴ Suresh, K. (2022), ‘Analysing Incentive Issues and Failures in Innovation Procurement’, *SSRN Electronic Journal*.

¹⁵ Manika, S. (2020), ‘Mechanisms for innovative-driven solutions in European Smart Cities’, *Smart Cities*, 3(2), pp. 183-199.

¹⁶ Edler, J. & Georghiou, L. (2007), ‘Public procurement and innovation – Resurrecting the demand side’, *Research Policy*, 36(7), pp. 949-963.

2.4 Member States should increase the amount and diversity of private capital available for co-investing in high-growth start-ups.

In 2025 several actions were initiated or reinforced by Member States, demonstrating commitment and progress. Although implementation is ongoing, progress has been made and measures adopted.

Several new measures shaped in 2025 saw Member State authorities partner with the European Investment Fund (EIF), part of the European Investment Bank (EIB) Group. For example, in 2025 the German Ministry of Economic Affairs and the EIF worked on improving access to professional venture capital and growth funds for technology-driven start-ups. The result (announced in January 2026) was the investment of an additional EUR 1.6 billion through the long-standing EIF German Equity programme. At the same time, the setup of the Growth Fund II (Wachstumsfonds II), the successor of the Growth Fund Germany (Wachstumsfonds Deutschland), was prepared. Both Wachstumstumsfonds include private investors on the fund-of-fund-level.

In November 2025 the EIB Group and the state-owned Polish development fund started working together on a new digital platform that helps innovative projects access funding. The EIF will also allocate PLN 500 million to the new Future Tech Poland fund.

In 2025 Romania's state-owned development bank, BID, committed EUR 20 million¹⁷ to the Three Seas Initiative (3SI) Innovation Fund, taking the 3SI fund – which is designed to catalyse investment in growth-stage companies across central and eastern Europe – to the EUR 100 million milestone. Romania's contribution joined those of Czechia, Croatia, Hungary and Poland. The EIF matches national contributions and aims to mobilise at least EUR 1 billion for private equity, venture capital, and private credit investments.

Luxembourg introduced a tax credit of 20% on investments made by individual taxpayers in eligible start-up entities, up to a maximum of EUR 100 000 per year¹⁸.

Moreover, some Member States continued to implement previously established measures. For example, France's TIBI initiative (a multiannual programme to channel private savings into technological innovation) announced in Sept 2025¹⁹ that it was aiming to bring total capital allocated by the initiative to more than EUR 15 billion by the end of 2026.

Although there has been progress in 2025, the reality remains that later-stage European investments are increasingly dominated by US venture capital (VC) firms. For example, in 2024-2025, 54% of lead investors in late-stage VC investments (USD 100 million+) in European AI start-ups were from American investors. Against that background, in 2025 the European Commission launched the Scaleup Europe Fund, which will invest only in EUR 100 million+ investment rounds. However, EU-level action alone in this area is not enough. Member States should take action and increase the European capital available for late-stage investment rounds.

¹⁷ [Romanian Investment and Development Bank \(BID\) joins EIF-led fund to boost CEEs companies](#), European Investment Fund, 14 November 2025.

¹⁸ [New in 2026](#), Luxembourg Government, 29 December 2025.

¹⁹ [Initiative TIBI: un objectif réhaussé à 15 milliards d'euros](#), French Ministry of Economy and Finances, 16 September 2025.

It is noteworthy that in December 2025 the EIB announced²⁰ ETCl 2.0, an expansion of the European Tech Champions Initiative, with the EIF and EIB committing a total of EUR 1.25 billion of their own funds to ETCl 2.0. While several Member States (BE, DE, ES, FR, IT and NL) are already contributing to ETCl, there remains a significant opportunity for the majority of Member States to join the reinforced ETCl 2.0 initiative.

SUMMARY ASSESSMENT: *Limited progress*

²⁰ [EIB Group renews record-high financing target of €100 billion to boost Europe's strategic and technological independence](#), European Investment Bank, 11 December 2025.

2.5 Member States should identify and support tech innovators in their countries (e.g. identified through the innovation radar, or EIC or the Strategic Technologies for Europe Platform Seal of Excellence).

In 2025 a number of relevant actions were initiated at Member State level to support tech innovators in their countries that had received previous recognition at EU level (e.g. EIC or STEP Seal of Excellence holders). This shows that some progress has been made with respect to this policy recommendation. However, not all Member States have pursued such opportunities. Moreover, countries that launched initiatives often did not target all types of Seal of Excellence (SoE) holders.

Countries that launched national or regional funding opportunities for Seal of Excellence holders in 2025 include Belgium, Bulgaria, Spain, Italy and Portugal. Bulgaria and Slovakia also launched initiatives that used structural funds and Recovery and Resilience Facility (RRF) funds for EIC Seal of Excellence holders. Lithuania chose to transfer such funds to the European Commission and empowered the Commission to distribute this funding to Lithuanian EIC Seal of Excellence holders.

In 2025 the European Commission issued STEP seals to over 100 European digital innovation hubs that successfully passed the evaluation, regardless of whether or not they were selected for funding by the EU. Due to the strategic technology aspect of these hubs, the STEP Seal presents new opportunities for Member States to identify and fund these hubs. Bulgaria and Romania are notable in promoting such opportunities for such STEP holders in their territories.

In 2026 the SoE landscape will expand further with the first ‘SoE for consortia’ being awarded under the EIC Transition programme.

Member State authorities have not adequately leveraged the growing store of data and intelligence available via the [Commission’s Innovation Radar platform](#). This platform – which in 2025 passed the milestone of 16 000 EU-funded innovations – offers a rich, sophisticated and growing dataset of EU innovators who have developed cutting-edge innovations. These are proven innovators with real potential to enrich national innovation programmes.

In Bulgaria projects that received an SoE under EIC Accelerator from 2024 onwards are supported by a similar national scheme under the European Regional Development Fund (ERDF) programme ‘Research, Innovation and Digitalisation for Smart Transformation’ 2021-2027 (PRIDST). In 2025 the Veneto region in Italy opened a call to support Seal of Excellence holders based in the region. In Portugal a support scheme for holders of the EIC Seal of Excellence (SoE) was launched under the multiannual funding framework ‘Portugal 2030’ and ran up to the end of October 2025. Additionally, in 2025 Romanian and Bulgarian national funding authorities started to identify digital innovation hubs that have a STEP Seal of Excellence with a view to providing hubs 100% funded by national programmes. The first hubs to be launched under this scheme are expected to start operating in 2026.

Although Member States have taken some actions, they have been sporadic and – in many cases – time-limited. It appears that some actions that ended before 2025 were not renewed. Examples include Spain (support for EIC Accelerator SoEs), Poland (under the European Funds for a Modern

Economy, FENG) and Bulgaria (recovery and resilience plan support for innovative SMEs that hold an SoE).

Moreover, many Member States have not engaged with the opportunities presented by SoE holders in their country.

This is a recommendation where there is considerable opportunity for quick gains and true synergies between EU funding actions and national and regional initiatives seeking to support the best innovators.

Member States are also recommended always to provide the Commission with details of national/regional SoE holders they have supported. This opens up the opportunity to understand how the Seal of Excellence programme benefits Member States and adapt it accordingly. It also presents the opportunity for the Commission to spotlight the innovative excellence being supported across the Union.

SUMMARY ASSESSMENT: <i>Limited progress</i>
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3 Connectivity infrastructure

3.1 Member States should introduce targeted measures to accelerate fibre roll-out and take-up by end users.

In 2025 several relevant actions were initiated and continued at Member State level, demonstrating sustained commitment and tangible progress with respect to this policy recommendation. Although implementation is ongoing, significant progress has been made and the measures adopted indicate that there are structured efforts and steps towards achieving the stated objectives.

In most EU Member States, previously established support measures continued to operate in 2025.

On the basis of Chapter III on “New public funding fibre roll out in 2025” of the draft study ‘Public funding support for 5G roll-out in EU Member States 2026 edition v2’ prepared by the 5G for Smart Communities – Coordination and Support Action platform (5GSC CSA), this is the case, for example, in Czechia, Cyprus, Poland and Sweden. In Sweden, for instance, a multiannual programme was already in operation, with dedicated allocations for 2025 and 2026. In Poland, the 4th call for proposals under the National Recovery and Resilience Plan (investment C1.1.1) continued to channel public funding into broadband infrastructure development.

The year 2027 will be the final year for new applications under the programme, while projects approved in that year are expected to be completed by 2030.

New measures were launched in 2025 in six Member States (Bulgaria, Estonia, France, Italy, Hungary and Slovenia). Most of these measures introduced new funding schemes supported by ERDF cofinancing or the RRF budget. The target group, the beneficiaries of the deployment of very high-capacity networks providing internet access, are located primarily in rural and sparsely populated areas. However, there are also cases, e.g. in France, where complex fibre-optic connection works carried out on private property were extended from users of 3 000 municipalities to a nationwide scheme in few months and remained open to private individuals and small businesses, or in Slovenia, where the intention is to upgrade or expand existing networks.

Bulgaria (an EUR 200 million project supported by the RRF) focused on large-scale deployment of digital infrastructure. Italy allocated EUR 95 million under its national complementary plan for the development of a new fibre-optic backhaul network and EUR 733 million via its National Connectivity Fund, a facility-type instrument, to stimulate private investment and improve access to financing in the ultra-broadband network infrastructure sector. Estonia (EUR 45 million supported by the ERDF) focused on high-speed access networks in rural areas.

SUMMARY ASSESSMENT: *Notable progress*

3.2 Member States should use regulatory and financing measures to incentivise the densification of 5G networks and accelerate deployment of secure 5G stand-alone networks, including by fostering cross-border collaborations and promoting innovative use cases;

In 2025 several relevant actions were initiated and continued at Member State and EU level, demonstrating sustained commitment and limited progress with respect to this policy recommendation.

In recent years, Member States have been able to benefit from EU funding via CEF Digital (the digital part of the Connecting Europe Facility). The 2025 CEF Digital Call 4 saw exceptional participation from eligible entities across the EU Member States. To date, four calls for proposals have resulted in a project portfolio of 47 projects for 5G for smart communities and 31 for 5G corridors, 13 inception studies and 18 works projects, corresponding to a total of EUR 331 million in grants, EUR 153 million of it for 5G corridors. Many projects are cross-border and involve multiple countries, regions and local communities. Most projects bundle 5G stand-alone with edge cloud capacities, leveraging 5G technology to enhance the quality of services. For smart communities, the four calls have covered 20 Member States in total. In Call 4 (2025) the Commission observed a further increase in geographical diversity, e.g. Ireland. For 5G corridors, a broad and geographically balanced footprint has been achieved on the basis of the four calls, with a total of 22 cross-border sections of corridors covered and an overall combined length of 9 000 km of 5G corridors, road, rail and waterways to be achieved once all 18 works projects have been completed.

In addition to this, Member States have also made significant progress via other types of funding schemes. On the basis of the draft Study 'Public funding support for 5G roll-out in EU Member States 2026 edition v2' prepared by the 5GSC CSA, Member States' 5G-related public investment aggregated data for 2022-2025 amounted to at least EUR 2.91 billion. Public support for 5G in the EU was driven primarily by the objective of supporting infrastructure deployment. The largest funding volumes were concentrated in a limited number of Member States and were financed predominantly through the Recovery and Resilience Facility (RRF). At the same time, the data shows that public intervention was not confined to network deployment alone. In several countries, support measures also aimed at fostering the development of 5G use cases, thereby linking infrastructure investment to broader objectives relating to innovation, experimentation and market uptake. It can be observed that public funding remains highly concentrated geographically. Italy and Spain account for by far the largest identified funding envelopes, each mobilising more than EUR 1 billion over the period concerned.

However, across the 27 schemes identified in 13 Member States, variations can be observed in the technological orientation of the measures, e.g. explicit targeting of 5G stand-alone (SA) remains limited. Only two measures were reported as supporting 5G SA exclusively, suggesting that most schemes continue to support deployment in broader technological terms rather than prioritising 5G SA-specific roll-out. Current deployment data shows limited progress on 5G SA specifically, and it should be noted that while public financing plays an important catalytic and incentive role, the bulk of investment required to achieve widespread 5G SA deployment is expected to come from the private sector.

3.3 Member States should support coordinated action for planning and developing a reliable, sovereign and resilient network of digital infrastructures across the EU and with international partner countries.

Recommendation (EU) 2024/779 highlights the need to strengthen the security and resilience of submarine cable infrastructures through various measures, on both governance and funding.

As described in the Annex I to the 2026 State of the Digital Decade Report, in order to follow up on the Recommendation, a Commission expert group composed of Member State authorities and the European Agency for Cybersecurity (ENISA) developed an EU risk assessment (October 2025) as well as a Cable Security Toolbox of mitigating measures and a list of priority areas for public investment – the Cable Projects of European Interest (February 2026). While this represents notable progress achieved with Member State participation, the Cable Security Toolbox and the Cable Projects of European Interest can be implemented only over the medium term. Significant efforts remain necessary to achieve reliable and sovereign networks, implying mobilisation of strategic investments in critical backbone infrastructure combining EU and MS resources, addressing inter alia supply chain risks and regulatory issues reported.

Moreover, the Council Conclusions on reliable and resilience connectivity of 6 June 2025 required a comprehensive EU strategic approach to the development of a reliable and resilient communications network infrastructure, comprising submarine, terrestrial and non-terrestrial networks and coordinated action between the EU and MSs to enhance security, resilience, and international partnerships.

This strategic imperative is already reflected in the strong and growing demand for EU support for digital infrastructure projects. Continuing the trend observed in recent years, the 2025 CEF Digital Call 4 saw exceptional participation from eligible entities across the EU Member States. The three topics (digital global gateways, 5G for smart communities, and 5G corridors) were significantly oversubscribed, setting a new record for demand compared to previous CEF Digital calls.

The digital global gateways topic was significantly subscribed and saw the highest demand, receiving 41 eligible proposals, requesting EUR 512 million (EUR 348 million more than the available topic budget). This high oversubscription ensures the high quality and EU added value of proposals selected, though several worthy projects could not be funded due to limited resources.

The intense competition highlights the growing importance of the CEF Digital fund, the strategic priority that Member States give to digital infrastructures and the urgent need to scale up funding to support more high-impact initiatives. It also indicates that while some funding for submarine cables is available via national budgets or other EU instruments, such as the European Regional Development Fund and the Recovery and Resilience Facility, CEF Digital remains the main funding instrument for such projects which are, by definition, projects with high cross-border impact and EU added value.

Beyond funding, the Body of European Regulators for Electronic Communications (BEREC) has reviewed the national regulatory efforts on submarine cable connectivity in its BoR(25) 171 report²¹. The overview stresses that public funding instruments are vital for assuring connectivity, especially for replacing the current submarine cable systems reaching the end of their lifecycle and when that submarine cables serve sparsely populated remote areas or coastal villages, where not only the investment costs, but also the maintenance and operation costs, are not justified by future revenues. While issues concerning resilience and security are reported to receive increased attention at national level too, the focus of the overview is on the measures to preserve competition, with a minority of countries (Croatia, France, Greece, Iceland, Portugal, and Spain) reporting having carried out market analyses regarding or including domestic submarine cables leading to regulation of submarine cables with designation of an operator with significant market power. Of those six, four (Croatia, Greece, Iceland, Portugal) are still regulating, and two (France and Spain) deregulated in 2017 and 2024 respectively, but still monitor market trends. The report does not, however, examine permit granting or other potential deployment or upgrade hurdles.

SUMMARY ASSESSMENT: *Notable progress*

²¹ [BoR \(25\) 171 BEREC Report on domestic submarine cables connectivity in Europe 1.pdf](#).

4 Cloud and Edge Infrastructure

4.1 Member States should support the deployment of secure and sustainable cloud and edge nodes and focus national efforts on infrastructure-targeted investments and strategies to ensure that businesses have access to the sovereign compute infrastructure required for serving their cloud and AI needs

Several relevant actions have been undertaken at Member State level, demonstrating clear engagement and progress with respect to this policy recommendation. Although implementation is ongoing, the measures adopted indicate that there are structured efforts and steps towards achieving the stated objectives. If edge deployment maintains its current rate of progress, projections indicate that the EU will meet its goal of deploying 10 000 climate-neutral and highly secure edge nodes by 2028.

The Edge Observatory reported that 7 451 neutral and highly secure edge nodes were operating across the EU. Edge node distribution across the EU remains varied. By 2025, Germany had the highest number of carbon-neutral and secure on-premises edge nodes, totalling 1 771, followed by France with 737, Italy with 629, Poland with 536, and Spain with 529. Germany also leads the way in public edge node deployment, closely followed by France and the Netherlands. Together, these three countries account for 51% of all public edge nodes in the EU.

A notable trend is the concentration of edge nodes in densely populated metropolitan areas, due to increased demand and infrastructure requirements, which correlates with regions of higher GDP and larger populations. Manufacturing (accounting for over 50% of nodes), retail and transport sectors are key players in advancing edge computing. Furthermore, for 25% of organisations, AI workloads are the main focus of their edge computing.

Beyond this, and in connection with cloud and AI infrastructure deployment, there is evidence, as of March/April 2026, that over the last year Member States have focused their efforts on infrastructure-targeted investments, and especially strategies to ensure adequate access to compute infrastructure in their national territory. The **French** government has published a list of sites considered favourable for data centre implantation to help attract infrastructure investment and compete at European level²². Similarly, **Italy** has developed a strategy for attracting investment in data centres²³, as well as an experimental initiative on Edge Cloud Computing (ECC) within telecom operators' access networks to enable low-latency services and support distributed application models across the territory; the objective is to assess the technical and economic benefits of deploying ECC platforms closer to end users²⁴. **Finland** has also recently developed a national road map for data centres²⁵, while Spain has developed a national strategy for IA, with measures on the deployment of data centres²⁶. The Netherlands had already developed a road map for the growth of data centres in the country in 2019²⁷.

²² [Ministères économiques et financiers, Implantation de centres de données, 2025.](#)

²³ [Strategia per l'attrazione in Italia degli investimenti industriali esteri in data center](#), Italian Ministry of Enterprises, 2025.

²⁴ <https://innovazione.gov.it/notizie/articoli/edge-cloud-computing-sperimentazioni-per-migliorare-qualita-e-prestazioni-dei-servizi-digitali/>, Italian Department for Digital Transformation, 2026

²⁵ [National Roadmap for Data Centres: Rapporteur's Report](#), Finnish Government, 4 November 2025.

²⁶ [Estrategia de Inteligencia Artificial 2024](#), Spanish Ministry for Digital Transformation, 2024.

²⁷ [Spatial Strategy for Data Centres](#), Ministry of the Interior and Kingdom Relations (Netherlands), March 2019.

In this respect, implementation has advanced, though not yet comprehensively across all Member States. Plans for the upcoming months are scheduled for a few Member States, which indicates the continued momentum. The **German** government is developing a national strategy to promote the operation and settlement of data centres²⁸. **Portugal** is also finalising its data centre strategy for AI development²⁹.

SUMMARY ASSESSMENT: *Notable progress*

²⁸ [National Data Centre Strategy](#), German Federal Ministry for Digital and State Modernisation, 18 March 2026.

²⁹ [Governo anuncia estratégia nacional de centros de dados para alimentar procura por Inteligência Artificial](#), Expresso, 3 November 2025.

4.2 (a) Member States should closely work with the Commission on the upcoming Cloud and AI Development Act to triple EU data centre capacity within five to seven years and bringing it to a level that matches the demands of EU businesses and administrations by 2035. This is an objective that could become a new Digital Decade target. (b) Member States should engage fully with the Commission in the discussion on the study supporting the Cloud and AI Development Act to establish methods for assessing and tracking the EU cloud compute infrastructure capacity.

The first part, Part (a), of this recommendation is aligned with the ambitions of the AI Continent Action Plan to triple EU data centre capacity within the next five to seven years and to make it match the demand of EU businesses and public administrations by 2035. On the basis of the review of measures and policy steps, we assess the overall progress made on this recommendation to be limited. Although good collaboration with Member States has been established with respect to policy development, the concrete implementation of this recommendation requires further engagement in the following months. Since this recommendation was first made, the Commission and Member States have initiated discussions, during bilateral and institutional meetings, on the proposal for a Cloud and AI Development Act, which will provide a clear legislative framework to enhance EU data centre infrastructure and measures to achieve the recommended objective. Nevertheless, the increase in data centre capacity to meet the needs of businesses and public administrations will require significant investment and effort from Member States in the years to come, and the current pace of development will not allow this goal to be met.

With respect to Part (b), the second part of this recommendation, we consider that limited progress has been made on Member States' engagement to define methods for assessing the EU cloud compute infrastructure capacity as part of the study supporting the Cloud and AI Development Act. This is due to the fact that public authorities have engaged with the study mainly on public sector demand trends and future requirements and accelerated permitting procedures. Even though the two workshops organised in the context of the study were well attended by national representatives to discuss and validate the findings of the analysis, including the methodology for assessing EU compute capacity, further work will be needed to finalise the proposed methods. This will ensure that national capacity is accurately reflected in any future monitoring exercise. The study provided a strong initial foundation and methodology that can be reused to establish a robust tracking system, but its implementation will require continued collaboration and commitment from Member States and the Commission.

Overall, while some initial progress has been made in collaboration and policy development, the actual implementation of data centre capacity expansion at Member State level still requires significant progress. The Cloud and AI Development Act is a critical factor in driving this implementation forward and providing a clear direction for the effective outcome of the tracking system

SUMMARY ASSESSMENT: *Limited progress*

5 Semiconductors

5.1 Member States should increase investments in semiconductors and stimulate secure and sustainable domestic chip design and manufacturing capabilities and continue their commitment in supporting both essential semiconductors and cutting-edge chips in leading value chain areas;

Significant investment in first-of-a-kind semiconductor manufacturing projects have been notified to the Commission under the EU Chips Act, in particular in Czechia, Germany, Italy and Austria during the reporting period. These investments help strengthen Europe's semiconductor ecosystem across key segments of the value chain, particularly in manufacturing and advanced technologies, and reflect continued Member State commitment to scaling up domestic capabilities. In parallel, around 20 Member States are preparing the Important Project of Common European Interest (IPCEI) on Advanced Semiconductor Technologies (IPCEI AST), currently in the company selection phase. This indicates strong pipeline development and coordinated action at EU level, although the overall scale, timing of implementation, and geographical distribution of investments will remain critical to achieving a fully resilient and competitive semiconductor ecosystem.

SUMMARY ASSESSMENT: *Notable progress*

5.2 Member States should enable a conducive investment framework by developing the workforce with the semiconductor skills needed.

Although several relevant actions have been undertaken at Member State level, which demonstrates a clear commitment with respect to this policy recommendation, there is still not a structured and conducive investment framework for achieving the stated objective that can effectively address the talent gap. Workforce demand is expected not to be matched by education and training systems throughout the European countries, with an estimated gap of about 65 000 jobs by 2030.

The national chips competence centres and the relevant coordination network, as provided for by the Chips Act Regulation, have been established in all Member States over the past year and will address skills development and other targets. The focus group of this network on ‘training and skills development’ aims to coordinate and roll out education and upskilling initiatives.

Overall, the competence centres, still being in their infancy, have great potential and their actual implementation will require support by Member States to make significant progresses.

SUMMARY ASSESSMENT: *Limited progress*

6 Quantum technologies / HPC

6.1 Member States should step up and coordinate investment in quantum technologies across Member States and strive to increase private sector investment

The coordination of investments in quantum technologies across Member States has increased. For instance, the Chips Joint Undertaking is already funding the first quantum pilot lines with EUR 150 million from the EU, which will be matched by national contributions. The joint undertaking will implement a full EU road map for the production of quantum chips and their industrialisation.

Moreover, the recently adopted EuroHPC amendment³⁰ transfers the implementation of quantum calls to the European High-Performance Computing Joint Undertaking (EuroHPC JU) and, as such, will require the input and contribution of Members States for the implementation of future calls and initiatives.

SUMMARY ASSESSMENT: *Limited progress*

³⁰ [EuroHPC JU's Mandate Expanded Under New Regulation Amendment](#), European High-Performance Computing Joint Undertaking, 20 January 2026.

7 AI/HPC

7.1 Member States should strengthen efforts in the area of AI infrastructure, including robust support to AI Factories and other EU initiatives in the field of AI, fostering a collaborative environment and maximising the impact of these efforts.

Member States have made progress in strengthening their AI infrastructures, AI factories and other EU initiatives in the field of AI. The EuroHPC Joint Undertaking is rolling out 19 AI factories and 13 antennas across Europe, backed by around EUR 2.6 billion in investment. This includes 15 new AI-optimised supercomputers, increasing Europe's AI computing power fivefold. The network supports research in sectors like healthcare, climate and finance. The EU has also launched JUPITER, its first exascale supercomputer (September 2025), with three EuroHPC systems in the global top 10 in 2025.

The federated network of the EuroHPC JU, enables cross-border collaboration, boosting the EU's digital sovereignty. The AI Continent Action Plan outlines a cross-sector AI adoption road map and establishes the Apply AI Alliance – a coordination forum for policymakers, industry, academia, and civil society. An AI Observatory will track progress (e.g. uptake, investments, labour impacts). While AI factories provide foundational infrastructure, AI gigafactories will scale up capacity to train next-gen AI models (with hundreds of trillions of parameters) via public-private partnerships, using energy-efficient data centres. A 2025 call for expressions of interest drew 77 proposals from 16 EU states. Following a December 2025 EuroHPC JU regulatory amendment, a formal AI gigafactories call is expected in spring 2026, with joint procurement securing long-term compute access, signalling strong market interest.

In December 2025, the Council of the EU amended the EuroHPC JU Regulation to establish AI gigafactories in Europe, with a procurement call expected in spring 2026. AI gigafactories will secure long-term AI compute access, positioning Europe as a leader by empowering start-ups, researchers, and industries. To accelerate adoption, European digital innovation hubs (EDIHs) are being repurposed as centres offering one-stop support for digitalisation and AI. Two STEP SEAL funding calls involve DEP co-funding of up to 50%. Under the Apply AI Strategy, EDIHs will also promote EU-made, open-source AI solutions, with a call for sector-wide deployment by companies.

During the last year significant policy developments have been made. In October 2025, the Apply AI Strategy, a follow-up to the AI Continent Action Plan, published a cross-sectoral blueprint for EU AI adoption, establishing the Apply AI Alliance as a central coordination hub for policymakers, industry, and civil society, backed by an AI Observatory tracking uptake, investments, and labour market impacts. To scale up infrastructure, AI gigafactories, building AI factories' baseline capabilities, will provide industrial-level HPC for next-gen AI models (with hundreds of trillions of parameters via public-private partnerships), ensuring energy-efficient, large-scale compute power to bolster EU technological autonomy. Market demand is already emerging: a 2024 call for expressions of interest drew 77 proposals from 16 Member States. Meanwhile, EDIHs are evolving into AI experience centres for SMEs and public bodies with a strategic AI focus, open-source priorities, and deeper ties to testing and experimentation facilities (TEFs) and AI regulatory sandboxes. Two consolidation calls (one finalised, another assessed post March 2026) are reshaping the network, with Member States funding preselected hubs. To accelerate the deployment of EU-made AI, the Commission will launch a call for

companies to share AI models via EDIHs, promoting multilingual, open-source solutions across strategic sectors. Together, these measures aim to position the EU as a global AI leader, driving innovation, competitiveness, and sovereign capability.

Significant progress has been made in the EU AI infrastructure. With EuroHPC AI factories deploying AI-optimised supercomputers and streamlined access prioritising start-ups, scale-ups and SMEs, AI gigafactories will support end-to-end large-scale AI model life cycles, boosting EU strategic autonomy in critical sectors. Meanwhile, EDIH networks have proved highly effective, delivering more than 67 000 services (which includes training, networking, testing, and funding) to 29 000 companies across EU regions engaging 60 000 entities through 9 800 events with high user satisfaction. However, barriers persist, including low AI adoption, data quality/reliability issues and gaps, alongside funding misalignment and national/EU criteria disparities that risk fragmenting support. To address this, policy (e.g. AI Continent Action Plan, Apply AI Strategy) and infrastructures (AI factories, gigafactories, EDIHs, TEFs) are aligning under a harmonised governance model – led by the EU AI Office’s AI Board – to foster cross-initiative collaboration, including AI regulatory sandboxes mandated by the AI Act. Critical next steps include seamless co-funding, simplified reporting, and deeper integration between EDIHs, TEFs and AI regulatory sandboxes to optimise resources, ensure a smooth journey for SMEs/start-ups, and maximise AI’s societal and economic impact.

The strengthening of the AI innovation ecosystem and provision of comprehensive support to (prospective) providers, especially SMEs including start-ups will be crucial; equally, coordination and collaboration across initiatives will be essential to ensure optimisation of the resources and a smooth journey for AI providers.

SUMMARY ASSESSMENT: *Notable progress*

8 Digitalisation of SMEs

8.1 Member States should strengthen their policies to accelerate SME digitalisation, with a particular focus on the integrating and adopting AI and tailored support within the framework of EDIHs. and testing and experimentation facilities (TEFs).

Member States should strengthen policies to accelerate **SME digitalisation**, paying particular attention to AI adoption and tailored support through key facilitators/networks and facilities such as the European digital innovation hubs (EDIHs) and testing and experimentation facilities (TEFs). This is especially important for SMEs, which often face difficulties in identifying viable AI use cases, accessing expertise, testing solutions in practice and managing compliance requirements.

The **European digital innovation hubs (EDIHs)** are key EU one-stop shops that help SMEs and public sector organisations adopt AI and other digital technologies by providing test-before-invest facilities, technical expertise, training, regulatory support, and ecosystem networking. They act as regional gateways to Europe's wider AI ecosystem, connecting firms to resources such as AI factories (high-performance computing and data infrastructures), AI-on-demand platforms and AI skills initiatives, enabling SMEs to develop and deploy AI solutions in practice. For instance, through concrete use cases, such as AI-driven SME advisory platforms, General Data Protection Regulation-compliant AI chatbots and healthcare AI pilots, EDIHs help organisations experiment safely before scaling up.

As of January 2026, the EDIH network has consisted of 161 co-funded hubs spanning all EU Member States, three EEA associated countries (Iceland, Liechtenstein and, Norway) and seven associated countries from the Western Balkans (Albania, Kosovo³¹, Montenegro, North Macedonia and Serbia), Türkiye and Ukraine. Switzerland will join the EDIH network in the second half of 2026, following a dedicated call. Associated countries strengthen the EDIH network by extending its reach beyond the EU and reinforcing pan-European cooperation. The hubs in the associated countries provide similar services while fostering reinforced cross-border collaboration, closer links with EU Member States, and stronger integration into the digital single market.

The **testing and experimentation facilities (TEFs)** are an important complement to EDIHs for SME AI uptake. By providing structured environments to test and validate AI systems, they help reduce adoption risks, support innovation and facilitate compliance with the AI Act. According to the OECD's 2025 report, nearly half of EU Member States reported AI testing and experimentation initiatives. Most initiatives focus on the EU priority areas of the agri-food sector, healthcare, manufacturing, and smart cities and communities.

The EDIH network is now moving into its second iteration, focused on consolidation and completion with a stronger AI orientation. This phase is marked by the award of the **STEP Seal** through dedicated STEP calls, recognising the quality and strategic relevance of the EDIH network for Europe's technological_sovereignty and competitiveness. It is therefore expected that the EDIHs' status in their country and regions will be further consolidated, thus facilitating their operations as strategic

³¹ This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

digitalisation and AI intermediaries for companies, especially SMEs, and the public through their facilitation and catalyst role within the wider AI ecosystem.

The STEP Seal is also helping improve funding pathways for the EDIHs in the consolidation stage, including in countries such as Bulgaria and Romania, where STEP budget lines have been mobilised to reduce the risk of renewed funding gaps.

The policy direction on TEFs is also becoming clearer. Member States are increasingly using testing and experimentation infrastructures to support SME uptake of AI, but funding for these infrastructures often remains difficult to track, as it is frequently embedded in broader programmes or financed through mixed sources.

Overall, progress has been significant over recent years, leading to the current consolidation of the EDIH network. EDIHs have become a central nervous system for digital and AI uptake, while TEFs increasingly complement them by providing practical environments for testing and validation. The OECD's 2025 *Progress in Implementing the EU Coordinated Plan on Artificial Intelligence* report suggests that EDIHs are most effective where they are embedded in a broader national and regional support architecture, as illustrated by Belgium, the Netherlands, Finland, or, for instance, Germany. More broadly, the OECD notes that EDIHs are active in all EU Member States and that many national SME support measures are channelled through them.

At the same time, progress remains uneven. In some Member States, EDIHs still need stronger strategic anchoring, more stable co-funding, clearer implementation frameworks and more consistent national and regional policy follow-through in order to fulfil their full potential as delivery structures for SMEs, mid-caps and public sector organisations.

For TEFs, the main gaps relate to the visibility and continuity of funding, their concentration in only a limited number of sectors, and the need to connect testing activities more closely to regulatory experimentation and compliance support.

Overall, the main challenge is now less the creation of support structures than their consolidation, strategic anchoring and effective integration into a wider ecosystem capable of supporting AI uptake at scale. In this context, it is important to underline that EDIHs support not only SMEs and other businesses, but also public sector organisations. This dual role can further accelerate business digitalisation and AI uptake, as a more digital and AI-ready public sector helps create the right framework conditions, stimulates demand, and demonstrates good practices that can be replicated by companies.

The strengthening of EDIHs as strategic intermediaries could ensure more stable and visible funding for TEFs, while connecting testing activities more closely to regulatory experimentation and compliance support.

SUMMARY ASSESSMENT: *Notable progress*

9 Uptake of advanced technologies

9.1 Member States should take targeted measures and earmark resources to support the adoption of advanced, trustworthy and sovereign AI-enabled solutions; step up investment, also by mobilising the private sector, in general purpose/generative AI.

Currently, only 12 Member States have financed their AI strategies through a stand-alone AI budget, with the remainder incorporating AI spending into broader digitalisation plans or ministry-led programmes. Among those with dedicated AI budgets, Germany and France lead in investment³². Germany allocated between EUR 482.8 million and EUR 625 million each year between 2018 and 2025, while France merged AI strategy funding with supplementary financing, totalling approximately EUR 1 billion per year from 2022 to 2025³³. In 2025 Czechia earmarked EUR 753.7 million to implement its Action Plan for Implementation of Digital Czechia, which includes AI initiatives³⁴. Other annual budgets include Italy (EUR 270 million), Spain (EUR 100 million), Estonia (EUR 31.7 million), Slovenia (EUR 22.5 million), Bulgaria (EUR 5-20 million), with Malta, Cyprus, and Denmark dedicating between EUR 2.5 million and EUR 5 million each³⁵. It is important to note that these figures typically reflect budgetary commitments rather than actual spending and may incorporate both EU and private funding. Additionally, many Member States have relied on the EU's Recovery and Resilience Facility (RRF) to co-fund their AI strategies. For example, Slovenia expects around half of its AI programmes to be RRF-financed. Similarly, Lithuania and Romania have both declared that the RRF plays a pivotal role in financing their AI initiatives.

To support the adoption of AI-enabled solutions, 24 Member States had formalised national AI strategies by December 2025, with the remaining three (Greece, Croatia, Slovakia) still in the process of finalising theirs³⁶. Approximately half of the Member States have further revised their AI strategies to address the changes caused by the widespread adoption of generative AI. This policy shift has been accompanied by an increased focus on boosting AI uptake nationwide, alongside specific initiatives aimed at accelerating AI adoption across key sectors in accordance with national objectives and needs. This trend coincides with the objectives outlined in the Apply AI Strategy. Examples of Member States broadly promoting AI adoption include France transitioning from a research-based approach to prioritising economic impacts, Denmark putting AI adoption in the public sector at the core of its agenda, Ireland fostering AI adoption among SMEs, and Belgium launching an initiative aimed at facilitating the adoption of generative AI in the form of grants of up to EUR 80 000 for SMEs.

The most significant challenge in evaluating progress toward this Digital Decade goal is the lack of separate accounting for AI expenditure. This is exacerbated by the fact that EU funding initiatives, such as Horizon Europe and the RRF, do not track AI-specific spending. Nevertheless, various Member States have committed to developing monitoring frameworks to better track AI-related financing. Overall, despite the limited number of dedicated AI budgets, Member States are making major efforts to

³² *Progress in Implementing the European Union Coordinated Plan on Artificial Intelligence (Volume 1)*, Organisation for Economic Co-operation and Development (OECD), 2025.

³³ *Ibid.*, p. 34.

³⁴ See note 32, page 35.

³⁵ *Ibid.*, pp. 34-35.

³⁶ *Ibid.*, p. 14.

promote AI uptake, as evidenced by their significant financial commitments, evolving policy frameworks, and targeted initiatives.

SUMMARY ASSESSMENT: *Notable progress*

9.2 Member States should focus national efforts on incentivising infrastructure investments to ensure that businesses and the public sector have access to the compute infrastructure required for serving their cloud and AI needs, especially for fine-tuning and inference operations.

As of the assessment period between Q2 2025 and Q2 2026, **notable progress** can be seen to have been made in several Member States and regions in creating more supportive conditions for investments in compute infrastructure with the aim of improving access to cloud capacity for both business users and the public sector.

France is leading AI and data centre investment, targeting EUR 109 billion in infrastructure funding, including EUR 400 million in eco-friendly data centres capable of hosting 25 000 graphics-processing units for AI processing³⁷. Meanwhile, other EU nations' measures partly funded by RRF funds are expanding data centres to digital government and AI strategies³⁸.

In Sweden, public cofinancing has been allocated to help Swedish organisations participate in EU investments in infrastructure and capacity-enhancing projects for cloud services, data and AI³⁹, and the 2026 AI strategy links competitiveness to facilitating investment, faster permit processes and the strengthening of Sweden's position across the AI value chain, including data centres⁴⁰. Finland has announced measures to safeguard competitiveness in attracting data centre investments⁴¹. In the Netherlands, provincial action in North Holland shows an active policy approach: the province's 2025-2027 data centre strategy continues cluster-based planning and seeks additional space to keep future siting possible, while treating digital infrastructure as important for innovation and competitiveness⁴². In Germany, the federal state of Hessen has launched a regional data centre strategy and a dedicated Data Centre Office^{43,44}, while North Rhine-Westphalia has created a competence centre for digital infrastructure⁴⁵ and is supporting hyperscale capacity in the Rheinisches Revier to increase the availability of cloud services⁴⁶. In Spain, Aragon repeatedly used its 'investment of regional interest' mechanism in 2025 to accelerate several new data centre campuses⁴⁷, while Madrid is investing in public sector data centre modernisation⁴⁸ and a broader regional AI and data strategy⁴⁹.

³⁷ [Faire de la France une puissance de l'IA](#), Élysée, 11 February 2025.

³⁸ OECD, Progress in IM.

³⁹ [Sweden's National Reform Programme 2023](#), Government of Sweden, 2023.

⁴⁰ [Sweden's AI Strategy in five minutes](#), Swedish Ministry of Finance, 25 February 2026.

⁴¹ [Government safeguards Finland's competitiveness in attracting data centre investments](#), Prime Minister's Office (Finland), 26 March 2026.

⁴² [Datacenter Strategy](#), Province of North Holland, 2025.

⁴³ [State wants to strengthen its position as a leading data centre location](#), Hessische Landesregierung, 17 September 2025.

⁴⁴ [Contact point for information, advice and networking](#), Hessen Digital (Hessisches Ministerium für Digitalisierung und Innovation).

⁴⁵ [State launches new Digital Infrastructure NRW Competence Centre](#), Ministry of Economic Affairs, Industry, Climate Action and Energy NRW, 21 February 2025.

⁴⁶ [Groundbreaking ceremony for Microsoft's data centres in the Rhenish mining area](#), Ministry of Economic Affairs, Industry, Climate Action and Energy NRW, 12 March 2026.

⁴⁷ [BOA Resultados avanzados](#), Aragon Regional Government.

⁴⁸ [La Comunidad de Madrid adjudica a Fujitsu la administración y gestión de los centros de datos del SERMAS](#), Comunidad de Madrid, 8 June 2025.

⁴⁹ [La Comunidad pondrá en marcha una Estrategia IA 2030 para posicionar a Madrid como referente europeo en la materia](#), Comunidad de Madrid, 1 October 2025.

These developments are increasingly aligned with the Cloud and AI Development Act.

With regard to the availability of AI compute capacity for inference at the edge, the analysis of the edge computing policy landscape across Member States reveals a wide range of approaches, with 13 of the 27 Member States including measures supporting the edge target in their strategic road maps. In addition, two other Member States have indicated that they are considering introducing measures in support of the edge target. This diversity is also reflected in public investment levels.

More specifically, edge-related measures in the Digital Decade strategic road maps encompass a wide range of initiatives, with IPCEI CIS⁵⁰ being the most prominent. Other national-level initiatives include measures in support infrastructure roll-out, such as installing edge nodes for public services or creating reusable shared building blocks, and the development of edge AI technologies. In some Member States, measures from the strategic road maps are complemented by national policies on edge computing.

Given the early maturity of edge computing, it is anticipated that its position in national agendas will continue evolving. For instance, Italy recently launched a call for studies to assess the potential of edge cloud computing platforms at the edge of telco networks, backed by EUR 4 million in funding. Nonetheless, other Member States, such as France and the Netherlands, indicate that no significant increase in the role of edge computing is currently foreseen within their national agendas. While both countries are taking measures to support the deployment of edge computing, they emphasise that any potential expansion would depend on a stronger uptake and engagement by industry at national level. In addition, a noteworthy trend for future developments is the growing interest in edge AI.

While IPCEI CIS is helping to encourage Member States to invest in edge and cloud computing, complementary initiatives are being pursued by participating Member States to further support these developments. The potential IPCEI on artificial intelligence⁵¹ (IPCEI-AI) aims to cover both research, development and innovation (R&D&I) and first industrial deployment (FID) for next-generation AI services based on cutting-edge technologies that are open, distributed, sustainable and highly scalable. This IPCEI-AI seeks to address the entire AI stack: from data processing and orchestration to the development of foundation models, including of general-purpose and sector-specific AI models.

In addition, and specifically targeting infrastructure deployment, the potential Important Project of Common European Interest on Compute Infrastructure Continuum (IPCEI-CIC)⁵² seeks to facilitate the establishment of a cross-border, federated, and distributed network of cloud and edge computing infrastructure for AI applications, forming a sovereign and distributed computing continuum for AI and beyond, across Europe.

Taken together, this suggests that the current actions across the EU are testimony to uneven but notable progress with respect to this measure.

SUMMARY ASSESSMENT: *Notable progress*

⁵⁰ [Approved IPCEI Next Generation Cloud Infrastructure and Services](#), European Commission (DG Competition), 5 December 2023.

⁵¹ [IPCEI Artificial Intelligence](#), German Federal Ministry for Economic Affairs and Energy.

⁵² <https://www.bundeswirtschaftsministerium.de/Redaktion/EN/Dossier/ipcei-cic.html>.

9.3 Member States should foster secure and trusted data sharing, supporting the deployment of European Data Spaces, including via practical tools such as model contract clauses, taking full advantage of relevant existing EDICs and accelerating those being prepared.

To this date the Commission has funded (through the Digital Europe Programme) projects for the deployment of common European data spaces in 14 sectors. The latest projects supporting the deployment of the Green Deal, agriculture, and energy data spaces started in April 2025. Beyond EU-funded initiatives, a broader ecosystem is taking shape. The Data Spaces Support Centre tracks 235 relevant initiatives, and the European Data Spaces Awards 2025 highlighted several mature deployments, including:

- **djustconnect.be** (agriculture) – recognised for strong user focus and a viable long-term financial model, funded by Regional and Flemish funds
- **Catena-X** (automotive) – a collaborative data ecosystem funded by the German Federal Ministry for Economic Affairs and Climate Action, now reaching good maturity
- **Data.gouv.fr** (open data) – France’s public data-sharing ecosystem spanning key societal domains
- **sphin-X** (health/pharma) – a privately funded data space advancing discoverable, usable data across pharma, MedTech, and research
- **SM4RTENANCE** (manufacturing) – focused on agile asset management and predictive maintenance, co-funded through the Digital Europe Programme
- **DEPLOYTOUR** (tourism) – connecting tourism with mobility, smart cities, and culture, co-funded through the Digital Europe Programme

EDICs are also playing an important role. A notable example is the **Common European Language Data Space (LDS)**, now in its fourth year under the Digital Europe Programme and among the most advanced European data spaces. It provides a secure marketplace for exchanging and monetising high-quality language data in compliance with EU rules, with growing engagement from both industry and research. To ensure long-term sustainability, the LDS operates in close coordination with the **Alliance for Language Technologies EDIC (ALT-EDIC)** – its future governance body – launched in March 2025 under French chairmanship, with 18 Member States as members and eight as observers. ALT-EDIC combines national efforts on multilingual datasets, supporting Europe’s competitiveness in language technologies while preserving its linguistic and cultural diversity.

Similarly, the EDICs on mobility and agriculture aim to create a sustainable infrastructure for sharing mobility and agricultural data by aligning common standards, governance, and interoperability frameworks. In particular, the EDIC on mobility and logistics aims to improve cross-border mobility services through better data sharing between transport authorities and operators, enhancing multimodal travel and traffic management. Meanwhile, the agriculture EDIC focuses on developing and implementing a digital Farm ID aligned with EU Business Wallets in order to accelerate data sharing

through data spaces, increase data availability for AI, and reduce administrative burdens in B2G and B2B data sharing.

Overall, a range of EU-funded and national initiatives have moved data space deployment forward across sectors, backed by emerging governance mechanisms such as EDICs. However, broad adoption, interoperability, and long-term sustainability are still developing and are likely to still require support from both the EU and Member States to deliver the intended results.

SUMMARY ASSESSMENT: *Notable progress*

10 Cybersecurity

10.1 Member States that have not already done so shall transpose the NIS2 Directive as a matter of urgency and should take actions, also going beyond what is necessary, to maximise the effects of the full implementation of the cybersecurity acquis, including the NIS2 Directive and the 5G cybersecurity Toolbox (encompassing where appropriate the imposition of restrictions or exclusions as regards high-risk suppliers).

NIS2 Directive

19 Member States have notified complete transposition of the NIS2 Directive (Network and Information Systems Directive 2), while three Member States have notified partial transposition. Considering that the deadline for transposing the Directive was 17 October 2024, it is particularly urgent for all Member States to complete the transposition of the Directive, enabling full implementation of the NIS2 framework across the EU.

The Commission has continued monitoring the transposition of the Directive in the Member States. On 7 May 2025, the Commission issued reasoned opinions to 19 Member States that had failed to fully transpose the Directive.

5G cybersecurity toolbox

22 Member States have a legislative framework in place to be able to restrict high-risk suppliers. Of those 22 Member States, 13 have put restrictions on high-risk suppliers. However, there are differences within these Member States as regards the scope of those restrictions.

In the meantime, the Commission has adopted the proposal for a revised Cybersecurity Act (CSA2), which includes a trusted ICT supply chain framework. This is a cross-cutting, risk-based and technology-neutral framework to address non-technical risks linked to ICT supply chains. The framework will be applied first to the telecommunications sector, in particular 5G networks where an EU coordinated risk assessment has already been conducted. It aims to fill gaps and harmonise the implementation of restrictions on high-risk suppliers in electronic communications networks throughout the EU. Once CSA2 and the relevant implementing acts have been adopted, the 5G Toolbox will become obsolete in terms of addressing non-technical risks.

However, until CSA2 enters into force, the 5G Toolbox will remain relevant. The proposal reinforces the objective of the 5G Toolbox to protect 5G networks from foreign interference and dependencies and encourages Member States to effectively impose and enforce necessary restrictions and exclusions on high-risk suppliers.

SUMMARY ASSESSMENT: *Limited progress*

10.2 Member States should step up efforts to increase cybersecurity capabilities, including relevant to ensure the development of skills for the cybersecurity workforce by making use of available resources at EU level such as the European Cybersecurity Skills Framework.

Member States have sustained their efforts at national level, in line with the NIS2 Directive requirement to promote and develop education and training on cybersecurity and cybersecurity skills. In this regard, all **National Cybersecurity Strategies**, including those adopted in 2025 (Czechia, Greece Hungary and Sweden) and 2026 (France and Slovakia) address the skills gap affecting their national cybersecurity workforce⁵³. In January 2026, five Member States (AT, CY, EL, HR, SI) have submitted an application to the Commission for a Cybersecurity Skills **European Digital Infrastructure Consortium (EDIC)**, which is a milestone in setting up the EDIC (see Section 12.2 on ICT specialists).

Furthermore, 18 Member States in total have adopted the **European Cybersecurity Skills Framework (ECSF)**, including four in the period between July 2025 and March 2026. For instance, Hungary's National Cybersecurity Strategy envisages the 'training of outstanding domestic professionals in accordance with the European Cybersecurity Skills Framework (ECSF)⁵⁴. Bulgaria introduced a new cybersecurity profession in the Bulgarian vocational education and training (VET) system, linking a learning outcome to making use of the role profiles defined in the ECSF⁵⁵. The Romanian National Cybersecurity Directorate, in the context of a Digital Europe Programme project, used the ECSF as a reference framework to define learner profiles and structure curricula, enabling the translation of EU cybersecurity skills needs into coherent education, training, and upskilling programmes⁵⁶. The Cybercampus Sweden, a national initiative that conducts research, innovation and education in cybersecurity and cyberdefence, is using the ECSF to mitigate the skills shortage⁵⁷.

Additionally, over the analysed period, eight Member States continued to engage with ENISA in the **pilot project on an attestation scheme for cybersecurity skills**, as planned in the communication on the Cybersecurity Skills Academy.

The Commission also took a significant step to support workforce development by presenting its **proposal for a Cybersecurity Act 2** on 20 January 2026. Building on the pilot project on an attestation scheme for cybersecurity skills, the proposal sets out a mechanism to develop a European system of attestations, with the view of supporting skills portability and growth and strengthening the European cybersecurity workforce.

SUMMARY ASSESSMENT: *Notable progress*

⁵³ [National Cyber Security Strategies](#), ENISA.

⁵⁴ [Hungary's National Cybersecurity Strategy](#), Hungary's Official Gazette, 2025, Issue 35.

⁵⁵ [Ordinance No 78 of 21 November 2025 on obtaining a qualification in the profession 'cybersecurity'](#), Minister of Education and Science, 2 December 2025, State Gazette No 103.

⁵⁶ [EU-iNSPIRE](#) website.

⁵⁷ [Guide for skills development – organizations in the public and private sector](#), Cybercampus Sverige, June 2025.

10.3 (a) Member States should, within the NIS Cooperation Group, develop a roadmap to ensure a synchronized transition to PQC throughout the whole EU for public administrations and critical infrastructure; (b) Member States should progress in the transition of their crypto systems to post quantum cryptography by 2035, ensuring intermediate milestones are also met for high risk use cases and/or very complex systems to be migrated by 2030.

The NIS Cooperation Group adopted a Coordinated Implementation Road Map for the Transition to Post-Quantum Cryptography (PQC) in June 2025, written by the PQC work stream of that group supported by the Commission. This was in reaction to the Commission's Recommendation for the transition to PQC from April 2024. Additional steps are now being taken by the Member States' representatives of the PQC work stream within the NIS Cooperation Group to possibly provide more sectorial guidance. This work has been initiated involving experts in different domains. However, progress in those further steps currently relies on non-continuous engagement by the different experts. In the meantime, the proposal for a Directive as regards simplification measures and alignment with the Cybersecurity Act amends the NIS2 Directive by requiring EU policies (including the above road map) to be incorporated into national cybersecurity strategies. Implementation within the MSs will be more difficult to monitor, and further work would be needed to ensure that cross-border testing of critical infrastructure could actually take place and that critical EU assets are deployed with post-quantum security. Moreover, further actions would be needed to ensure that a full ecosystem of PQC-compliant solutions flourishes in the EU, thus allowing the transition to PQC to take place on the basis of EU-based solutions.

SUMMARY ASSESSMENT: *Limited progress*

10.4 (a) Member States, together with the Commission, should urgently operationalise the different actions outlined in the Action Plan. Building on the transposition of NIS 2 and CER, priority should be given to the aim of ensuring comprehensive cable security; (b) Member States should fast-track key deliverables, including the Expert Group’s tasks (mapping, risk assessments, Cable Security Toolbox, priority Cable Projects of European Interest) the development of a common strategy to reinforce cable repair capacities, and the establishment of Regional Cable Hubs. The goal of these hubs will be to establish an integrated surveillance mechanism for the EU to monitor and respond to cable security threats, in coordination with the cable repair capacities.

The actions were placed under four pillars on the basis of a resilience cycle approach: PREVENT, DETECT and RESPOND/REPAIR, DETER.

In October 2025 the Commission published an [EU risk assessment on submarine cable infrastructures](#), accompanied by a thorough mapping of these infrastructures as well as a policy and market analysis, and stress test guidance. It was prepared and agreed with Member States in the framework of the cable expert group set up under Commission [Recommendation \(EU\) 2024/779](#) on Secure and Resilient Submarine Cable Infrastructures. Under the prevention pillar, the action plan delivered: (i) a mapping of existing and planned submarine data cable infrastructures connecting EU territories to each other and with other parts of the world; ii) a coordinated risk assessment identifying seven main risk scenarios that build on different threats, vulnerabilities and dependencies; and iii) guidance to stress-test these risk scenarios. The assessment also provided a comprehensive policy and market overview of EU submarine data cable infrastructures.

In October 2025, the European Cybersecurity Competence Centre (ECCC) published DEP-related calls for the preparedness measures (EUR 10 million for stress-testing infrastructure, including cables) and the seed financing of the regional cable hubs (EUR 10 million to set up two or three hubs). These calls required the DEP work programme to be amended to find the right financing for the hubs and create the necessary synergies with the other work strands (repair, defence). The calls are open until the end of March.

In February 2026, the Commission followed up with a [Cable Security Toolbox](#) of mitigating measures, in response to the results of the EU risk assessment, and a list of priority areas for Cable Projects of European Interest (CPEIs), to be prioritised for future public support, under the [Connecting Europe Facility \(CEF\)](#) and other programmes.

In February 2026, the Commission launched a dedicated pilot call for deploying modular repair equipment in the Baltic Sea. It also launched calls on smart cables and awarded the CEF-related projects.

Cable resilience is also included in the upcoming cyber blueprint exercise.

In March 2026, the Commission organised a [high-level conference](#) on submarine cables to take stock of the EU deliverables related to submarine cable infrastructures since the 2024 Recommendation and 2025 action plan and discuss the next steps, together with representatives from public authorities, industry, and academia.

Overall, the implementation of the action plan is on track, in terms of both mobilising financial resources, mobilising Member States and delivering on security reports.

Protecting and empowering people, reducing burdens and harnessing digitalisation for sustainability

11 Basic digital skills

11.1 (a) Member States should prioritise investment in digital education and skills in line with the Council Recommendation on improving the provision of digital skills and competences in education and training, including targeted policies for groups most in need; (b) Member States should promote AI literacy and basic cybersecurity practices.

Member States have made significant **investments in digital education and skills at primary and secondary level**, improving school digital infrastructure and supporting innovative teaching and learning methods. Examples include Germany reaching agreement on its EUR 250 million Digitalpakt 2.0⁵⁸, Greece announcing the establishment of innovation centres in each Regional Directorate of Education in the country⁵⁹, Czechia encouraging the recognition of international digital competence certificates (such as ECDL/ICDL, Cisco, Oracle, etc.) for school-leaving examinations⁶⁰, and Italy creating the Digital Facilitation Service Network, now counting around 4 000 active facilitation points, and supporting approximately 2.5 million citizens in developing basic digital skills.

Significant actions have also been taken by Member States to **ensure equal access to AI technologies and applications in schools**, foster their effective use for learning and support the necessary teacher skills. According to an OECD-EC study⁶¹, more than half of EU Member States have implemented digital literacy initiatives in primary and secondary education, commonly integrating AI-focused components such as coding, robotics, and algorithmic thinking. Notable examples are Estonia's national initiative TI-Hüpe 2025, aimed at integrating AI tools and skills into the education system; Finland's Digivisio 2030 programme, which consolidates digital competence courses and open learning materials into a unified platform, with AI supporting student guidance and counselling services; Slovakia's Responsible Use of Artificial Intelligence in Education Plan 2025–2027⁶², the Finnish National Agency for Education's updated joint qualification components of vocational upper secondary qualifications, which emphasise data protection and AI⁶³, and the Italian *Strategy for Artificial Intelligence 2024-2026* which includes a dedicated section on AI literacy⁶⁴.

Looking beyond formal education, several Member States are including AI in broader adult learning and skills strategies: at least 14 countries have adopted national strategies that include AI literacy as a

⁵⁸ [Digital Pact for Schools 2.0: Federal and state governments invest €5 billion by 2030](#), Florentine Anders, 18 December 2025.

⁵⁹ [13 innovation centres are being established in each Regional Directorate of Education in the country: a strategic investment in the digital and innovative era](#), Ministry of Education, Religious Affairs and Sports (Greece), 7 July 2025.

⁶⁰ [Amendment to the Education Act gives schools room to make school-leaving exams more meaningful and simpler](#), DigiKoalice, 18 September 2025.

⁶¹ [Progress in Implementing the European Union Coordinated Plan on Artificial Intelligence \(Volume 1\) – Member States' Actions](#), OECD, 10 November 2025.

⁶² [Plan for the Responsible Use of Artificial Intelligence in Education 2025-2027](#), Ministry of Education, Research, Development and Youth (Slovakia), 5 September 2025.

⁶³ [New joint components of qualifications emphasise communication and financial literacy in vocational upper secondary qualifications](#), Finnish National Agency for Education, 12 January 2026.

⁶⁴ [Italian Strategy for Artificial Intelligence 2024-2026](#)

key pillar⁶⁵. Hungary's Artificial Intelligence Strategy 2025-2030 includes AI literacy within the pillar on education and competence development⁶⁶. In Austria, the Digital Skills Initiative ensures that AI literacy is integrated into nationwide digital education. Similarly, Portugal's Digital Skills Pact prioritises basic digital skills training for the whole population, including through mobile units⁶⁷.

Member States have also taken action to **enhance cyber resilience, emphasising knowledge, skills and awareness**. In line with the NIS2 Directive requirement to promote and develop education and training on cybersecurity, all national cybersecurity strategies, including those adopted in 2025 (Czechia, Greece, Hungary, and Sweden) and 2026 (France and Slovakia) address the promotion of cybersecurity awareness and cyber hygiene⁶⁸. For example, Greece's recently published National Cybersecurity Strategy supports skills development and the cultivation of a security culture covering all levels – from primary and secondary to tertiary and lifelong learning⁶⁹. Furthermore, the National Cybersecurity Coordination Centre of the Latvian Ministry of Defence, in cooperation with CERT.LV, launched the information campaign 'Sniff out the scam!', which aims to strengthen the public's knowledge of cybersecurity and resilience to threats, while educating them about cyber hygiene and digital fraud schemes⁷⁰.

The **European Digital Skills Awards** continue to highlight outstanding Member State initiatives supporting digital competences, digital literacy and inclusion. On 12 November, the winners of the 2025 edition were announced. From 195 applications, five projects were selected. Engineers for a Day promotes STEM careers among girls, while Digital Überall delivers community-based basic digital skills training, including for vulnerable groups. In cybersecurity, Digital Angel raises awareness and equips citizens and organisations with practical skills to navigate online risks. In education, Escape Fake uses game-based learning to strengthen media literacy and critical thinking among students. At professional level, the EBU Academy – School of AI provides applied AI training tailored to workforce needs, particularly in the media sector⁷¹.

SUMMARY ASSESSMENT: <i>Notable progress</i>
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⁶⁵ [Progress in Implementing the European Union Coordinated Plan on Artificial Intelligence \(Volume 1\)](#), OECD, 10 November 2025.

⁶⁶ [Hungary's Artificial Intelligence Strategy 2025-2030](#), Government of Hungary, 3 September 2025.

⁶⁷ [State Reform advances with Digital Strategy and Agenda for Artificial Intelligence](#), XXV Constitutional Government (Portugal), 4 December 2025.

⁶⁸ [National Cyber Security Strategies](#), European Union Agency for Cybersecurity (ENISA), 4 June 2025.

⁶⁹ [Greece – National Cybersecurity Strategy 2026-2030](#), Digital Skills and Jobs Platform, 20 January 2026.

⁷⁰ [Ministry of Defence and CERT.LV launch cybersecurity campaign 'Sniff out the scam!' – eprasmes.lv](#), Digital Skills and Jobs Platform, 9 September 2025.

⁷¹ [Meet the winners of the European Digital Skills Awards 2025!](#), Digital Skills and Jobs Platform, 19 November 2025.

12 ICT specialists

12.1 (a) Member States should promote ICT careers among young people, with notably a dedicated attention to girls; (b) Member States should enhance the academic offer for advanced digital skills and strengthen VET and lifelong learning in order to contribute to the EU's strategic digital objectives in key areas such as AI Factories, cybersecurity, data and semiconductors; (c) Member States should increase efforts to expand labour migration pathways to attract highly skilled ICT specialists from non-EU countries and incentivise the return of European ICT talent to the EU, leveraging both national and European frameworks

Since July 2025, Member States have further expanded their **academic offer of advanced digital skills**, in particular through joint programmes run by higher education institutions. They have also provided short-term training in key digital areas to support lifelong learning in ICT. The stakeholder community involved in developing state-of-the-art education and training programmes, supported by the Digital Europe Programme, has grown to more than 577 organisations from 26 Member States, including education institutions, private companies, training providers and research organisations.

Member States are taking varied approaches to **promoting ICT careers among young people**. The Dutch government has set up 'development pathways', describing ICT jobs, specialisations and growth opportunities for people entering the sector, switching careers or developing their skills⁷², while the Maltese government has announced a new EUR 400 000 initiative to support individuals aged 16 and above in attending basic coding courses⁷³. The Luxembourg government has launched a new programme to encourage girls aged 13-16 to consider tech/STEM careers, through school immersion days for girls and teacher mobilisation. It has also set up 'TechTalks4Girls' events to inspire girls through real-world tech role models⁷⁴. All Member States also continue to engage in EU Code Week. In 2025, over 70 000 activities relating to coding and algorithmic thinking were organised across all 27 Member States, attracting two million young participants, 48% of whom were girls.

To **strengthen advanced digital skills in the workforce**, Member States have formed **strategic partnerships with businesses, research institutions and social partners**. Notable examples include: Austria's new DKO Business Platform, which aims to increase the number of IT professionals and reskill and upskill professionals in critical areas such as AI, data use, and cybersecurity; and the Spanish government's allocation of EUR 200 million from the RRF for a digital skills training programme for professional associations, which will train 80 000 professionals in digitalisation and AI⁷⁵. Poland has significantly expanded its PW eSkills initiative, by signing agreements with nine new institutions⁷⁶.

⁷² [First development pathways for ICT now live – cybersecurity, data and AI to follow soon](#), Digital Holland, 2 September 2025.

⁷³ [Malta Launches EU Code Week With New Schemes To Make Coding Accessible to All](#), Malta Daily, 9 October 2025.

⁷⁴ [Girls: Deploy Your Talents!](#), IMS Luxembourg, 2025.

⁷⁵ [Digital Transformation allocates 200 million euro to the training of 80 000 professionals in digitalisation and artificial intelligence](#), Government of Spain, 11 August 2025.

⁷⁶ [Digital Poland Foundation joins PW eSkills initiative – together we build Poland's digital future](#), Digital Poland Foundation, 8 July 2025.

Support for cities and municipalities is also present, for example through Slovakia's declaration on cooperation between the Association of Towns and Municipalities and the National Digital Coalition⁷⁷.

AI also plays an important role in Member States' strategies to support workforce upskilling. Many Member States reported measures to boost AI skills for adult upskilling and reskilling. Within its AI Skills Pact, which aims to have one million Danes enhance their AI skills by 2028, Denmark has launched the country's first AI Skills Framework, giving leaders and employees a concrete tool to understand, use and develop AI skills⁷⁸. Luxembourg has announced the launch of three skills academies in data and AI, cybersecurity and quantum computing in 2026⁷⁹. Many Member States are also promoting gender inclusion in STEM fields, laying important groundwork for more diverse participation in AI, although efforts targeted specifically at women in AI remain scarce. Austria's 'SHE GOES AI' is a notable example promoting digital and AI skills, facilitating entry into AI-related professions, and actively involving women in shaping AI⁸⁰.

Member States are also working to attract highly skilled ICT specialists from non-EU countries through a range of measures. The Blue Card scheme is widely used to attract highly qualified workers, with fast-track options for shortage sectors such as ICT. The Netherlands offers a highly skilled migrant scheme; Estonia promotes ICT recruitment through its e-Residency programme and start-up visa; Denmark uses its Positive List scheme to identify shortage occupations, including in ICT; Ireland prioritises flexible visa options to attract tech professionals; and Finland is building pathways through fast-track visas and bilateral agreements, focusing on start-up growth and innovation. Member States also participate in other EU initiatives, such as talent partnerships, to attract ICT specialists from abroad.

SUMMARY ASSESSMENT: *Notable progress*

⁷⁷ [Representatives of cities and municipalities want to strengthen their digital and green skills](#), Digitálna koalícia, 13 October 2025.

⁷⁸ [Denmark's first AI Skills Framework aims to make AI accessible to everyone](#), Digital Dogme, 4 December 2025.

⁷⁹ [Three new academies for the jobs of tomorrow at the Digital Learning Hub](#), Luxembourg government, 2026.

⁸⁰ <https://www.bundeskanzleramt.gv.at/bundeskanzleramt/nachrichten-der-bundesregierung/2025/10/bundesregierung-will-mit-she-goes-ai-frauen-in-der-ki-staerken.html> – Bundesministerium für Frauen, Wissenschaft und Forschung, 30 October 2025.

12.2 (a) Member States should support the implementation of EU Digital Skills Academies(b) Member States should leverage EU funding opportunities and governance

The European Commission is establishing **digital skills academies** in multiple digital areas. The most advanced is the Cybersecurity Skills Academy, which was launched in 2023. To support its governance, Member States are currently setting up a European Digital Infrastructure Consortium (EDIC). The consortium is led by Greece and includes Croatia, Cyprus, Austria and Slovenia as members, with Czechia and Poland participating as observers. DG CNECT has recently received the formal application, and the EDIC is expected to be legally established in the near future, pending the Commission Decision.

The EuroHPC Virtual Training Academy was established in April 2025, involving institutions from seven Member States. It will help ensure the availability of common quality and qualification standards in HPC, compatibility of training modules and learning objectives, and greater standardisation of training and education in the European HPC ecosystem.

Three new digital skills academies in quantum, AI and virtual worlds have been called for under the Digital Europe Programme in 2025. A total of 31 applications were submitted, covering 26 Member States. The selected consortia will start their activities in summer 2026.

Under the governance of the Digital Decade Policy Programme, the **Best Practice Accelerator** has continued its work. Member States have shared initiatives aimed at increasing the participation of women in digital studies and careers and supporting the inclusion of vulnerable groups through improved digital skills.

Member States are also actively engaging with the **Digital Skills and Jobs Platform**⁸¹, operated by the European Commission. This platform provides Member States with a one-stop shop for high-quality information on data, training initiatives and resources for digital skills at all levels, from basic to advanced. In 2025 the platform was visited more than 430 000 times. It hosts the Digital Skills and Jobs Coalition, consisting of over 21 000 registered stakeholders, and connects 25 **national digital skills and jobs coalitions** representing the Member States. In addition, 23 national websites are connected to the core platform, continuously updating information on national initiatives.

SUMMARY ASSESSMENT: *Notable progress*

⁸¹ [Digital Skills and Jobs Platform](#), European Commission, 2026.

13 Digital public services

13.1 Member States should focus investments and regulatory measures to develop and make available secure, sovereign and interoperable digital solutions for online public and government services, including possibly in the context of public procurement and including the completion of the connection of authorities to the Once-Only Technical System.

Member States, supported by a comprehensive EU policy framework, have undertaken significant actions to develop secure, interoperable and user-centric digital public services. These collective efforts have led to measurable improvements in availability and usability across the EU. However, implementation remains uneven, with persistent gaps in cross-border service provision, interoperability in practice, and emerging challenges related to security, advanced technologies and digital sovereignty.

Cross-border service provision remains the main structural bottleneck. Despite progress at national level, a substantial number of services still require further development to meet Digital Decade targets. Key sectors affecting mobility, in particular health and employment, continue to face difficulties in delivering fully online cross-border services for citizens, while procedures associated with the digitalisation of permits, official business certificates and proof documentation remain most complex for cross-border businesses. This reflects the fact that, while interoperability frameworks are well established at EU level, their implementation across administrations is still ongoing. Core components, including cross-border data exchange and the once-only principle, are not yet fully operational in practice.

EU-level instruments, including the Interoperable Europe Act, the Single Digital Gateway Regulation and the European Digital Identity Framework, provide the foundation for cross-border data exchange and authentication. Their effectiveness, however, depends on sustained and coordinated implementation by Member States.

Progress is also visible in enabling functionalities and user experience, in particular through the increased use of prefilled forms to reduce administrative burden and the continued high performance of user support and mobile-friendly services.

At the same time, common challenges persist in security, sovereignty and the uptake of advanced technologies. While improvements have been made, uneven compliance with security controls and secure internet standards across public sector websites indicates the need for further efforts to strengthen trust and readiness to face an evolving threat landscape. At the same time, reliance on non-EU network operators for the hosting and network-level delivery of government and email services raises shared concerns regarding digital sovereignty and long-term resilience. Finally, although Member States are exploring AI in public service delivery through chatbots for user support, its deployment remains at an early stage, limiting its impact on efficiency and user experience.

Overall, Member States have made steady progress, but achieving fully interoperable, secure and sovereign cross-border digital public services by 2030 will require sustained and coordinated collective action across the EU.

SUMMARY ASSESSMENT: *Notable progress*

14 EU Digital Identity Wallet

14.1 Member States should continue their strong commitments to the development of use cases to link private and public service providers to the wallets and offer the user a large variety of use cases upon first issuance of the wallets at national level in 2026.

Under Regulation (EU) 2024/1183 establishing the European Digital Identity (EUDI) Framework, each Member State is required to provide an EU Digital Identity Wallet by the end of 2026. **All Member States are actively working on developing their European Digital Identity Wallets.**

To ensure that EUDI Wallets are secure and protect users, each national EUDI Wallet must be **certified in accordance with the Cybersecurity Act**. A certification scheme for the EU Digital Identity Wallets is key to the successful functioning of the wallets concept.

While an EU-level certification scheme following the Cybersecurity Act is being developed, the first-generation wallets will have to be certified under national certification schemes. The Commission has set up a support mechanism for Member States, including several work streams. In addition, to ensure users' privacy and data protection, the requirements of the General Data Protection Regulation must also be respected.

In addition, the Commission is supporting Member States through the financing of **large-scale pilot projects**, which are critical in testing, validating, and maturing the EU Digital Identity Wallet ecosystem across multiple Member States and use cases. The four pilots concluded in 2025 – [NOBID](#), [Potential](#), [EWC](#), and [DC4EU](#) – covered a wide range of use cases, from payments and travel credentials to education, social security, and public/private sector digital services. Together, they involved over 300 organisations, including public authorities and private sector partners, **across more than 20 Member States**.

The pilots have successfully delivered major tangible outputs, including actual wallet implementation, cross-provider testing, stakeholder engagement, and early insights into business models. The pilots demonstrated the real-world use of EUDI Wallets in everyday scenarios, including in a cross-border context. For example, the wallet has been used to authenticate and authorise secure payments for products and services, showing that it can support actual payment transactions both online and in-store. In addition, the large-scale pilots tested use cases such as the opening of a bank account online, registering a SIM card, accessing government services (for example electronic identification and authentication for public services, presentation of certificates such as proof of residence, or representation of legal persons through the presentation of company registration attestation), signing documents with a qualified electronic signature, and redeeming e-prescriptions.

These pilots have laid a **robust foundation for the next phase** of digital identity deployment in Europe, providing valuable lessons on technical feasibility, cross-border interoperability, user experience, **and governance that the next generation of large-scale pilots** – [WE BUILD](#) and [APTITUDE](#) – can build upon.

Overall, the breadth of measures undertaken, including (i) the development of national wallets across all Member States, (ii) the establishment of certification frameworks, and (iii) the successful completion of large-scale cross-border pilots covering a wide range of use cases, demonstrates sustained commitment and tangible implementation at EU and Member State level. **This justifies the**

assessment of significant progress, although further efforts will be needed to ensure full deployment and uptake of wallets by 2026.

SUMMARY ASSESSMENT: *Significant progress*

15 Electronic health record

15.1 (a) Member States should continue to implement the necessary measures to achieve full access for citizens to their electronic health records. (b) Member States should cooperate to fully deploy the innovation potential of health data by: (i) maximising the use of existing and future health data initiatives and infrastructure; (ii) investing in the research and deployment of advanced technologies such as high-performance computing and trustworthy AI applications in healthcare; (iii) strengthening cybersecurity measures and enhancing cooperation through EDICs in this area.

Digitalisation remains a key enabler of the transformation of health systems, supporting universal access to electronic health records (EHRs) and enabling the deployment of advanced digital technologies, including artificial intelligence (AI), through the effective use of health data. EU Member States have reached **87% of citizens with access to their EHRs, an increase of 4 percentage points** compared to 2025⁸². This progress reflects sustained efforts to improve the timely availability, accessibility and interoperability of health data across healthcare providers.

Significant **policy developments and cooperative initiatives** have taken place over the assessment period. Member States have strengthened cooperation to maximise the innovation potential of health data infrastructures. The **1+Million Genomes (1+MG) initiative** has entered its scale-up phase, with 26 Member States contributing to governance, trust, and technical frameworks. This is supported by the Digital Europe Programme (DIGITAL) projects **Genome of Europe (GoE)** and the **Genomic Data Infrastructure (GDI)**, with the latter establishing a decentralised, federated infrastructure for secure access to genomic and clinical data. By late 2026, **15 Member States** are expected to have operational federated infrastructures in place, supporting research pilots, high-quality genomic data generation, and connectivity with the EHDS. In 2026 an application is also expected to be submitted for the creation of an EDIC laying the basis for governance and sustainability.

Similarly, under the **European Cancer Imaging Initiative**, cooperation has been stepped up on the use of medical imaging and AI for personalised cancer care. The **Cancer Image Europe** platform deployed through the DEP-funded **European Federation for Cancer Images (EUCAIM) project** is now operational, providing access to a public catalogue of over **80 medical imaging datasets** and more than **35 preprocessing tools**. The platform is being expanded through the EU4Health-funded projects **BreastScan** and **UNICA**, with the latter bringing additional breast, lung, and prostate cancer imaging datasets from 12 medical centres. 18 Member States are now preparing the submission of a new EDIC.

Progress in **AI deployment and supporting infrastructure** has also been notable. According to the Commission, at least **19 Member States** identify health as a priority sector for AI deployment. The Commission has established **19 AI factories, 17 of which focus on health, life sciences, or pharmaceuticals**, providing Member States, researchers, and SMEs with access to advanced computing capacity, data, and AI expertise. These efforts are complemented by planned investments of **EUR 20 billion in AI gigafactories**, which will support the development and deployment of cutting-edge AI models for strategic sectors, including healthcare.

The **European Virtual Human Twins (VHT) Initiative** is advancing the next generation of **AI-enabled virtual human twin solutions for personalised healthcare**. The Commission convened a **high-level**

⁸² [The 2025 Digital Decade eHealth indicator study](#), 2026 State of the Digital Decade report, European Commission, June 2026.

[event in October 2025](#), bringing together around 200 stakeholders to align on its long-term vision and strategic priorities. In addition, [a framework contract](#) was signed in June 2025 to develop an advanced VHT platform supporting modelling, integration, and validation. Two Horizon Europe research topics published in December 2025 and the **VHT Uptake Incubator**, a **EUR 7.2 million** knowledge-sharing and collaboration hub developed under the Apply AI Strategy, will further expand the VHT Initiative.

Progress has also been made in strengthening cybersecurity in the health sector, in cooperation with the European Union Agency for Cybersecurity (**ENISA**), the European Cybersecurity Competence Centre (**ECCC**), and Member States. The Commission continued to implement the [European action plan on the cybersecurity of hospitals and healthcare providers](#). In this context, the ECCC launched a **EUR 30 million** call to reinforce cybersecurity capacities in hospitals and healthcare providers, while ENISA issued guidance on cybersecurity practices in September 2025. Building on these activities, the Commission will put forward recommendations to further refine the action plan.

Progress towards full access to EHRs is expected to accelerate with the phased application of the [European Health Data Space \(EHDS\) Regulation](#), which entered into force on 26 March 2025. The application of general requirements is expected from March 2027, followed by rules on the primary and secondary use of specified health data categories from March 2029. Additional provisions for the remaining data categories, including genomic data for secondary use, will become operational from March 2031.

To facilitate access to data, computing infrastructure, skills, and regulatory guidance for AI deployment in health, the [Apply AI Strategy](#) launched in **October 2025** sets out four flagship initiatives to boost AI adoption, with healthcare and pharmaceuticals identified as priority sectors. Among these are: (i) the network of [European AI-powered advanced screening centres](#), which will integrate AI solutions for cancer and cardiovascular diseases and assess their impact; and (ii) the [European Network of Expertise on AI Deployment in Healthcare](#), which will consolidate guidelines and best practices for safe and effective AI integration in healthcare settings.

Overall, Member States have made **notable progress** in expanding citizens' access to EHRs and strengthening cooperation on health data for AI. However, major barriers and gaps remain. EHR deployment is uneven across the EU due to disparities in digital maturity, investment capacity, workforce skills, and cybersecurity preparedness. More broadly, the deployment of AI in healthcare continues to be constrained by fragmented data ecosystems, outdated IT infrastructure, regulatory complexity, financial affordability, and persistent challenges related to data quality and standards⁸³. Addressing these gaps will require sustained coordinated action at both EU and national level, including continued investment in AI uptake in health, stronger interoperability, and effective implementation of the EHDS.

SUMMARY ASSESSMENT: *Notable progress*

⁸³ [Study on the deployment of AI in healthcare – Publications Office of the EU](#), Directorate-General for Health and Food Safety (European Commission), PwC, EEIG, Open Evidence, 2025.

15.2 Member States should implement the actions foreseen in the Action Plan on cybersecurity of hospitals and healthcare providers.

Member States have begun preparations for a coordinated security risk assessment on medical devices, as outlined in the action plan. Moreover, some Member States have reported on preparation of national action plans for cybersecurity in the health sector (HU, SK). Member States have not reported on the distribution of cybersecurity vouchers for hospitals and healthcare providers.

As the set-up of a cybersecurity support centre for hospitals and healthcare providers at ENISA is ongoing, activities for Member States indicated in the action plan that involve interaction with the support centre have still to be initiated.

SUMMARY ASSESSMENT: <i>Limited progress</i>
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16 Protection of minors

16.1 Member States should implement the harmonised EU age-verification solution in the national EUDI Wallets, including systems for issuing the proof-of-age attestations, and accelerate the issuance of electronic means of identification to minors;

Member States are required to provide European Digital Identity Wallets (EUDIWs) to their citizens by 24 December 2026. The wallet will support the privacy-preserving exchange of proofs of age, including a specific ‘I am over the age of NN’ attestation which citizens can use to confirm that they meet a minimum age requirement when accessing services.

Wallets are issued to minors on the basis of national regulations, as harmonisation across the EU has not yet been achieved. As a result, some Member States make the wallet available from the age of 12, while others restrict it to adults (18+).

To support online platforms in implementing a robust, user-friendly, data protection, and privacy-preserving age verification method, the European Commission, in close collaboration with the Member States, has developed a harmonised approach in parallel. This resulted in the release of a [blueprint for an EU age verification solution](#), based on the technical specifications of the EUDIW, in July 2025, which is currently being piloted with Member States, platforms, and users.

Several Member States (CY, DK, EL, ES, FR, IT) are planning to run pilots, with the first national apps expected in spring 2026. Once available in app stores, published by either Member States or third parties, the application will allow users to prove that they are over 18 when accessing age-restricted content or products online (such as pornography, gambling, or alcohol purchases), without sharing any additional personal data. The system is adaptable to extend the age verification solution to other age thresholds (e.g. 13+, 15+, 16+), or to other use cases, such as purchasing alcohol in a shop. Member States can decide on their exact functionality when customising it to the national context, or at any later stage.

SUMMARY ASSESSMENT: <i>Limited progress</i>
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16.2 Member States should take action to ensure the protection of minors and their well-being online, by cooperating on important issues such as age verification and cyberbullying, including through support for the future action plan against cyberbullying

The digital services coordinators (DSCs) and competent authorities in charge of scrutinising the implementation by online platforms of the Guidelines on the protection of minors under Article 28(1) of the Digital Services Act (DSA) meet monthly with the Commission and discuss compliance solutions and exchange best practices with regard to the enforcement of the Guidelines. Over the last year, the working group has adopted an implementation strategy for the Guidelines and also contributed to the development of the Commission's blueprint for age verification. Moreover, concrete actions concerning enforcement against providers of pornographic content are expected by Q2 2026.

The Commission continues to monitor the transposition and effective implementation of the Audiovisual Media Services Directive (AVMSD) by the Member States, including the provisions pertaining to the protection of minors. Moreover, since its establishment in February 2025, the European Board for Media Services has also functioned as a forum for exchange and collaboration between Member States on the implementation of the AVMSD, especially with regard to pressing challenges such as the protection of minors online, which was one of the media board's work priorities in 2025.

The Commission adopted the action plan against cyberbullying after extensive consultations with stakeholders, including Member States' representatives through the expert group on safer internet for children. The action plan focuses primarily on minors, while also considering the gender dimension and enhanced vulnerability of certain groups of young people.

It aims to establish an EU framework with a common understanding of cyberbullying at its core. The action plan is founded on three interlinked pillars:

- o first, ensuring a coordinated EU approach for protection, by making full use of the existing policy and legal instruments;
- o second, increasing prevention and awareness;
- o third, improving reporting and support, including with a dedicated online safety app.

On the basis of the 2026 Better Internet for Kids (BIK) policy monitor, Member States **have continued to take significant action** to protect minors and support their well-being online. National approaches are increasingly aligned with the BIK+ strategy and reinforced by the implementation of key EU legislation such as the DSA and the AVMSD. There has been a clear shift towards more structured governance, with more countries adopting national action plans, clarifying responsibilities, and grounding policies more explicitly in children's digital rights. Cooperation is also becoming more operational, for example through closer links between digital services coordinators and safer internet centres, and the use of tools such as risk assessments and trusted flaggers.

Measures addressing online risks, including cyberbullying and harmful content, are now widespread across Member States and increasingly embedded in broader policy frameworks. Countries are

strengthening oversight of platforms, introducing school policies to support digital well-being, and integrating online safety, media and AI literacy into education systems. Digital empowerment is well established, with most Member States running initiatives on disinformation, youth-focused fact-checking, and support for parents. At the same time, gaps remain: data collection is still uneven, monitoring is not always systematic, and only a limited number of countries have put in place mechanisms to involve children directly in shaping digital policies.

Progress is also visible on age-related safeguards and efforts to address cyberbullying. Age verification is receiving increased attention, with more Member States introducing or developing measures, although approaches remain at different stages and are not yet consistent. Taken together, this points to **notable progress**, with clear engagement and a solid basis for further cooperation, including in support of the action plan against cyberbullying, while further work is needed to improve consistency, evidence, and structured participation across Member States.

SUMMARY ASSESSMENT: *Notable progress*

17 Information integrity

- 17.1 (a) Member States should increase resilience against disinformation by investing in areas such as fact-checking, media literacy and technological detection tools; (b) Member States should promote further research on information manipulation, looking into the structural, economic, psychological, and technological factors that contribute to its spread; (c) Member States should develop and implement national strategies for countering foreign information manipulation and interference, including improved detection, response capacity, and secure information exchange channels**

The erosion of information integrity poses a threat to democratic resilience, particularly in an era when foreign information manipulation and interference (FIMI) and coordinated inauthentic behaviour (CIB) have grown in sophistication, exploiting algorithm-driven amplification, deepfake technologies, and fragmented media ecosystems. As emphasised by the European Council, strengthening democratic resilience is of primary importance and Member States are invited to enhance their efforts to counter FIMI⁸⁴.

Recent Eurobarometer data shows that 42% of Europeans view foreign information manipulation and disinformation, especially during elections, as a major threat to democracy, second only to public distrust in institutions (49%)⁸⁵. This underscores the importance of safeguarding information integrity to maintain public trust, empower citizens through media literacy, and strengthen democratic resilience against emerging digital threats.

The European Democracy Shield (EDS), adopted in late 2025, bolsters and complements the initiatives undertaken within the Digital Services Act (DSA) framework. The democracy shield is a comprehensive initiative to protect democratic processes, institutions, and media freedom from foreign interference, disinformation, and cyber threats. It focuses on enhancing societal resilience, ensuring electoral integrity, and combating malicious manipulation using AI and deepfakes. This complements the processes under the DSA and the Code of Conduct on Disinformation, to significantly boost the EU's capacities to combat FIMI and safeguard the integrity of the information space.

Member States have made some progress in recognising and integrating media literacy as a tool to counter disinformation. However, implementation remains fragmented in both scope and target audience. Estonia stands out for its collaborative approach⁸⁶ to media literacy guided by the National Media Literacy Action Plan for 2024-2026⁸⁷. However, most Member States bundle media literacy with broader digital skills initiatives, often focusing narrowly on school-aged populations. At the same time, Member States have made efforts to advance research on information manipulation. However, these efforts remain fragmented and unevenly distributed, often driven partially by national security frameworks.

⁸⁴ [European Council Conclusions](#), 19 March 2026.

⁸⁵ [Special Eurobarometer 568, 'Protecting and promoting democracy'](#), May 2025.

⁸⁶ In Estonia, national responsibility for media literacy is held by the Government Office (Riigikantselei), in collaboration with the Ministry of Education and Research (Haridus- ja Teadusministeerium).

⁸⁷ [National Media Literacy Action Plan for 2024-2026](#) [in Estonian], Estonian Government.

The European Digital Media Observatory (EDMO) complements these national efforts through its network of 15 regional EDMO hubs. EDMO integrates the work of independent academic researchers, fact checkers, and media literacy practitioners. Each hub helps detect and analyse disinformation campaigns, producing content to support mainstream and local media and public authorities in exposing harmful disinformation campaigns, organising media literacy activities at national or multinational level, and helping national authorities monitor online platforms’ policies and the digital media ecosystem.

In 2025 Member States made limited progress in developing national strategies to counter FIMI, with approaches ranging from comprehensive, multi-pillar frameworks to fragmented, sectoral measures. France and Ireland stand out as leaders, having adopted formal national strategies: France’s National Strategy to Combat Information Manipulation (2026-2030) and Ireland’s National Counter-Disinformation Strategy (NCDS).

However, most Member States do not have unified FIMI strategies, and rely instead on sectoral approaches through broader national security, cybersecurity, or DSA-related measures. To effectively safeguard information integrity, Member States should fully leverage the FIMI Toolbox to maximise coordination, scale up responses and provide information for proactive, deterrence-based strategies⁸⁸.

SUMMARY ASSESSMENT: *Limited progress*

⁸⁸ [4th EEAS Annual Report on Foreign Information Manipulation and Interference Threats](#), European External Action Service, June 2026.

17.2 Member States should develop new strategies to ensure a pluralistic media sphere, including through financing provisions for news media, in ways that respect media independence.

According to the Media Pluralism Monitor 2025 report on risks to media pluralism and media freedom, no Member State falls into the extreme risk bands (very high/very low), with only HU falling into the high-risk category. Most (22) of the countries are assessed as medium-risk, with roughly half of them falling into the upper band of this category (medium-high) (BG, CY, CZ, EL, ES, HR, IS, IT, MT, PL, RO and SK) and the other half (AT, BE, EE, FI, FR, IE, LT, LU, LV and PT) at the lower tier (medium-low). The average risk score for the EU, estimated at 49%, falls within the medium-low risk band. Only four Member States – DE, DK, NL and SE – are assessed as falling in the low-risk category. Their good performance reflects strong fundamental protection of the media, as well as good safeguards for the political independence of the media and, to a lesser extent, for the inclusive media environment. HU stands out as the worst-performing country by a considerable margin, followed by MT and RO, which show shortcomings in the areas of market plurality and political independence. BG, CY, RO and, to a lesser extent, EL are all associated with an especially poor performance in market plurality and social inclusiveness. The worst-performing Member States scored particularly poorly in market plurality, with CY, HU, and RO falling into the highest-risk category.

According to the 2025 European Media Industry Outlook, the viability of the news media sector is at risk in nearly all Member States (except for LU and NL). Total revenues have been decreasing, in particular in the press and magazine subsectors. The distribution of news is increasingly dominated by online platforms and search engines, which generate structural imbalances in the online advertising market and limit opportunities for news media actors to monetise their content. The viability of local news media is under particular strain, with a medium-to-high risk of emerging news deserts in most (19) Member States, which further weakens the pluralism of the media sector.

The European Media Freedom Act (EMFA), a key piece of legislation to protect media freedom, independence and pluralism within the EU's internal market, entered into force across the European Union in August 2025. The EMFA aims to enhance the integrity of the internal market and thus protect media pluralism and independence in the EU. The 2025 Rule of Law Report highlighted that the EMFA triggered readiness checks of Member States' legislation before most of its provisions had been applied and that the newly set up European Board for Media Services, an independent advisory body consisting of representatives of national media regulators, will play a central role in monitoring, coordinating and supporting media policies across EU Member States.

In November 2025 the Commission, jointly with the High Representative of the Union for Foreign Affairs and Security Policy, adopted a communication on the European Democracy Shield. It also lays down the Commission's plans to deploy its financial tools to support independent and local journalism under a new Media Resilience Programme to bridge current support with funding programmes proposed in the 2028-2034 multiannual financial framework (MFF). The Commission also proposed to further increase support to the news media sector under the next MFF with the AgoraEU programme.

The Commission operates in full accordance with the principle of subsidiarity. Action to support the sector is also needed from the Member States.

The 2025 Rule of Law Report explained that measures put forward in previous years in several key areas, such as strengthening the safety and protection of journalists, addressing strategic lawsuits against public participation (SLAPP) and addressing structural challenges in the media landscape more generally under the European Media Freedom Act (EMFA), were at different stages of implementation. The report referred to deteriorating conditions for journalists in several countries, with increased physical violence during protests, more online harassment and smear campaigns by politicians, as well as growing risks from highly concentrated media ownership and the dominance of a few digital platforms.

The 2025 European Media Industry Outlook highlighted that news media organisations struggle to harness technological developments, including AI systems, and to develop industry-wide technological infrastructures to scale up and unlock new revenues. While EU-level support for media viability and media pluralism is expected to increase, it is also necessary to support the development of such technological infrastructures, which can help news organisations overcome language and cultural barriers, reach new audiences or generate new advertising revenues.

SUMMARY ASSESSMENT: *Limited progress*

18 Green and digital

18.1 (a) Member States should support the development of harmonised environmental impact metrics for digital solutions including AI-based solutions as well as metrics for digital infrastructures such as, edge computing, data centres, and telecommunications networks; (b) Member States should reinforce their cooperation with the AI Office, the Green Digital Coalition, and the European Green Deal Data Space, as well as contributing to the upcoming EU Code of Conduct for sustainable telecommunications networks; (c) Member States should incorporate digital sustainability KPIs into their national digital and green transition plans.

In January 2026 the Commission published an [EU Code of Conduct \(EU CoC\) for the sustainability of telecommunications networks](#), as provided for in the [2022 'Digitalising the energy system' action plan](#). Member States contributed via BEREC, in particular during stakeholder workshops in May and November 2025. BEREC has included in its [2026 work programme](#) the establishment of an ad hoc data collection mechanism, through a questionnaire on the implementation of key sustainability indicators that national regulatory authorities will distribute to market players. Moreover, references to the EU CoC are included in the Commission's [Digital Networks Act \(DNA\) proposal](#), which is currently in interinstitutional negotiations.

In February 2025, the second phase of the European Green Digital Coalition (EGDC) pilot project was launched. Between now and February 2027 the EGDC will apply the science-based methodology for assessing the net carbon impact of ICT solutions, which was developed in phase one and published in 2024, to 50 case studies. The project also includes close collaboration with financial institutions on setting eligibility criteria for climate-aligned investments. By January 2026, the European Green Digital Coalition had held alignment discussions with several national agencies in different Member States, such as ADEME (the Agency for Ecological Transition) and Arcep (the Electronic Communications, Postal and Print Media Distribution Regulatory Authority) in France and DENA (the German Energy Agency) in Germany, that are developing their own national frameworks closely aligned with the EGDC methodology in order to measure and assess the net environmental impact of digital solutions and infrastructure. The EGDC is also highlighted by the World Economic Forum in its new AI Energy Foresight Tool. Furthermore, the EGDC will continue working closely with similar initiatives at an EU and global level on developing a repository for sharing knowledge from the 50 case studies.

The Green Deal Data Space is seeking to enable the Digital GreenTech community to scale up cross-sector solutions using reusable components and high-quality datasets. Priority actions include data-driven services for the European Water Resilience Strategy, digitisation of permitting processes, pilots on textile traceability and nature credits, and advanced forest monitoring with machine learning on open and confidential data.

With respect to environmental impact metrics for digital infrastructures, the Commission has introduced the Data Centre Energy Efficiency Package, which includes a rating scheme for data centres, covering energy efficiency, water efficiency, renewable energy use, waste heat reuse and flexibility, based on the existing reporting scheme.

SUMMARY ASSESSMENT: *Limited progress*

19 Simplification

19.1 Member States should fully leverage the DDB's role and expertise to help streamline the implementation of digital *acquis* and support the development and deployment of solutions for simplification and reduction of administrative burden.

The Digital Decade Board (DDB) continues to play an important role as a platform for exchange, coordination and peer learning between Member States on the implementation of the Digital Decade Policy Programme (DDPP) and the broader digital *acquis*. Throughout 2025 and in early 2026, Member States engaged regularly in the DDB, structuring their work around monitoring progress, preparing the DDPP review and addressing implementation challenges.

Engagement has taken place through regular meetings, targeted exchanges under successive Council Presidencies and more structured formats such as 'deep dives'. These discussions have enabled Member States to share experiences, identify common challenges and help implement and review the DDPP. In particular, Member States have consistently highlighted issues related to administrative complexity, reporting burdens, KPI methodology, and the alignment of EU recommendations with national governance and budgetary processes.

In 2025 Member States collectively strengthened their focus on regulatory simplification and administrative burden reduction. A dedicated deep dive on simplification, held in September 2025, enabled exchanges on national road maps and on streamlining reporting and implementation processes. Simplification concerns also featured prominently in broader discussions, with several Member States calling for lighter monitoring requirements, better-aligned indicators and more actionable recommendations. Subsequent exchanges, including in the context of the DDPP review, confirmed simplification as a shared priority.

This collective orientation was reinforced by the adoption of the 2025-2026 DDB work programme. The programme introduces thematic deep dives on governance and simplification and plans the preparation of a DDB Opinion on the DDPP review as a key joint deliverable, supporting more strategic and evidence-based discussions between Member States.

At the same time, Member States are cooperating closely in preparing the DDB Opinion through a collaborative drafting process supported by the Commission and led by designated penholders. The Opinion is expected to include proposals on governance simplification, administrative burden reduction and improved coordination mechanisms, building on DDB exchanges.

These developments point to a gradual strengthening of the DDB's role, with Member States moving towards more structured and output-oriented cooperation. However, this is a gradual process. While discussions have become more focused and operational, tangible collective outputs in the area of simplification – such as jointly agreed guidelines, common tools or coordinated implementation approaches – remain limited at this stage.

Overall, Member States have demonstrated sustained engagement in the DDB and advanced collective discussions on simplification, governance and implementation of the digital *acquis*. More structured cooperation is emerging, in particular through thematic deep dives and the preparation of

the DDB Opinion, but this has not yet translated into concrete shared tools or coordinated implementation practices.

Further efforts might be needed to strengthen the DDB's operational role and translate discussions into tangible outcomes. This could include developing common guidelines, practical toolkits or shared approaches to reducing administrative burdens, particularly in areas such as reporting, monitoring and alignment of national road maps. The ongoing DDPP review and forthcoming DDB Opinion could provide an opportunity to reinforce the Board's role as a more strategic and action-oriented forum supporting simplified and coordinated implementation across the EU.

SUMMARY ASSESSMENT: <i>Notable progress</i>
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20 Cities and regions

20.1 Member States should encourage cities to participate in multi-country projects such as the LDT CitiVERSE EDIC and support cross-border reuse of digital public services;

Although Member States and local and regional authorities are investing in digital capacity building and data-driven governance, these efforts remain fragmented and project-based. There is limited coordination across borders or policy domains at EU level. Joint frameworks and collective actions are still in their early stages, as the Commission has only recently established the governance and legal structures for initiatives such as the LDT CitiVERSE EDIC, which participating Member States and cities are now building and scaling up.

In this context, the progress made so far can be described as limited but foundational: individual administrations are experimenting and investing, but the conditions for large-scale, interoperable and reusable digital solutions across the EU have not yet been fully established. The next three years are therefore expected to be critical, as Member States and cities transition from isolated pilots and national or regional-level initiatives to more coordinated, EDIC-driven investment and shared governance. This should transform the current limited progress into significant, systemic advancement in local digital capabilities and data-driven governance.

Living-in.eu is a bottom-up movement that aims to accompany cities in their digital transformation and enables cities and regions to work together on societal challenges with the help of digital solutions. The initiative is a cooperation of Eurocities, Open & Agile Smart Cities & Communities (OASC) and the European Network of Living Labs (ENoLL) and is supported by the European Commission and the European Committee of the Regions. Currently, the [Go Li.EU](#) project funded by the Commission provides support for the governance structure until September 2026.

Over the past three years, the focus has been on creating the conditions for upscaling existing and ‘proven digital solutions’ and supporting Member States, cities, and regions in strengthening local digital capacities and promoting data-driven governance. In the last year of the project (November 2025 to September 2026), more effort has been dedicated to curating existing and proven digital solutions in line with the increasing demand from within the community, the European Commission, and other stakeholders for best practices and use cases that showcase how, in practice, technology is used in cities to improve the quality of life of the people who live there.

[The Local Digital Twin \(LDT\) CitiVERSE EDIC](#), legally established on 12 December 2024 in Valencia, is the only EDIC accepting cities, regions and public institutions as members. It sets a new global benchmark for cooperative smart city development. It focuses on AI-based solutions to enhance and better customise urban planning, including simulations addressing the impact of changing traffic conditions on air quality, decarbonisation, and congestion. Additionally, it explores generative AI-based virtual reality applications to improve citizen interaction, for instance, simplifying the consultation and understanding of planned urban changes.

The LDT CitiVERSE EDIC now involves 15 Member States (Belgium, Czechia, Germany, Estonia, Ireland, Spain, France, Croatia, Italy, Latvia, Luxembourg, Netherlands, Portugal, Slovenia and Slovakia) including Germany, which joined on 11 February 2026, and supports cross-border reuse of digital public services through common infrastructure and solutions implemented in regions and cities.

SUMMARY ASSESSMENT: <i>Limited progress</i>
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20.2 (a) Member States should anchor local digital strategies in the European Declaration on Digital Rights and Principles (DRP); (b) Member States should invite cities to adopt their own local Digital Rights and Principles Charters;

In 2025 the European Union continued to strengthen structured cooperation between Member States and subnational authorities, particularly cities and regions. Initiatives such as the Living-in.EU community have further expanded, facilitating alignment with EU digital principles and enabling peer learning across municipalities, although participation remains uneven across countries.

Collaborative platforms, including Eurocities-led initiatives, have supported experimentation and scaling-up of digital urban solutions, reinforcing citizen-centric service delivery, in particular at the [2025 Eurocities Digital Forum – Digital rights at the heart of cities](#), which gathered city leaders, policymakers, and experts to address the role of local administrations in safeguarding digital rights. At the same time, the network of [European digital innovation hubs \(EDIHs\)](#) has consolidated its role in supporting local digitalisation processes. The EDIH network has established itself as a significant driver for local digitalisation and AI uptake across both businesses and public administrations. While some hubs focus more strongly on SMEs and others on the public sector, in practice their work often bridges both. By early 2026 EDIHs had a presence in nearly 90% of European regions through more than 200 hubs. They provide tailored support in areas such as test-before-invest, networking, access to finance, and skills development. This support is anchored locally, while the hubs are increasingly coordinating their efforts at national level and stepping up exchanges of good practices and mutual support across Europe.

The [LDT CitiVERSE EDIC](#) significantly expanded its membership and operational scope in 2025, fostering the development of a European ecosystem for AI-enabled Local Digital Twins. It contributes to the implementation of smart communities data spaces and supports interoperability and open standards fostering collaboration between actors to develop municipal strategies aimed at people-centred digitalisation, while enhancing technological sovereignty, interoperability and the use of digital technologies to promote sustainability and collective well-being. In this way, the LDT CitiVERSE EDIC acts as a catalyst for the territorialisation of the European Declaration on Digital Rights and Principles. Despite these advances, the uptake of EU-supported frameworks by national and regional administrations remains limited, constraining their overall impact. Progress in data collection and monitoring is also still fragmented. While tools such as the Local and Regional Digital Indicators (LORDI) framework and its maturity assessment system ([LORDIMAS](#)) have expanded – reaching over 150 participating authorities by early 2025 – data coverage remains insufficient for comprehensive benchmarking. In this context, LORDIMAS serves as a practical tool to advance the implementation of the European Declaration on Digital Rights and Principles at local level, by helping authorities to identify gaps in areas such as inclusiveness, transparency, interoperability, and citizen participation, and supporting the alignment of digital strategies with a human-centric approach.

Overall, cities continue to play a central role in operationalising the Declaration on Digital Rights and Principles beyond the national authorities. Local initiatives across Europe are increasing their efforts to embed inclusiveness, transparency, and data protection in digital governance. However, implementation gaps persist, and awareness of digital rights frameworks varies considerably between Member States.

20.3 Member States should invest in local digital capacity and data-driven governance: foster the development of local observatories (e.g. to monitor the digital divide) and encourage participation in tools to improve data availability and inform targeted policymaking.

Although the European Commission and Member States are actively investing in local digital capacity to ensure that cities are co-creators of European data spaces, overall progress remains limited as these initiatives are still largely in foundational or pilot phases. Current efforts are heavily focused on developing the necessary tools, middleware, and standardisation frameworks, meaning that widespread deployment and the targeted establishment of local observatories have not yet been fully realised.

To build local capacity, the European Data Space for Smart Communities project is providing structured support, mentoring, and training to 11 pilots across 14 Member States (Austria, Belgium, Bulgaria, Germany, Ireland, Spain, Croatia, Finland, Italy, Hungary, Netherlands, Portugal, Romania and Slovenia). These pilots, covering domains such as traffic management and climate, serve as practical testing grounds for cities to learn how interoperability and governance function in real urban contexts. Concurrently, the deployment of Simpl – an open-source, smart middleware platform – is addressing critical barriers related to data sovereignty, security, and cross-industry interoperability, establishing a common technical baseline for data-sharing initiatives.

A major focus of current progress is the drive towards standardisation to improve data availability and reduce the high fragmentation of the smart city market. Through the LDT and MIM project, efforts are being made to develop European standards for an AI-based Local Digital Twin (LDT) reference architecture. This aims to ensure that smart city solutions can be exchanged and reused across borders, catering to the distinct operational needs of large metropolitan hubs, medium-sized cities, and rural communities alike.

Furthermore, to foster true data-driven governance, significant collective action is directed at standardising minimal interoperability mechanisms (MIMs). Current initiatives aim to formally standardise key specifications (MIMs 1, 2, and 7). This standardisation will eventually enable cities to procure interoperable components, scale up successful models, and avoid vendor lock-in, paving the way for more targeted policymaking and significant progress in the coming years.

Overall, the Local Digital Twin (LDT) CitiVERSE EDIC – driven by the vision of ‘Networked Local Digital Twins towards the CitiVERSE’ – is meant to serve as the primary vehicle for utilising these standards and technologies. Currently involving 15 Member States, the initiative aims to connect existing Local Digital Twins to form a unified European ecosystem of data-driven collaboration. By fostering multi-country projects, it seeks to create a common infrastructure of interoperable data platforms and services with a special focus on geodata, AI, and virtual worlds. This will enhance capacity building through a shared set of practice-validated products and facilities. By ensuring scale, replicability, and portability on the basis of international open standards, the EDIC will soon offer its AI-based urban planning and citizen interaction solutions to members through a dedicated marketplace, ultimately strengthening local governance while securing European values and digital sovereignty.

Funding the Digital Decade

21 Efficiency of budget

21.1 (a) Member States should prioritise strategic digital investment in their national budgets, aligned with Digital Decade objectives, EU digital principles, and sovereignty imperatives, including taking action to mobilise private investment. (b) Member States should pursue reforms, including in public procurement, to facilitate the emergence and scaling of sovereign digital technologies and infrastructure.

Member States have included approximately 1 933 measures in their national Digital Decade strategic road maps, including national and EU-funded measures with a total public budget of EUR 222.1 billion. Several of these measures contribute to Digital Decade objectives, EU digital principles and sovereignty imperatives and cover actions such as developing secure infrastructure and capacities for cutting-edge technologies (e.g. AI, quantum technologies, semiconductors, 5G) as well as fostering digital capabilities, protection and empowerment. However, these elements are often integrated as a complementary aspect. The number of measures directly targeted and designed to address Digital Decade objectives, EU digital principles and sovereignty imperatives is smaller.

SUMMARY ASSESSMENT: *Limited progress*

21.2 Member States should collaborate actively in the development of large-scale digital projects with transnational relevance, potentially supported by new common financing mechanisms or a dedicated Digital Sovereignty Fund

Member States' continued collaboration in the area of large-scale digital projects has resulted in two new European Digital Infrastructure Consortia (EDICs) being set up in the last quarter of 2025 and two more formal applications to set up EDICs submitted in the first quarter of 2026. This means that the EDIC ecosystem has grown from three established EDICs in May 2025 to five established EDICs in Q1 2026, with the possibility of seven EDICs being established by Q2 or Q3 2026.

More specifically, in addition to the existing Alliance for Language Technologies EDIC (ALT-EDIC), the Local Digital Twins towards the CitiVERSE EDIC (LDT CitiVERSE EDIC) and the EDIC for the European Blockchain Partnership and European Blockchain Services Infrastructure (EUROPEUM-EDIC), the following EDICs were set up: the Digital Commons European Digital Infrastructure Consortium (DC-EDIC) and the Innovative Massive Public Administration interConnected Transformation Services European Digital Infrastructure Consortium (IMPACTS-EDIC).

The DC-EDIC aims to build a European community around digital commons by facilitating access to funding, supporting development and scale-up, enhancing public contributions, and participating in digital commons projects. It will act as a one-stop shop for stakeholders such as open-source communities, public administrations and developers, serve as an incubator for strategic digital commons, and accelerate joint projects (e.g. a European digital workplace). Through collaborative and open governance models, the DC-EDIC also supports the development and scaling of reusable digital solutions and common digital infrastructures that can strengthen interoperability, resilience and cooperation across Member States.

IMPACTS-EDIC aims to accelerate the adoption of advanced technologies, supporting the implementation of the Interoperable Europe Act (IEA). With the goal of advancing collaboration between Member States, European agencies, and institutions, IMPACTS-EDIC aims to enhance public services through innovative interoperability solutions. It will facilitate digitisation of cross-border public services by promoting shared governance models and technological innovation, such as GovTech and the European Interoperability Framework. This will benefit citizens, businesses, and economies by streamlining processes and reducing administrative burdens.

In addition to the new EDICs set up, the overall number of Member States engaged in the existing EDICs also increased. To date, all EU Member States have participated in at least one of the EDICs, either as members or as observers. The geographical coverage is already improving, and further growth in terms of budget size, use case development, or involvement of industry is likely in the next stage.

While the governance structures underpinning several EDICs are now becoming operational, a key challenge will be translating these frameworks into sustainable ecosystems capable of delivering concrete cross-border projects, attracting stakeholders and ensuring broader uptake at national,

regional and local level. Further efforts will be required to strengthen coordination and scale reusable digital solutions across participating Member States.

The Commission proposal for the draft European Competitiveness Fund regulation recognises EDICs as one of the implementation mechanisms for large-scale digital projects (multi-country projects). As a structural measure to facilitate cooperation with Member States in setting up EDICs (also responding to the Digital Decade Board's plea for further support for EDICs in realising their full potential), the introduction of national contact points for EDICs at Member State level will be proposed as a general recommendation.

SUMMARY ASSESSMENT: *Notable progress*