



CSC welcomes the draft implementing decision on the key performance indicators of the EU's 2030 digital targets. However, we continue to regret the rather sporadic and narrow nature of the targets themselves. We hope that the 2026 review of the targets, as provided for in Recital 20 of the Digital Decade policy programme, will indeed expand the targets to cover the data economy, sustainability, cybersecurity and other relevant dimensions that are missing from the current targets. Taking a more comprehensive approach is instrumental in order to go beyond the merely technological aspects. It means recognising the profound systemic change that digitalisation drives, and only this recognition enables reaping the benefits for the economy and society at large.

More comprehensive target-setting will require an approach that moves away from administrative silos, similarly to how Finland's national digital compass has been prepared in good cooperation across all ministries. It is also crucial to design the KPIs so that the right issues are measured. This can be done already before the 2026 review by using the KPIs of the existing targets to widen the scope of the targets as much as possible, aiming to take into account also the societal implications. The Commission is already suggesting such widening for target 1a by adding gender convergence in the KPI, although this aspect is regrettably not featured in the target itself. In the following sections, we suggest a similar approach for some of the other indicators.

When it comes to target 1b, we recommend designing the KPI so that it does not only measure the number of ICT specialists as a whole, but in all fields that are key for the development of the digital single market and data economy. This would put more emphasis on the quality rather than quantity of the specialist competences. The key sectors in which the number of specialists would be measured should include at least data management and data analytics, AI and quantum development as well as cybersecurity. These have all been identified as fields in which demand for skills is growing¹, European skills levels are lagging behind in international comparisons² or there is a mismatch between the supply and demand of skills³.

The KPI for target 1b must also reflect the fact that digitalisation changes the competences needed in other fields than just ICT. For example, legal, policy and business specialists must adjust their competences to the requirements of the digital era. The systemic nature of digitalisation means, that new types of skills are needed in all fields, and on the other hand, digital infrastructures are also a key enabler for skills development. Therefore, the KPI should measure the development of digital skills in a wider array of fields of specialist expertise than just ICT.

¹ <https://digital-skills-jobs.europa.eu/en/inspiration/research/oecd-skills-digital-transition-2022>

² <https://macropolo.org/digital-projects/the-global-ai-talent-tracker/> and <https://www.bcg.com/publications/2022/can-europe-catch-up-in-quantum-computer-race>

³ https://iapp.org/media/pdf/resource_center/ISC2_Cybersecurity_Workforce_Study_2021.pdf

We continue to regret the absence of targets related to data and HPC infrastructures, especially as the EU has very ambitious goals and heavy investments for developing its capacities and competences in these areas (e.g. EuroHPC). Thus, it is crucial to formulate the KPI for target 2c so that it will not only measure the number of the edge nodes, which are only a part of the ecosystem, but also their interoperability with the wider ecosystem of data and computing infrastructures. Also, the climate-neutrality of the edge nodes mentioned in the target must be reflected in the KPI as well.

Similarly to what was suggested for the edge nodes above, the KPI for target 2d must also measure the interoperability of quantum infrastructures with the rest of the ecosystem. Furthermore, this KPI must be developed towards putting more emphasis on the quality than on the quantity of quantum capabilities. The aim should not be to have as *many* quantum computers as possible but as *advanced* quantum computers as possible. One way to measure this could be to simply follow how the number of qubits in Europe's top quantum computers develops by 2030.

The KPIs should also expand the scope of the targets to cover cooperation between enterprises and higher education institutions. For example, the KPI related to target 3a(ii) could measure how many of the enterprises performing data analytics do so in cooperation with research and higher education institutions.

As to the rest of the KPIs related to the digital transformation of businesses, it is impossible to evaluate those suggested for targets 3a(iii) and 3b, due to unclear references. The footnotes do not provide the necessary information as to what technologies will be considered AI technologies and what are the 12 selected technologies referred to in the KPI of target 3b. Especially the former are crucial to clearly define here, as the deliberations on the AI Act seem to be taking longer than expected, and reliance on the definition to be made there may delay the KPIs as well.

Whereas the target 4a only measures provision of digital public services, the related KPI should also assess the uptake of those services and/or the citizens' ability to use them. Moreover, the interoperability between the various digital public services should also be assessed.

We suggest using the KPI for target 4b to advance secondary use of health data for research purposes. This can be done by adding that the mechanisms for citizen online access to health data must also support access for secondary use purposes.

Finally, the KPI for target 4c must measure the Union-wide recognition of the national eIDs, as required in the target itself.

As a general concluding remark we would like to point out that while the suggested KPIs do a good job at leveraging existing Eurostat indicators and resources, more must be done to explore those of other actors, such as OECD⁴. Also, the metrics being created at national level to measure progress towards the digital decade targets each Member State has/will set for themselves must be used to inform the EU-level KPIs.

Another aspect to explore further are the possible interactions between the KPIs. This is important for ensuring synergies and avoiding overlaps.

⁴ e.g. Skill needs per industry: https://stats.oecd.org/Index.aspx?DataSetCode=S4J2022_NACE

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