



OPINION

European Economic and Social Committee

Digital Innovation Hubs and SMEs

Digital Innovation Hubs and SMEs
(own-initiative opinion)

CCMI/194

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Plenary Assembly decision	18/01/2022
Legal basis	Rule 52(2) of the Rules of Procedure Own-initiative opinion
Section responsible	Consultative Commission on Industrial Change (CCMI)
Adopted in section	13/09/2022
Adopted at plenary	27/10/2022
Plenary session No	573
Outcome of vote (for/against/abstentions)	136/0/0

1. **Conclusions and recommendations**

- 1.1 The EESC strongly believes that the European economy can benefit from the digital and green transitions and become more competitive, sustainable, resilient and autonomous.
- 1.2 To achieve such goals, the EU must improve its R&D and innovation capacity and increase the dissemination of technologies among citizens, public administrations and enterprises.
- 1.3 The Committee considers that EU R&D investment should be boosted to 3% of GDP as soon as possible. The EU must develop a distinct skill set in new-generation digital technologies and ensure that they become a part of the business models of EU businesses.
- 1.4 The twin transitions offer many opportunities for enhancing SMEs' competitiveness, but they can also pose a threat. To avoid such risks, European SMEs must be accompanied through transitions with a set of policies and instruments.
- 1.5 Whilst they can be extremely innovative, traditional SMEs find difficulties in managing the twin transitions due to financial and organisational limits, as well as lack of competences.
- 1.6 Access to finance for innovation for SMEs must be radically improved in every Member State, also through recourse to equity financing and tax incentives linked to digital technologies and skills.
- 1.7 DIHs function as one-stop-shops that provide analyses and solutions to companies for tackling the twin transitions. The EESC believes that more EU companies, even those in the social economy, should engage in the DIHs' activities, and that the results should be better communicated, particularly to SMEs.
- 1.8 DIHs can serve as platforms for testing technological solutions prior to investing ("test before invest"), for exchanging best practices and developing digital skills. They can also play a major role in harnessing the potentials of digital technologies for sustainability.
- 1.9 The Committee believes that there is a lack of clear vision on the future development of the DIHs, especially in light of the newly established EDIHs. KPIs that measure the performance of DIHs are needed, with the goal of transforming them into the main European centres for the inclusive innovation of SMEs.
- 1.10 The EESC considers that the DIHs should act as "middle-layers", designed to listen to SMEs demands and identify tools and solutions to guide them. Raising awareness on the important role that the DIHs can play is paramount.
- 1.11 The Committee notices several SME policies are not implemented at national level, and there is a large gap in communication on these facilities for SMEs. The EU and the Member States must jointly engage in raising awareness on existing European and national initiatives for SMEs, including the benefits of joining the DIH network.

- 1.12 The EESC considers that proper financing needs to be ensured for the DIHs' activities – from business development and R&I support programmes, to subsidised financing for businesses and participation in calls for tender.
- 1.13 The EESC believes that DIHs should focus their attention on supporting regional economies and local SME systems, and recommends a regional mapping of existing hubs and an action plan focusing on regional development and greater inclusion and participation. Cooperation between large companies and SMEs can bring digital innovation to new levels, harnessing the now unused potential of supply chain based innovation.
- 1.14 The EESC notes that there are differences among European regions in the distribution of DIHs, with eastern and south-eastern Europe lagging behind. Reducing disparities between Member States and regions is of vital importance for European progress.
- 1.15 DIHs must support SMEs in upskilling and reskilling their workforce, including entrepreneurs, also for ensuring future employability in rapidly changing contexts. Education systems must be developed with a strong focus on STEM, starting from primary schools. Moreover, technical and vocational secondary and tertiary education and local universities are important actors. Digital skills are a critical factor to achieving full digitalisation and attracting young talents also into traditional sectors.
- 1.16 Trade unions, civil society organisations, employers' associations and public authorities, need to work together both in governing DIHs' missions and strategies and to develop lifelong learning and vocational training programmes that guarantee continued employability with decent workplaces and salaries, ensuring workers' social rights and active participation. Social dialogue is vital in the process, and gender equality must be secured.

2. Context of the proposal and general considerations

- 2.1 The digital transformation is having extraordinary effects on the economy, the environment and society as a whole. It is increasing the productivity of economic systems, improving public services and people's quality of life, and generating new development. Businesses and organisations (public and private, market and social) that have embarked on a path of digital transformation have developed their services, products and processes, and become more competitive.
- 2.2 Fears concerning the negative impacts on employment as a result of digitalisation have also been more clearly put into context: highly standardised activities in sectors that are more exposed to competition do present displacement risks, but these risks are much lower in sectors with greater added value and in manufacturing. Overall, the European economy can benefit from the digital and environmental transitions and become more competitive, sustainable, resilient and autonomous.
- 2.3 The changes being brought about by the digital transformation are fundamental and rapid. They require all organisations to continuously keep up with the frenetic pace of change, including by

reinventing themselves. SMEs, the backbone of the European economy, have been among the organisations that have suffered the most from the digital transformation.

- 2.4 Traditional SMEs tend to concentrate resources, which are scarce in terms of financing, human capital and organisational structure, into consolidated activities and practices. Even when they are highly innovative, SMEs tend to prefer incremental innovation (mid-tech) over the radical innovation (high-tech) that is typical of the digital domain. SMEs are also relying on traditional bank loans as financing, which is sometimes hindered by a lack of collateral or credit history. Enhanced financing opportunities can be developed, especially with regard to equity financing, which remains less developed in the EU compared to the USA for example, where much financing is available at stages where debt cannot be repaid.
- 2.5 The COVID-19 pandemic has accelerated digital transformation processes: key facets of the economy and society such as work, trade, education, communication, entertainment, were suddenly made virtual. In order to survive, SMEs have also had to develop a digital presence.
- 2.6 The COVID-19 pandemic also limited trade flows and disrupted global value chains, demonstrating the need and urgency for Europe to acquire a much higher level of technological independence. This is the direction in which the EU's strategies for developing autonomous and highly competitive solutions for key technologies for the future are moving. This entails policy choices that need to be welcomed and encouraged. Although progress has been made, there is still significant room for improvement in terms of the digital transformation of businesses, public authorities and other organisations.
- 2.7 The EESC believes that the ability to both produce innovation, and to disseminate it in society and the economy, will be the key factors that will determine EU's competitiveness between now and 2050. To this end, and as maintained by the European Commission in the Digital Europe¹ programme, the EU must develop a distinct skill set in new-generation digital technologies such as IoT (internet of things), big data, artificial intelligence, robotics, cloud computing and blockchain, and ensure that these enabling technologies become a permanent part of the business models of European businesses, including through Digital Innovation Hub activities. For the sake of clarity, in this opinion we refer to both DIHs and EDIHs as DIHs.
- 2.8 What has been said about the digital transition is also valid for the green transition. The two phases of the systemic transition have much in common and create a double burden for SMEs (and, of course, different opportunities that must be carefully assessed).
- 2.9 The digitalisation of European industry will have a direct impact on the achievement of the climate objectives of the Green Deal and on the Sustainable Development Goals (SDGs) of the 2030 Agenda. However, advanced digital projects are also using significant quantities of energy, and the EESC believes that EDIHs can play a major role in looking into the impact on the green transition. Sustainable production and circular business models in Europe can only be achieved through major investments in new emerging technologies.

¹ [OJ L 166, 11.5.2021, p. 1 Regulation \(EU\) 2021/694.](#)

- 2.10 These challenges require the rapid and vigorous development of the EU's technological capacity. The EESC notes that the EU is still behind in terms of R&D investment relative to GDP (2.32% in 2020, compared to 3.08% in the USA and 3.2% in Japan)². Investments in R&D should be boosted as soon as possible to 3% of GDP to allow the EU to compete globally in the world of the digital transition.
- 2.11 At European level, companies, and not just SMEs, struggle in adopting new technologies. The EESC – through several opinions – has highlighted the fact that, while the digital transformation involves significant opportunities for businesses throughout the EU, many of them still face barriers and legal uncertainties, particularly when it comes to cross-border activities. Uncertainties that, for many SMEs, add up to the lack of access to finance or investment resources, as well as skills shortages.
- 2.12 Hence, tools to support SMEs to overcome these gaps should be developed and strengthened. Digital Innovation Hubs (DIH) are the main instruments for this purpose. The EESC believes that more companies in Europe should collaborate with DIH and that the results obtained should be better communicated, particularly to SMEs.

3. **Digital Innovation Hubs as infrastructure to support SMEs**

- 3.1 Digital Innovation Hubs are different entities (organisationally, in terms of governance and in terms of services provided), set up across Europe to aid SMEs in undergoing digital transformation. DIHs function as one-stop-shops that provide analyses and solutions to companies for tackling the twin transitions.
- 3.2 DIHs provide SMEs with value-added services such as up- and re-skilling, consulting on innovation, technologies, strategies, finance, the green transition and the circular economy. They also often offer technological facilities and platforms for testing technological solutions before making investments ("test before invest").
- 3.3 The wide network of DIHs in Europe is currently undergoing major restructuring. The recently selected European DIHs (EDIH) will be 50% financed by Digital Europe funds and 50% by national and regional funds, and will be tasked with supporting the digitalisation of SMEs and public authorities. Following the adoption of the Digital Europe programme, the first EDIHs will be operational from September 2022. The current DIHs will continue to operate in support of the digital transformation of SMEs and regions using Horizon Europe and ERDF resources. The EESC believes that this overlapping of names could cause confusion among the recipients of the services.
- 3.4 The EESC believes that there is a lack of clear vision on the future development of DIHs. Therefore, the EESC calls for some clear KPIs to measure the performance of the DIHs overtime, as well as to map out how the digitalisation strategy of SMEs is progressing at European level. DIHs must become a thorough network of one stop shops for assisting the digital needs of SMEs.

² https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure&oldid=551418.

- 3.5 EDIHs will be more uniform in terms of size, governance and tasks. They will have a fairly extensive geographical presence and will develop specific, high-level capacities in individual "key enabling technologies" as defined by the Digital Europe programme. They will assist the digital transformation of companies, particularly SMEs and mid-caps, and public authorities.
- 3.6 While the key enabling technologies and high tech centred approach followed by the European Commission for the EDIHs is coherent with the goals of Europe's technological competitiveness set forth in the Digital Europe programme, it raises concerns in term of its ability to fit with the innovation pathways of SMEs.
- 3.7 The EESC considers that it is essential, in the strategy for increasing the digital capacity of SMEs, for more attention to be paid to the nature of the demand coming from these types of businesses, as well as the potential critical issues that could arise in these processes of radical change. This will be achieved by having more capacity to listen to the needs of SMEs and by collaborating with various stakeholders, including large companies, in dedicated innovation programmes.
- 3.8 SMEs do not have official organizational roles for innovation and R&D, and their approach to innovation is mainly geared to mid-tech (integration of established technologies) and incremental innovation (progressive and slower than radical digital innovation), which also develops through informal and semi-formal ways of exchanging expertise and experimentation with other companies, including as part of sub-contracting relationships. Key technologies could also be introduced in SMEs by building strategic and technological development pathways that include such technologies.
- 3.9 Innovation processes for SMEs therefore require a "middle-layer" between demand and supply. It should be designed to listen to (even a weak) demand and identify the most apt tools and solutions from among an over-abundant and chaotic supply of technological answers. DIHs could be this "middle-layer". Raising awareness on the important role that the EDIHs can play is paramount.
- 3.10 The results achieved by DIHs in this regard, can already be considered positive. According to the EIB: "The data collected show that digital innovation hubs play a key role in supporting European SMEs in the digital transformation. [...] Over 70% of surveyed enterprises that had used a digital innovation hub believe that the support they received has improved their digital journey".
- 3.11 Digital Innovation Hubs can also play a very important role in promoting the digitalisation of social economy enterprises, particularly for social enterprises operating in the welfare and home care sector, where digital technologies can help to improve services by addressing the needs of people with disabilities.

4. **Proposals for improving European policies on digital innovation for SMEs**

- 4.1 The EESC appreciates the attention devoted to SMEs and the amount of policies and programmes for their support. However, the Committee notices the overall approach of the EC is not focused enough on the processes and needs of SMEs. Moreover, not all of these policies are implemented at national level and there is large gap in the communication of these facilities among SMEs. Raising awareness on European and national initiatives must become a priority and the responsibility must be shared between the European institutions and Member States.
- 4.2 The EESC believes that, in order to implement the tasks of DIHs, proper financing needs to be ensured through the use of various sources, from business development and R&I support programmes at regional, national and European level, to subsidised financing for businesses and participation in calls for tender. On the SME side, the possibility of accessing tax incentives linked to investments in digital innovation and related skills, must be provided for.
- 4.3 The EESC believes that DIHs should play a key role in the smooth and balanced economic and employment development of the EU and, specifically, accompany the twin digital and green transitions of SMEs. To this end, they should also develop the provision of so-called "non-market" services as part of training and awareness-raising activities, and the costs of these activities of public relevance should be covered by public funding.
- 4.4 The EESC believes that DIHs should, above all, play the role of system integrators, bringing together SMEs' needs and technological solutions. To this end, it is crucial that DIHs develop the capacity to operate as local innovation platforms, bringing together the skills and resources of local innovation networks (and possibly external ones) and the demand/opportunities arising from local production systems, before developing specific skills in individual key technologies specific to other R&I entities (research centres, universities, large companies).
- 4.5 Given the standardisation of processes and incentives for cross-border cooperation and the sharing of knowledge, experience and practices, including through a shared digital platform, the EESC believes that DIHs should focus their attention on supporting regional economies and local SME systems. The EESC therefore recommends a regional mapping of existing hubs in collaboration with SME employers' organisations, and an action plan focusing on regional development and greater inclusion and participation.
- 4.6 The EESC notes that differences remain in the distribution of DIHs among European regions, with the same eastern and south-eastern European countries that have had low digitalisation turnouts in recent years lagging behind. In a previous opinion, the EESC stated that "It will be a particular priority to address the digital divide. [...] the pandemic has highlighted both the opportunities and disadvantages of digital communication, particularly for those living in rural areas". Reducing disparities between Member States and regions is of vital importance for European progress.
- 4.7 The EESC believes that, in order to incentivise the digital and green transitions for SMEs, two key dimensions must be properly monitored and addressed: widespread digital skills and cooperation between companies, starting with production and supply chains.

- 4.8 Digital skills are a critical factor, especially for SMEs, since they constitute the main obstacle to achieving full digitalisation, even in the presence of strong financial incentives for investments. For SMEs, up- and re-skilling involves both the employed workforce and entrepreneurs that are directly involved in the production processes and in innovation and investment choices. Where entrepreneurs lack digital skills, this prevents them from taking advantage of the opportunities provided by digital technologies, and is a serious hindrance to companies' competitiveness, which has a negative impact on employment.
- 4.9 SMEs do not have official organizational roles for innovation and R&D, and their approach to innovation is mainly geared to mid-tech (integration of established technologies) and incremental innovation (progressive and slower than radical digital innovation), which also develops through informal and semi-formal ways of exchanging expertise and experimentation with other companies, including as part of sub-contracting relationships. Key technologies could also be introduced in SMEs by building strategic and technological development pathways that include such technologies.
- 4.10 Trade unions, non-governmental and civil society organisations, employers' associations and public authorities, whose leading role must guide DIHs' mission and strategies, need to work together to develop up- and re-skilling, lifelong learning and vocational training programmes that guarantee the continuous employability of the workforce, decent workplaces and salaries and social rights. Workers must play a leading role in digital transformation processes and gender equality must be secured. Social dialogue is crucial for this purpose, and must be supported to identify the short- and medium-term needs, as well as the long-term policy effects.
- 4.11 Cooperation between large companies and SMEs, starting from production and supply chains, could bring digital innovation to new levels, overcoming many barriers to knowledge, standardisation and costs.
- 4.12 The EESC believes that the future strategic role of EDIHs depends on two factors: the ability to transmit to policy-makers the needs, constraints and opportunities of SMEs related to R&D&I in order to better design policies that promote the relevance and quality of SMEs; and the ability to enhance our social and entrepreneurial ecosystem, contributing to make it more resilient and forward-looking.

Brussels, 27 October 2022.

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The president of the European Economic and Social Committee