European Observatory for Clusters and Industrial Change

Policy Briefing –

Piemonte

This policy briefing report was carried out for the European Commission by

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Luxembourg: Publications Office of the European Union, 2019

PDF ISBN 978-92-9202-658-5 doi: 10.2826/937763 EA-02-19-817-EN-N

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Selection as one of 10 regions in industrial transition

The customised advice on modern cluster policy in support of industrial modernisation provided to the 10 regions in industrial transition is funded by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), as part of the European Observatory for Clusters and Industrial Change (EOCIC). The regions were selected as a result of an open call for expression of interest, published and assessed by the Commission services. The Commission launched a first call for expression of interest on 29 September 2017 and, as a result of demand from regions, a second call was launched on 14 December 2017.[1]

The following regions were selected[2]:

- Cantabria (Spain)
- Centre Val de Loire (France)
- East & North Finland
- Hauts-de-France (France)
- Lithuania
- North-Middle Sweden
- **Piemonte (Italy)**
- Saxony (Germany)
- Slovenia
- Wallonia (Belgium)

The aim of the work being provided by the EOCIC to 10 regions in industrial transition is to define a set of actions in the form of a comprehensive strategy to foster regional economic transformation, identify collaboration and funding opportunities and connect with other regions in regional and cluster partnerships.

This pilot will help test new approaches to industrial transition and provide the European Commission with evidence to strengthen post-2020 policies and programmes.

The output of the first phase of the EOCIC advisory services was an assessment report, which summarises the key challenges of industrial modernisation for the region and the potential policy directions. The second phase of the EOCIC advisory services will build on this report to develop concrete policy proposals for each industrial transition region. DG GROW and the EOCIC are working closely with the Directorate-General for Regional and Urban Policy (DG REGIO) and the OECD to provide advice services for the pilot regions.

More information on the activities carried out by the EOCIC is available at the end of this report.

[1] Details on the selection procedure are available at: https://ec.europa.eu/regional_policy/en/policy/themes/industrial-transition/

[2] 12 regions were initially selected for the overall process of the project on pilot regions in industrial transition, of which 10 then engaged with the project through to the final stages of the work carried out by the EOCIC.

1. Introduction

1.1. Aims and objectives of the exercise

The aim of this policy briefing is to present a strategy and a set of recommendations to support the authorities and stakeholders in Piemonte in the regional industrial transition process.

This document includes the main challenges for the region through a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis and a PEST (Political, Economic, Socio-cultural and Technological) analysis. Both are described in Chapter 2. Based on these challenges, Chapter 3 provides a customised strategy designed to address the needs and challenges identified. Chapter 4 two specific recommendations for policy intervention. Their respective action plans are in Chapter 5.

The aim of the work in Piemonte is to support the regional authorities and stakeholders in defining actions that facilitate the industrial transformation of the region through a cluster approach. This document builds on the assessment report prepared by the EOCIC team that summarises the challenges and barriers to, and drivers of industrial modernisation through clusters in Piemonte, before outlining a number of actions to increase the impact of the regional cluster policy. This work was carried out in close cooperation with the AMI experts[3] – also funded by the European Commission – and the work of the OECD on Regions in Industrial Transition.

This work provides inputs into a regional cluster strategy focused on strengthening the role, outreach and impact of the regional innovation hubs to support the implementation of the region's smart specialisation strategy. Regional clusters have reached maturity; the number of participating firms has stabilised without further increase in spite of the existing potential. In the last 10 years, the regional cluster policy has focused on establishing and supporting a cluster governance system based on the work of innovation hubs that has facilitated firms' access to public funding (mostly the ERDF) for collaborative R&I projects. The innovation hubs carried out this mission successfully. However, they have not yet been able yet to transform themselves into more proactive suppliers of knowledge-intensive business services. Nor have they been able become more active in fostering industrial transition by supporting the implementation of programmes in other policy areas, such as entrepreneurship, internationalisation or digitalisation. The proposed actions build on ongoing processes and complement the action proposed by the AMI expert (mostly in relation to the Policy Action "Experimental Call for Clusters"). They have been developed by looking at good practices of cluster programmes implemented in other European regions. To facilitate transferability in the regional context, this document outlines different possible delivery mechanisms to let the region decide, in consultation with the regional stakeholders, on the most feasible and acceptable options.

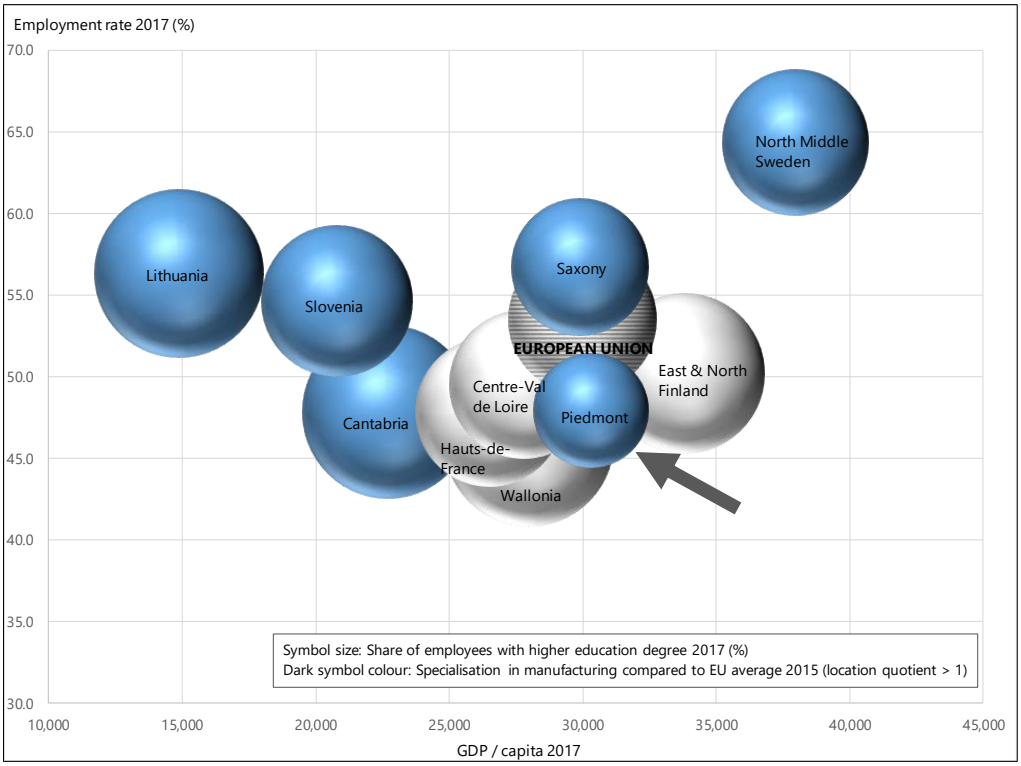
[3] External experts contracted by DG REGIO to provide support to the pilot regions in industrial transition

1.2. Key economic and innovation indicators for the pilot region

In 2017, Piemonte had a gross domestic product (GDP) of EUR 30 300 per capita, which is slightly above the EU level of EUR 30 000 and above the national figure (EUR 28 500). Of the 10 pilot regions, the Italian pilot region ranks third behind North Middle Sweden and East & North Finland.

Figure 1 combines selected economic indicators for the 10 pilot regions. It shows Piemonte's good position in terms of economic strength, measured as GDP per capita. In terms of the employment rate, the region ranks seventh among the 10 pilot regions. With 20.6% of employees with a higher education degree, Piemonte comes last of all 10 pilot regions and has a below average level of highly educated employees compared to the EU average (34.4%) and the national level (22.3%). Unlike Italy as a whole, Piemonte specialises in manufacturing compared to the EU; the pilot region has a location quotient of 1.2892 (Figure 1).

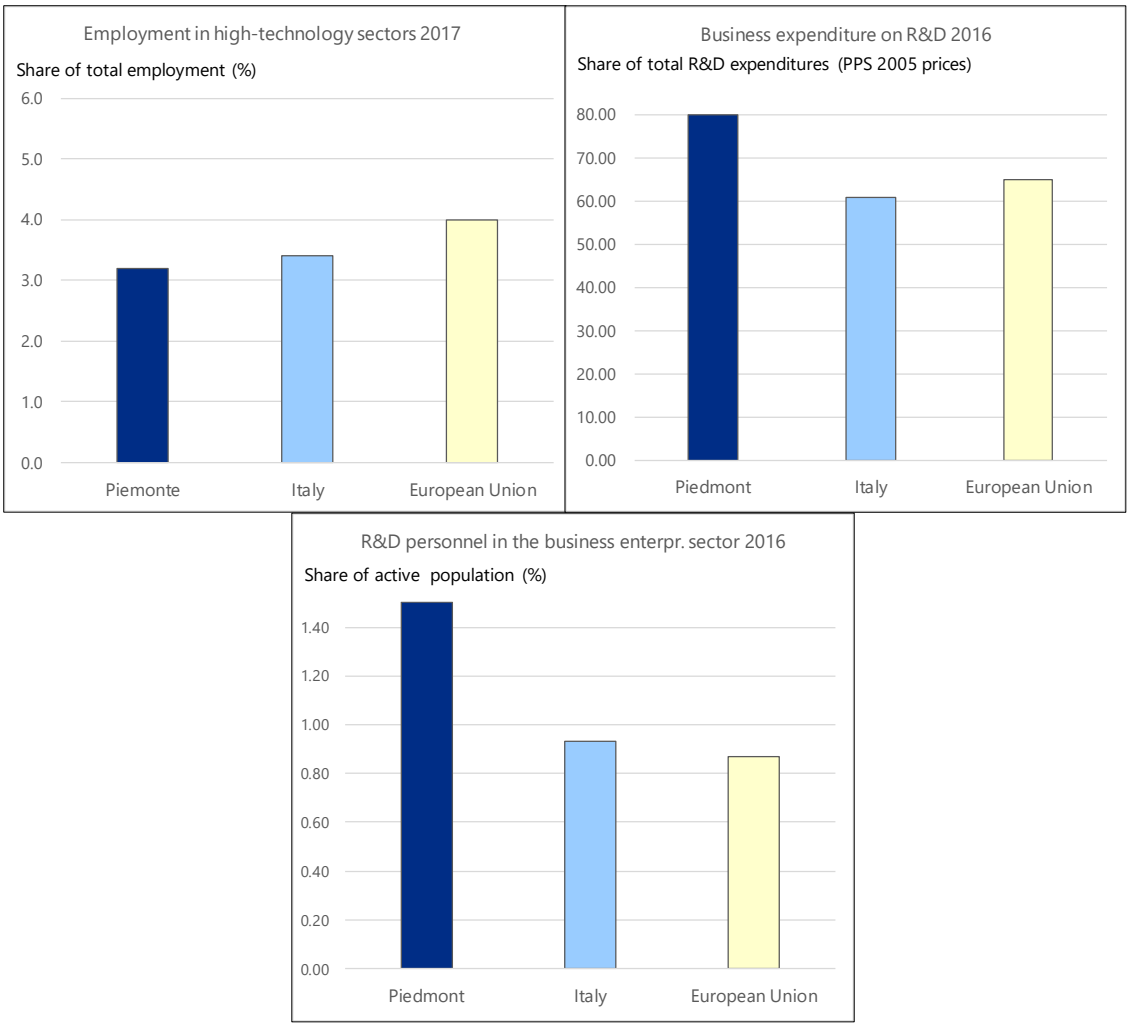
Figure 1: Selected economic data for the 10 pilot regions: GDP/capita, Employment rate, Share of employees with higher education degree and Specialisation in manufacturing



Source: EOCIC, based on Eurostat data and own calculations

Piemonte's share of employment in high-technology sectors (high-technology manufacturing and knowledge-intensive high-technology services) is slightly below the national average and is also below the European average. The business enterprise sector in Piemonte spends a higher percentage of total business expenditure on research and development activities than enterprises in Italy as a whole and the European Union. In line with this, the region's share of R&D personnel in the business sector exceeds the national and the EU figures (figure 2).

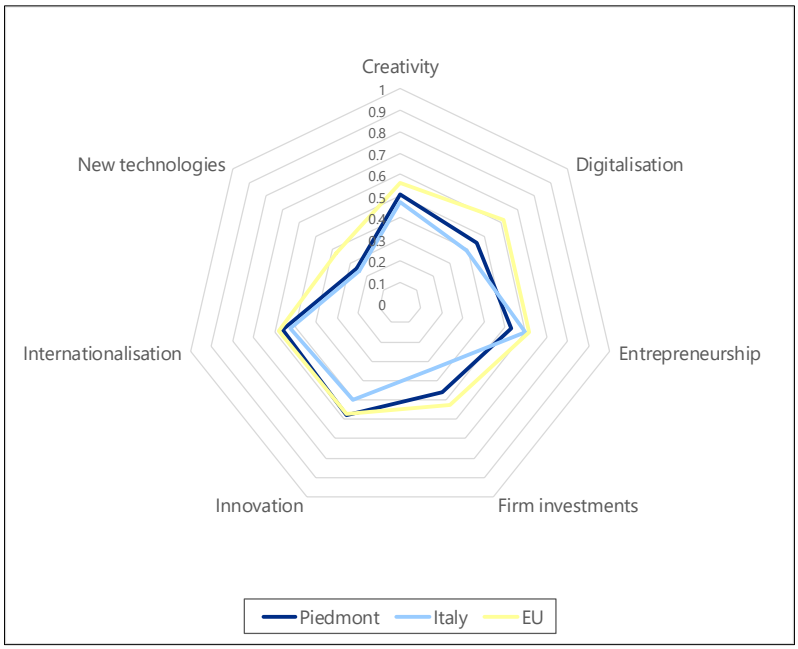
Figure 2: Selected technological indicators for Piemonte



Source: EOCIC, based on Eurostat data and own calculations

In order to provide insights into industrial modernisation, the European Observatory for Clusters and Industrial Change (EOCIC) provides composite indicators on seven dimensions: Evolution towards a more innovative regional economy; New and emerging technologies; Digitalisation; Firm investments; Internationalisation; Creativity; and Entrepreneurship. Each dimension is represented by a set of specific indicators, which are condensed to a composite indicator. Figure 3 presents the results for those seven dimensions in Piemonte. The region has scores that are above the national average, but below the EU average for creativity, digitalisation, firm investments, internationalisation, and new and emerging technologies, while the composite indicator for entrepreneurship is below the national and EU levels. Piemonte also scores above the national and EU levels, but the advance on the EU level is not as great. Piemonte's highest scores are for the innovation, internationalisation and entrepreneurship dimensions. At the other end of the spectrum, the region's lowest score is for new technologies.

Figure 3: Composite indicators for Industrial Change: Piemonte

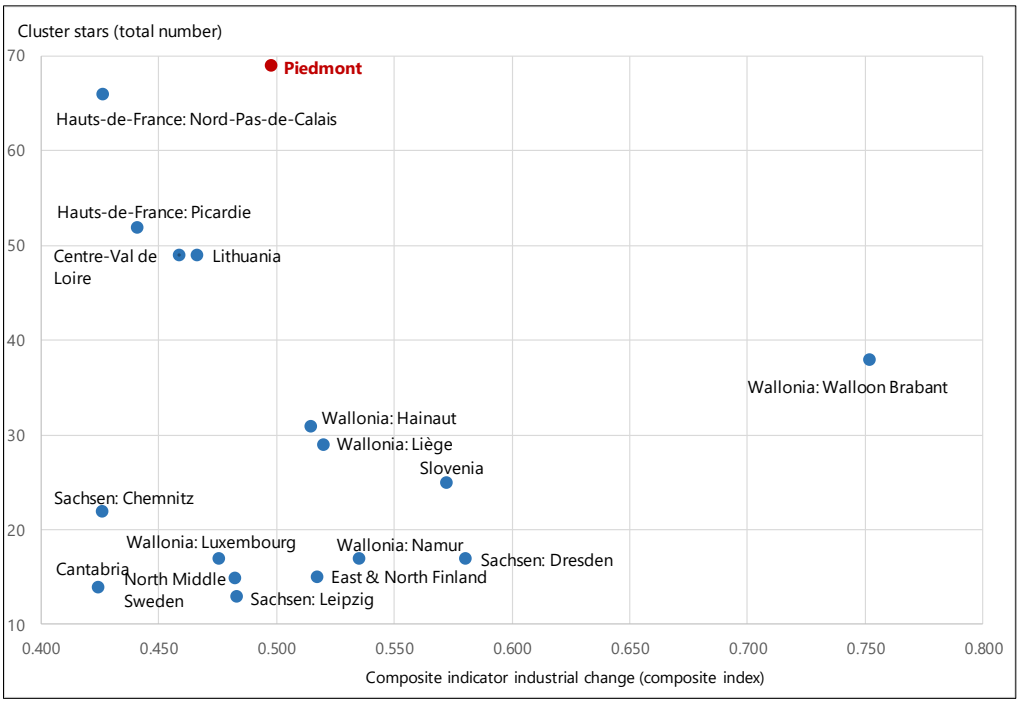


Source: EOCIC, based on various data sources and own calculations

Figure 4 shows the most recent total composite indices for industrial change and the total number of clusters stars in the pilot regions (NUTS 2 level). The composite indices show industrial change in a range between 0.4 and 0.8 in the 10 pilot regions, and the total number of cluster stars in a range between 10 and 70. Five NUTS 2 regions have 45 or more cluster stars. Piemonte is the clear leader (69 stars). Figure 4 also shows that the industrial change ranking is led by Walloon Brabant: on a scale of 0 to 1, this NUTS 2 region has a score of 0.751.

Mapping the pilot regions' industrial change and cluster stars reveals three different types of region: (1) high number of cluster stars, but moderate composite index of industrial change (below 0.5) (Piemonte, Nord-Pas-de-Calais, Picardie, Centre-Val de Loire, Lithuania), (2) regions with moderate figures for both indicators (below 35 cluster stars and composite indices of industrial change below 0.6) (Hainaut, Liège, Slovenia, Dresden, Namur, East & North Finland, Leipzig, Luxembourg, North Middle Sweden, Cantabria, Chemnitz), and (3) Walloon Brabant (composite index of 0.75 and 40 stars). In the second group, Hainaut, Liège and Slovenia stand out from the other regions due to the higher numbers of cluster stars. In part, this is also the case for Chemnitz, but it has a lower index for industrial change.

Figure 4: Composite indicator industrial change (total index) and cluster stars (total) for pilot regions



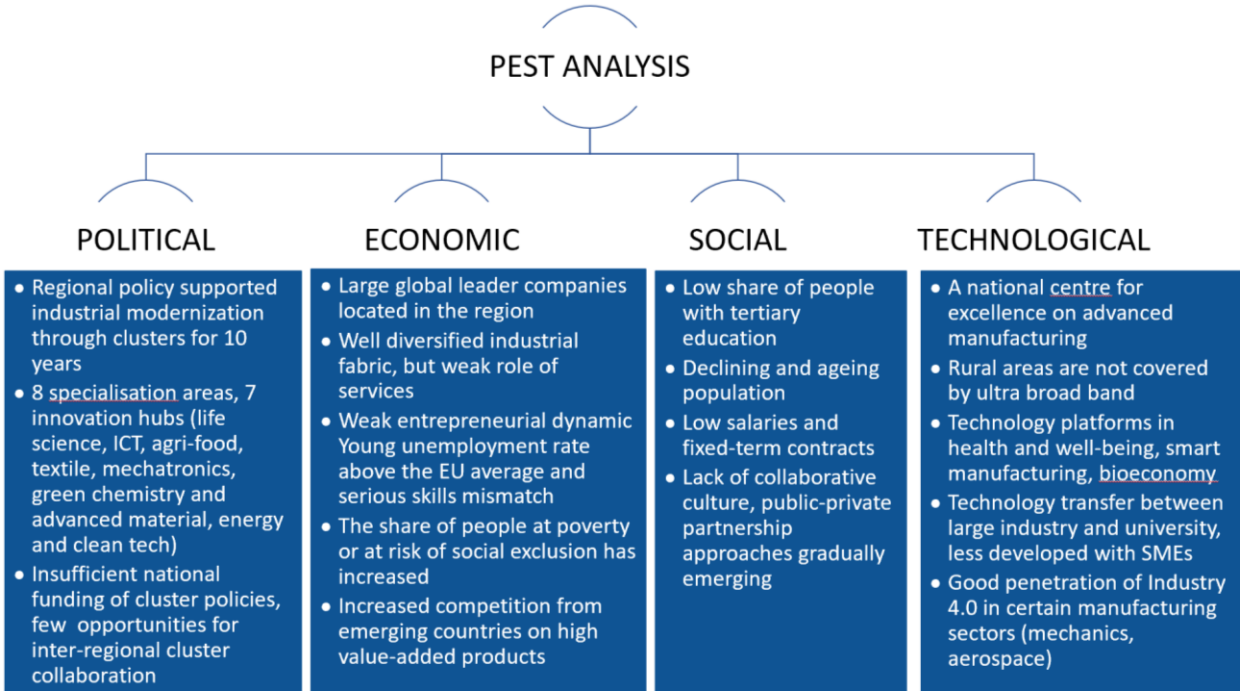
Source: EOCIC, based on various data sources and own calculations

2. Key challenges, barriers, and drivers of industrial modernisation in Piemonte

This chapter summarises, in tabular form, the political, economic, socio-cultural and technological framework conditions (PEST) in Piemonte (Figure 5). The chapter then presents the key strengths, weaknesses, opportunities and threats (Table 3Table 1) that need to be considered in the development of the regional cluster strategy in Chapter 3. The information provided in this chapter builds on the assessment report.

Many of the region's PEST features relate to its industrial traditions and the ongoing transformation towards a more diversified and less fragmented industrial landscape. The impact of the prolonged economic crisis and a stagnating national economy have negatively affected all socio-economic indicators, which have not yet recovered to their pre-crisis levels.

Figure 5: The regional ecosystem and framework conditions in Piemonte



Source: EOCIC

Table 1 details the strengths, weaknesses, opportunities and threats of industrial transition in Piemonte. The region's strengths lie in its strong manufacturing tradition and in the diversity of the industrial fabric. However, the transition towards a knowledge-based and innovation-based economy is not yet complete. **Dualism (i.e. the productivity differential between firms operating in the same sectors) is very pronounced. Digitalisation and the uptake of Industry 4.0 concepts are not widespread** and are mostly found in medium-sized and large firms operating in the mechanical and aerospace industries. The service sector is less developed and less dynamic compared to other regions in Northern Italy. Demographic transition, a skills mismatch (a high youth unemployment rate in the face of an increasing number of job vacancies for highly qualified technicians that cannot be met by the regional workforce)

and an ageing entrepreneurial cohort, are constraints holding back the acceleration of industrial modernisation.

The support measures put forward by the region (support for technology platforms, R&I projects and research infrastructure), along with the national incentives for Industry 4.0 and innovative start-ups, have helped to inject more dynamism into the regional economy. The Turin City of Health in Turin project is also opening up many opportunities for strengthening the region's life science cluster, but also for collaboration with other clusters, such as ICT for the development of e-health products and services. The region is committed to widening support for innovation by renewing support to clusters, by establishing linkages between innovation policies and other policies (education and skills, entrepreneurship), and by pursuing internationalisation, and the opportunities offered by European cluster and SME programmes to integrate SMEs in global value chains.

The innovation hubs have been instrumental in implementing the region's innovation and cluster policy and in disseminating a culture more favourable to collaborative projects and joint investment. However, their potential as springboards of industrial modernisation has only been partially exploited and their impact on increasing the competitiveness of enterprises, especially SMEs, can be further enhanced.

Table 1: Strengths, weaknesses, opportunities, and threats of industrial transition

Strengths	Opportunities
• Strong and long manufacturing tradition and presence of leading and highly competitive firms in the different regional clusters. • The specialisation domains and clusters are based on regional skills, industrial specialisation patterns and Made-in content. • Coherence and continuity of political support for promoting innovation through cluster development. • Piemonte was the first Italian region to establish an innovation hub to promote collaborative R&I in specific industries. • Cluster policy is a tool for implementing the smart specialisation strategy, and the innovation hubs are instrumental in achieving the S3 objectives. • Strong knowledge and awareness of the S3 framework and process among the main players in the regional ecosystem. • Research, development and innovation infrastructure of the region (universities, research centres, technology parks, fab labs) and high level of private R&D. • Participatory approach in cluster and innovation policy design.	• High potential for further increasing cluster membership, especially in mechatronics, agri-food, chemical, energy and ICT. • The creation of the City of Health in Turin (a large regional investment opening up opportunities for the life science sectors, but also for e-health technologies). • Establishment of the national competence centre on advanced manufacturing. • Globalisation and increasing demand for Made-in products (textiles and agri-food), and pharmaceutical and medical device products in emerging countries. • Dissemination of digitalisation and the further uptake of Industry 4.0 (ICT and mechanics). • Substitution of the hub and spoke production model with partnerships between large and small firms coordinated by cluster organisations. • Proximity to innovative European regions (e.g. Lombardy, Auvergne Rhône-Alpes, southern France). • Participation in European cluster programmes to open up new market opportunities for cluster members and connect to European value chains, and to increase the professionalisation of cluster management organisations.

	• Increased synergies in the use of European funds (EFSI, ESIF, Horizon Europe, COSME).
Weaknesses	**Threats**
• Low propensity to entrepreneurship, risk aversion. • Dual industrial structures where a limited number of very competitive firms coexist with a large number of SMEs with little propensity to innovate. • Over-fragmented productive system. • Skills mismatch and brain drain. • Lack of dynamism in the service sector • Lack of dynamism of the regional entrepreneurial ecosystem. • Cluster policy narrowly targeted on promoting collaborative R&I. • The value proposition of cluster organisations is narrowly targeted on supporting access to public funding for collaborative R&I projects. • Collaboration is too restricted to the regional context. • The capacity of the innovation hubs to integrate the different actors of the ecosystem and to establish linkages between the different players in value chains is not fully and equally exploited. • Only one innovation hub has received the Cluster Management Excellence Gold label.	• Demographic decline, population ageing and generation-to-generation handover. • Stagnation of the national economy and risk of a new recession. • Widening of the existing territorial imbalances. • Low dissemination of digitalisation in public administration and private firms. • Low internal demand for innovative products and services. • Low uptake of the newly established tertiary vocational schools (equivalent to European Qualifications Framework Level 5). • Increased competition from emerging economies in high value-added products (e.g. aerospace, mechatronics). • Sustainability of the innovation poles because of the lack of public financial support. • Too much focus on technological innovation and product development, while innovation in the service sector is progressing more slowly. • Insufficient funding of national cluster policy.

Source: EOCIC

The SWOT and PEST analyses above led to the formulation of four main challenges to industrial modernisation that need to be addressed:

1. Low entrepreneurial dynamics;
2. Low attractiveness of the region for talents and investments;
3. Fragmented productive system and insufficient collaboration; and
4. Low share of innovative SMEs.

The next chapter outlines a regional cluster strategy that can address these challenges.

3. Proposed regional strategy to address the challenges

At the policy review meeting, a major challenge stood out for regional cluster policy: the need to **transform the regional innovation hubs into fully-fledged tools for the achievement of the objectives of the regional smart specialisation strategy**. To achieve this purpose, **the innovation hubs need to improve their capabilities** in order to:

1. Act as system integrators and further their collaboration with all regional innovation and entrepreneurial ecosystem actors;
2. Extend their offer of business innovation services, especially to SMEs; and
3. Better support the region in identifying future technology roadmaps, changes in business models, requirements with respect to human resources and infrastructure to address the ongoing global trends, and changes in the systemic conditions.

The achievement of the targets above is also perceived as a pre-condition for **securing the financial sustainability of the innovation hubs,** whose operations have been co-financed by the region for 10 years. In order to reduce public support in the future, the following options could be pursued (Table 2).

Table 2: Funding options for the region's innovation hub

Financing options for cluster organisations	Summary of discussions with stakeholders
Increase membership fee	**This is a feasible option** given that the current annual membership fees are low (approximately between EUR 1 000 for corporates and EUR 500 for SMEs). However, higher fees might discourage firms from joining the clusters and would not help enlarge the clusters' membership base. An increase in the membership fees can help secure additional funding but is not enough to address the problem of fully remunerating the services of the innovation hubs.
Provide fee-based services	Discussions with the innovation hubs showed that **it is not clear which services members would be willing to pay for**. Other regional actors are also providing services in areas where the innovation hubs could expand further (universities for technology transfer, CEI Piemonte for internationalisation, university incubators for early stage entrepreneurship and start-up support). There are also problems with setting the right prices for fee-based services and for identifying services that are not provided by other public or private organisations. Charging a fee for services provided to non-members was not considered a feasible option.
Increase participation in regional or national programmes	The region could **activate more programmes that are channelled through the innovation hubs** and that address policy objectives that go beyond technology transfer and dissemination of innovation. National cluster programmes are not sufficiently funded and offer limited possibilities. The possibility of benefitting from other industry-specific national initiatives very much depends upon the individual capacity and network of the cluster managers. Participation in

	national programmes can also be more cumbersome and less attractive by comparison with European programmes.
Increase participation in European programmes	This is **a specific objective set by the region for the innovation hubs** at the beginning of this programming cycle. European programmes are highly competitive and can have a complex implementation framework. To succeed, the innovation hubs need to strengthen their capacity to network internationally, design suitable project proposals and to follow them through.

Source: EOCIC

In the short term, additional financial support to the innovation hubs can be provided through a competitive call launched by the region within the framework of the Pilot Action (Experimental Call for Clusters). This call would aim to reward innovation hubs that achieve a certain number of performance targets defined by the region. This proposed action follows the examples of past calls for projects targeting cluster organisations but would have a focus on performance (ex-post assessment). It pursues the two-fold objective of providing additional funding to the innovation hubs while pushing them towards the achievement of more ambitious development targets[4].

However, discussions with stakeholders highlighted the fact that **the future financial sustainability of the innovation hubs very much depends on their capacity to obtain project funding** from different sources (European, national and regional). As the direct financial support from the region dries up, the innovation hubs will not have sufficient resources to cover other important services that they have been able to provide individually to their members, such as technology scouting or partner/supplier identification.

At the regional level, the broadening of project funding opportunities for the innovation hubs can be achieved by **introducing new support measures to complement the existing regional cluster programme and reinvigorate the entrepreneurial dynamics in the region**. Entrusting the innovation hubs with the implementation of new cluster initiatives that go beyond financing collaborative research programmes can reinforce the strategic positioning of the innovation hubs within the regional ecosystem and can also help them develop a stronger value proposition. The assessment work carried out by the EOCIC team identified four critical thematic areas that could be better integrated into regional cluster policy and where the innovation hubs could play a role in partnership with other regional ecosystem actors. These policy areas also constitute important priority of the broader regional development policy. They are:

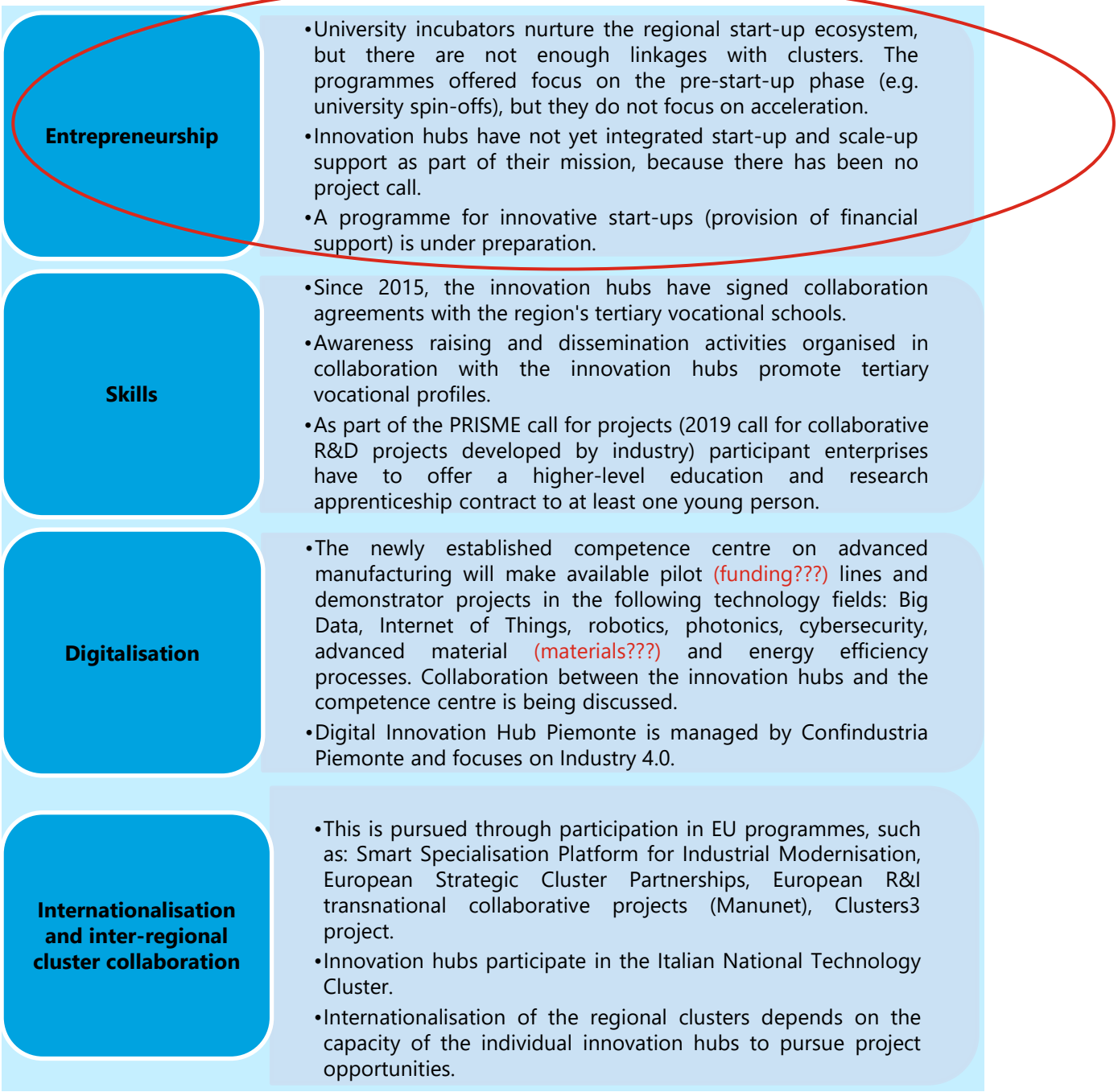
1. entrepreneurship (innovative start-ups and scale-ups),
2. education and skills,
3. digitalisation, and
4. internationalisation and inter-regional collaboration.

Of the four thematic areas listed above, **the promotion of entrepreneurship (start-ups and scale-ups) appears to be the area with the largest unexplored potential** and where the region's policy response has been lagging behind (Figure 6:). Low entrepreneurial dynamics are also critical bottlenecks holding back the industrial transition of the region towards a more innovative and front-running economy. The number of innovative start-ups is lower than in other regions of Northern Italy, and

[4] At the moment of preparing this policy brief, some key elements of the action, such as the key performance indicators, were not yet finalised.

regional start-ups face many barriers in scaling up (e.g. lack of tailored financing instruments, lack of competences for managing the transition to a larger company, access to larger markets).

Figure 6: Mapping and assessment of relevant cluster initiatives in four critical areas of the regional development policy



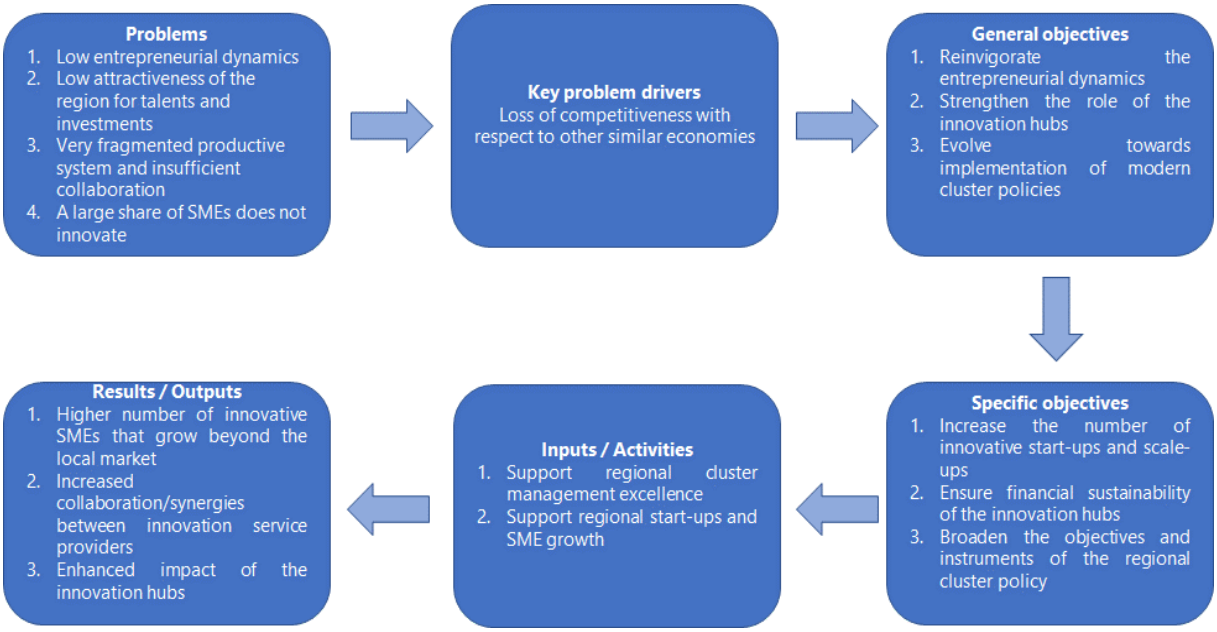
Source: EOCIC

Support to innovative start-ups and SMEs through clusters can be delivered by building on existing services and by exploiting the different competences and outreach capacities of the different regional entrepreneurial ecosystem actors. Two possible actions have been identified for achieving these objectives:

- the **implementation of acceleration programmes through clusters**, which could be delivered by the university incubators or the regional technology parks in partnership with the innovation hubs. The region could capitalise on the experience of the Bioindustry Park Silvano Fumero near Ivrea and replicate this successful model in other regional clusters. There are at least two possible models that could be explored and that could be launched in the short-term:
  i) within the incubator of Turin Polytechnic in collaboration with the ICT innovation hub, which is one of the founding members of the incubator, and
  ii) within the Environment Park in collaboration with the Clever (clean energy) and CGreen (green chemistry) innovation hubs;
- the implementation of **actions that connect innovative start-ups and high growth SMEs to larger domestic and foreign markets** and that complement the existing European programmes aiming to build inter-regional cluster partnerships in which the region's innovation hub already take part. These actions can be implemented by the innovation hubs alone or in partnership with other regional organisations (e.g. Ceipiemonte[5]).

The figure below maps the key elements of the proposed strategy against the four key challenges identified in the previous chapter.

Figure 7: Overview of the regional industrial modernisation strategy through clusters for Piemonte



Source: EOCIC

[5] Piemonte regional agency supporting exports and attracting foreign investment, http://www.centroestero.org/en/

4. Specific recommendations for policy intervention

4.1. Support regional cluster management excellence

4.1.1. Description

The selection of the innovation hubs was the result of a competitive procedure. To increase the performance of the innovation hubs, the region has also adopted an approach based on performance incentive mechanisms, where the organisations performing best receive additional financing because of their capacity to achieve a certain number of targets (e.g. number of cluster members). This approach has helped the innovation hubs increase membership numbers and make a greater effort to participate in European cluster programmes. However, progress has been uneven across the innovation hubs, and more tailored efforts to build cluster management capacity could deliver better results, especially if the role of the innovation hubs in supporting industrial transition is going to be broadened (see measures in section 4.2). In fact, the **reinforcement of cluster management capacity** could be seen as a **precondition for channelling additional project funding** through these organisations.

There is a need to implement actions that would increase the aggregate, as well as the individual, performance of the innovation hubs by rewarding the organisations that fulfil certain criteria of excellence. In the absence of a national cluster management excellence scheme, this objective can be achieved by applying for the European Cluster Excellence Initiative (ECEI) label that combines cluster management assessment and benchmarking with customised advice.

Box 1: The use of cluster labelling schemes in other EU countries

The use of cluster labelling schemes, at the national or European level, is increasingly recognised as a useful mechanism to enhance the quality and variety of the services provided by cluster organisations[6], but also as a means of channelling funds and programmes through the organisations performing best. Examples of countries that have developed national labelling schemes to rationalise and streamline the offer of business and innovation services by cluster organisations and that can make the funding of cluster projects dependent upon cluster labels include France, Hungary, Poland and Spain. The development of strong and professional clusters has been a key priority of Denmark's national cluster policy since 2013. This has led to the Danish clusters being lead users of the ECEI labelling scheme. In parallel with this, a national cluster support institution (Cluster Excellence Denmark) was established to support certification of clusters.

There are two possible ways in which the region can support a commitment of the innovation hub to achieving the Silver or Gold certification.

i) Make the accreditation an eligibility requirement for accessing a number of regional cluster programmes. This option implies the region diversifying its current cluster project portfolio to include instruments that go beyond supporting collaborative R&I projects (see section 4.2).

ii) Co-finance the accreditation process for organisations that meet a certain number of requirements. In this case, the co-financing could be embedded in a competitive call as one of the requested outputs or as part of a performance-based financing mechanism. This would be

[6] Pluss, 2017. Evaluation of the European Cluster Label system (ECEI) in Denmark https://ufm.dk/en/publications/2017/files/evaluation-of-the-cluster-label-system-in-denmark.pdf

similar to the regional innovation hub call of 2016 but would integrate the labelling scheme along with a number of performance criteria.

4.1.2. Benefits and Costs

The benefit for the region would be to **level upwards and harmonise the performance of the regional cluster organisations** while building a more solid regional cluster governance system for the implementation of the revised S3 strategy. Silver and Gold labels bring higher benefits than the bronze label. The Silver and Gold labels can **improve the visibility of the region's innovation hubs** at European and international level, **increasing** their chances of **accessing alternative sources of funding** and entering into new strategic cluster partnerships. When cluster organisations pursue internationalisation as one of their key objectives, **a label of excellence can accelerate the building of trust and facilitate collaboration with other cluster organisations**. The Gold and Silver labels can also help attract new cluster members, including from other European regions. This would open up the regional cluster systems to new and more dynamic companies. Finally, these labels help improve the management of the cluster by building new competences in managing and involving the cluster's stakeholders, better structuring the contacts with cluster members, and improving the level of professionalism in the delivery of services.

The cost of this action needs to include the fees charged by the organisation running the ECEI scheme[7], but also the necessary preparatory work, which can be rather cumbersome for the participating organisations. Actual costs are higher for the Silver and Gold label, because of the resources required to complete the accreditation process, but the cost/benefit balance is more positive for these labels because they are perceived as a tool for self-development.

Finally, it is important to consider that the current ECEI scheme is being revised to minimise the costs for the participant organisations while keeping its benefits unchanged.

4.1.3. Risks, obstacles and challenges

There are **no specific implementation challenges for the regional authorities** as the action suggests adopting the performance framework already developed by the ECEI and the certification will be run by an independent accredited organisation identified by the ECEI. A possible obstacle could relate to the perceived usefulness of the accreditation process by the different innovation hubs. The benefits of engaging in such a process should be clearly higher than the administrative costs. More importantly, the delivery of this action should be channeled through **schemes that comply with EU State Aid regulations**, especially relative to option II (i.e. the co-financing by the region of the accreditation process).

[7] Full price list is available at the following web site: https://www.cluster-analysis.org/pricing-of-the-processes-to-obtain-a-label-related-to-the-201ceuropean-cluster-excellence-initiative201d

4.2. Support regional start-ups and SME growth

4.2.1. Description

The assessment report identified the need to **broaden the objectives and instruments of the regional cluster policy** to make better use of clusters in promoting regional industrial modernisation. Support to regional start-ups and SME growth can be implemented through two different measures, which are not mutually exclusive, but that have different implications in terms of costs, level of stakeholder engagement and implementation challenges.

I - Business Accelerator

Business Accelerators are geared towards increasing the capacity of participant start-ups and SMEs in reaching sustainably larger markets, increasing productivity and, ultimately, creating more jobs. They **target companies with high growth potential within specific industrial domains** that already have a viable business model in place, a clear product or service offer and a small client/user portfolio.

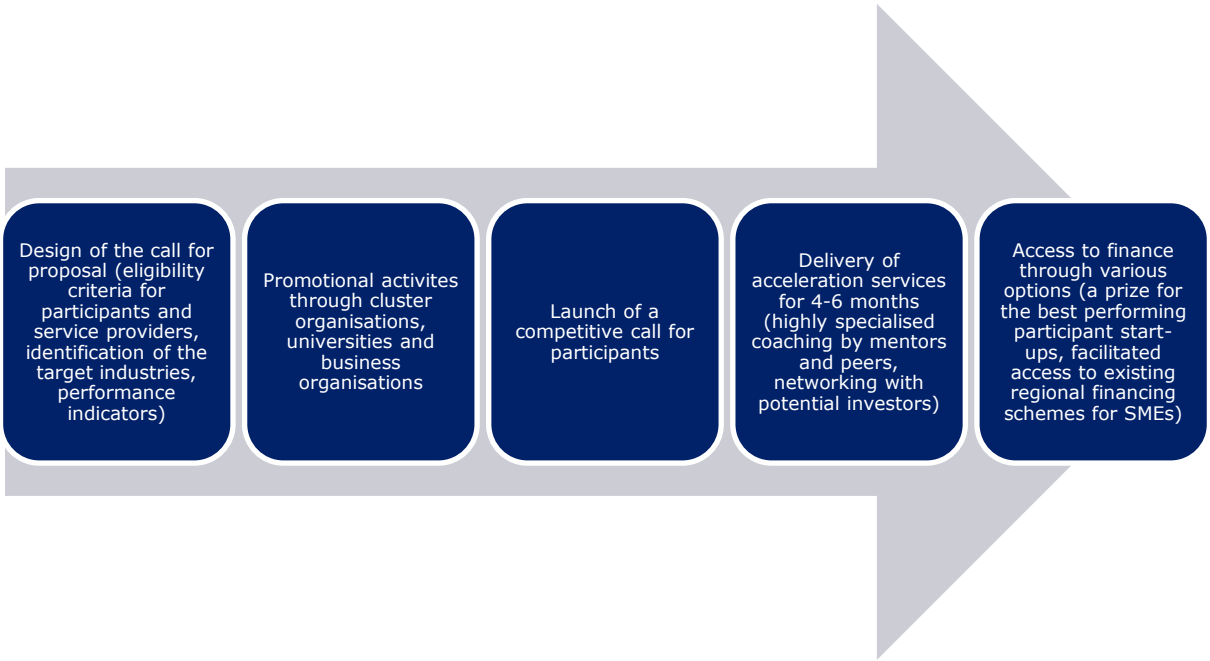
Box 2 Examples of Business Accelerator programmes implemented through clusters

The establishment of an accelerator programme could follow the example of Bioindustry Park, where services to high growth start-ups are contracted out to a specialised service provider and focus on sales, marketing and organisational development. Financial assistance is not provided, but innovative SMEs or start-ups hosted within the Park are supported in identifying and getting in touch with private investors. In addition, the Park pursues an internationalisation strategy that helps its members identify opportunities and partnerships in larger markets. Other similar examples in Europe include the MedTech accelerator,[8] which was developed by the cluster organisation of the Brussels region for the life science sector and was later scaled up at the federal level to involve cluster organisations in Flanders and Wallonia. This is also an example of how the provision of this type of support could be delivered in partnership with other neighbouring regions to reach a higher critical mass of participants with realistic growth perspectives.

The implementation of an accelerator programme does not require investment in physical infrastructure, as it is based on the **provision of individual business support, mentoring by peers and intensive coaching** services on a selected number of themes (e.g. entrepreneurial finance, international marketing, human resource management and talent scouting). The service provider selected could be an innovation hub, a university incubator, a private entity, a technology park or a partnership between different entities. The measure could be **implemented through a competitive call for projects** to award one or two grants to eligible organisations for the delivery of the acceleration services. The definition of the industry/ies could be open (i.e. include all the S3 specialisation domains) or defined by the region based on strategic considerations. The duration of the contract with the service provider(s) should be of at least three years to allow for consolidation of results given that this is a novel service. The chart below (Figure 4) summarises the main steps for implementing this policy action.

[8] http://lifetechbrussels.com/medtech-accelerator/

Figure 8: Main steps in implementing the Business Acceleration policy action



For the success of this policy action, the selected service providers should demonstrate that they possess the following characteristics:

- They should be in close contact with the region's start-up community and be able to reach out to the most innovative regional SMEs. The competitive selection of participants is indeed a key success factor for such programmes.
- They should have in place collaborations and partnerships with potential buyers and suppliers (industry organisations, public administrations, research and technology centres, national or international clusters within the target industries).
- They should be able to liaise with private investors, venture capitalists, business angels and crowdfunding platforms to address the lack of risk capital. This lack is a severe constraint for young and innovative start-ups in the region. The enterprises that successfully conclude the acceleration programme could be considered automatically eligible for financing (as a form of Seal of Excellence) under the existing schemes providing loans to SMEs.

The following **indicators of performance** could be considered:

i) number of innovative start-ups and SMEs that get access to the programme and complete it;
ii) sales, investment and export growth rate of the participating companies in the following three years;
iii) number of SMEs that grow beyond the local and national market;
iv) number of SMEs that secure additional funding (either public or private);
v) number of partnerships or collaborations with corporates;
vi) number of high skill jobs created in the following three years.

II - Connecting SMEs with Large Buyers.

At the request of their members, the innovation hubs provide matchmaking services. However, such services could be better structured and be more impactful if they were developed as part of a regional cluster programme. The purpose of this action is to **enhance access to large markets and global value**

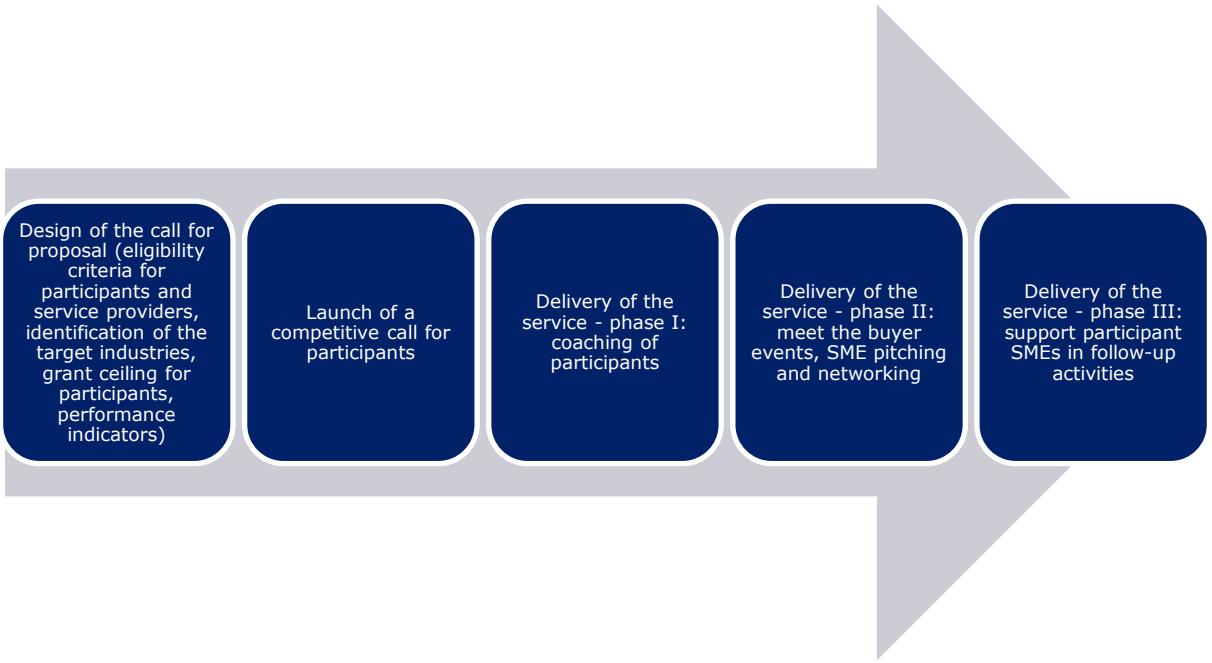
chains by bridging the gap between start-ups and SMEs, and large companies. This proposed action is inspired by the Scale-Up programme[9], which is supported by the Interreg North Sea Region (Box 3).

Box 3: European clusters connecting cleantech innovators and large companies

This action targets the cleantech industries but is also transferable to other emerging or traditional industries. It is designed to connect innovative SMEs with corporates by unlocking procurement opportunities, but can also be extended to the public sector, which is also a large procurer of products and services. The key element of the Scale-Up programme is the organisation of "Meet the Buyer" events, including matchmaking and one-to-one meetings between SMEs and corporate buyers. The programme's strength relies on the fact that it puts together cleantech clusters from five different countries (Belgium, Denmark, Netherlands, Sweden and UK).

The measure could be **implemented through a competitive call for projects** that would be open to all innovation hubs or similar organisations that fulfil the eligibility criteria. The industries targeted should be those included in S3. The grant could cover the costs of organising a determined number of events and the provision of vouchers to the participating SMEs. As part of the services, the participating SMEs should receive a financial contribution to cover the costs of participating in events organised outside the region and qualified support in perfecting their pitching and negotiation skills. The chart below summarises the main steps for implementing this policy action.

Figure 9: Main steps in implementing the Connecting SMEs with Large Buyers policy action



To be more impactful the action should integrate the following elements.

- **Target corporates outside the region** to ensure access to larger and more diversified markets. The selected service providers could either organise stand-alone events or connect to events organised at the European level by other cluster initiatives or by corporates themselves (e.g. industrial competitions or challenges).

[9] https://northsearegion.eu/scale-up/

- **Carefully select and prepare the participating SMEs.** These need to be innovative SMEs, which have developed new technological solutions or business concepts that can be scaled in larger markets. Service providers should provide a preliminary list of targeted participants, as well as a list of targeted corporates and events.
- **Integrate access to finance in the policy action** to ensure that the participating SMEs can adapt production to higher quality products and to different types of customer orders. The provision of finance in the form of bridging loans could be considered for the companies that succeed in securing new contracts and need to increase their production capacity quickly. This could either be embedded in the current programme or developed as a complementary programme providing access to finance to innovative start-ups and SMEs[10]. In the former case, enterprises that proved to be successful in this programme would be automatically eligible for financing in the complementary scheme.

The following **indicators of performance** could be considered for this measure:

i) number of events organised;
ii) number of SMEs involved;
iii) number of corporates outside the region targeted and involved;
iv) number of supply contracts signed;
v) changes in turnover and export volume of the participating SMEs.

4.2.2. Benefits and Costs

Both programmes aim to support the growth of innovative start-ups and SMEs, to keep them in the region and to showcase the region's innovative and entrepreneurial potential. They **address an existing gap in the offer of services for innovative SMEs.** They also create incentives for the innovation hubs to broaden the type of services provided and to look at categories of enterprises that are underrepresented in their membership (start-ups). Other important benefits relate to the **strengthening of collaboration between the innovation hubs and the other business support ecosystem actors**. Taking these actions will also help the region to broaden the objectives of its cluster policy beyond support to collaborative R&I and extend the benefit of the cluster approach to a broader category of beneficiaries (not only R&D-intensive companies).

The costs of the two actions varies and depends on the final configuration of the actions (e.g. number of industries involved, participants targeted, duration, types and combination of services provided). In addition to the financial costs of the actions, cost and benefit perception, especially in relation to the acceptance by regional stakeholders, also plays a key role in the definition of the overall cost/benefit analysis. A comparative analysis of the pros and cons of the two actions is presented in the table below.

[10] The region is about to launch a start-up support programme (provision of financial support) through Finpiemonte.

Table 3: Pros and cons of the two proposed measures

	Business Accelerator	Connecting SMEs with Large Buyers
Pros	• Foster collaboration between university incubators and innovation hubs. • Establish a continuum between the provision of early-stage entrepreneurship services for innovative businesses up to the acceleration phase. • Use Bioindustry Park as a role model for the provision of business acceleration services. • Take into account the Turin Polytechnic incubator's plans to integrate within its incubation services more support measures for start-up growth.	• These services are already provided individually and on demand by the innovation hubs. This measure will allow the innovation hubs to finance the provision of these services, to target new types of cluster members and to create a better structured and more professional offer for these types of services. • The measure can be delivered by the innovation hubs without overlapping and competing with existing services. • The measure can also be used to foster internationalisation and can foster collaboration with CEI Piemonte. • Benefits for both SMEs and innovation hubs are clear and measurable in the short term.
Cons	• New type of services, little experience within the innovation hub. • The innovation hubs need to build new competences to manage such a scheme. This might make it less attractive to them than other instruments targeting the growth of innovative start-ups and SMEs. • Perception that this type of service does not integrate well with the mission of the innovation hubs.	• If not developed in partnership with other regions, or if the innovation hubs do not have the capacity to reach sufficient numbers of large potential buyers outside the region, the potential impact of the measure is reduced.

4.2.3. Risks, obstacles and challenges

Supporting SME growth through these types of actions constitutes **a novel approach compared to past measures implemented by the region.** These provided a financial contribution (either a grant or a loan) for capital investments, for R&D activities within companies or for participating in trade fairs or trade missions (in the case of internationalisation support measures). Although there is no need to set up new administrative structures or organisations to deliver these services, **the design of these calls for projects can be challenging for the region and needs to be based on extensive consultations** with the potential implementing organisations and with representative organisations of beneficiaries.

The table below summarises the major risks, their relative importance and a number of mitigation actions.

Table 4: Summary of risks and of the proposed mitigation measures

Risks	Mitigation measures
Lack of critical mass of participants (High)	• Open participation to innovative start-ups and scale-ups from other regions. A requirement could be that the beneficiary company move its headquarters to the region to benefit from the programme. In this way, both programmes can be used to attract national or foreign companies and to inject new entrepreneurial ventures into the regional productive system. • Invest in visibility/programme branding activities. • Disseminate effectively the results of the first pilot, with participating companies acting as ambassadors of the programme. • Build a regional community of start-ups and SMEs with high growth potential. • For the pilot, select industries where the potential number of participants is larger.
Lack of attractiveness of the measures because there are no direct financial incentives (High)	• Complement the action with an access to finance scheme for start-ups and SMEs. • Include private investors in programme implementation (for the Business Accelerator). • Provide financial support to cover the expenditures of SMEs (for the measure Connecting SMEs with Large Buyers).
Insufficient capacity in innovation hubs for implementing these actions (Low for Connecting SMEs with Large Buyers; medium to high for the Business Accelerator)	• Build partnerships and collaborate with regional ecosystem actors. • Learn from other European good practices.
Lack of participant commitment (Low)	• Co-financing mechanism. At the beginning of the programme, when there is not yet a track record of results, it might be difficult to ask for financial contributions from participants as there is no evidence of the quality and usefulness of the services provided.

5. Roadmap and action plan with activities, timeframe and actors

To deliver the specific recommendations set out in Chapter 4, the table below summarises the actions required, their timing and the relevant action owner.

The timing of the specific actions is indicative and reflects the fact that the current proposal has been developed to feed the discussion for the programming of the New Cohesion Policy Funds in Piemonte (2021-2027). It also considers the fact that the proposed measures are new (i.e. are not based on the provision of direct financial support to beneficiary SMEs) and that the actual implementation framework needs to be discussed in detail with the regional stakeholders.

Table 5: Action plan - Support regional cluster management excellence (Gold Label)

Action	Timing of the action (between 6 months and 1 year)	Owner of the action
Self-assessment through the document "European Cluster Excellence Baseline - Minimum Requirements for Cluster Organisations".	2 weeks to 6 months for both steps. Average duration: 2 months	Innovation hubs
Online-based self-check of a number of quality indicators.		Innovation hubs
Full assessment: two-day on-site assessment conducted by two independent cluster analysis experts.	Including advance planning and coordination: 2 months	Innovation hubs
Submission of the assessment report by ESCA.	4-8 weeks	Innovation hubs
Label award	Approval period for the expert group: 2 weeks. Label award including the expert approval: 4 weeks.	Innovation hubs

Source: ESCA

Table 6: Action plan - Support regional start-ups and SME growth

Action	Timing of the action	Owner of the action
Business Acceleration		
Discuss and agree key elements of the action with regional stakeholders (eligible implementing organisations, beneficiaries, selection criteria, priority industries, budget, services provided, duration).	Second half of 2020	Regional authorities with regional ecosystem actors (innovation hubs, university incubators, technology parks)
Design and programming of the first call for projects for the first pilot of the Business Accelerator.	Beginning of 2021	Regional authorities
Launch of the first call.	Second half of 2021	Regional authorities
Project evaluation and award.	Second half of 2021	Regional authorities
Provision of the business acceleration services (from 3 to 6 months) – one year if the service includes the provision of incubation facilities.	Beginning of 2022	Implementing organisation
Repeat the call at least twice.	Beginning of 2023 Beginning of 2024	Regional authorities
Monitoring and evaluation.	From the end of the first pilot (2022)	Implementing organisation and regional authorities
Connecting SMEs with Large Buyers		
Discuss and agree key elements of the action with the regional stakeholders (eligible implementing organisations, selection criteria for beneficiaries, priority value chains, budget, services provided, duration).	Second half of 2020	Regional authorities with regional ecosystem actors (innovation hubs, university incubators, CEI Piemonte)
Design and programming of the first call for project for the first pilot of the action.	Beginning of 2021	Regional authorities
Launch of the first call.	Second half of 2021	Regional authorities
Project evaluation and award.	Second half of 2021	Regional authorities
Provision of the services to innovative start-ups and scale-ups. Phase one: preparatory work, provision of tailored support to the selected beneficiaries.	Beginning of 2022	Implementing organisation
Provision of the services to innovative start-ups and scale-ups. Phase two: organisation of the matchmaking events.	Mid 2022	Implementing organisation

Provision of the services to innovative start-ups and scale-ups. Phase three: follow up support to beneficiaries.	End of 2022	Implementing organisation
Repeat the call and the project implementation process at least twice.	Beginning of 2023 Beginning of 2024	Regional authorities
Monitoring and evaluation.	From the end of the first pilot (2022)	Implementing organisation and regional authorities

European Observatory for Clusters and Industrial Change

The European Observatory for Clusters and Industrial Change (#EOCIC) is an initiative of the European Commission's Internal Market, Industry, Entrepreneurship and SMEs Directorate-General. The Observatory provides a single access point for statistical information, analysis and mapping of clusters and cluster policy in Europe, aimed at European, national, regional and local policy-makers, as well as cluster managers and representatives of SME intermediaries.

The aim of the Observatory is to help Europe's regions and countries design better and more evidence-based cluster policies and initiatives that help countries participating in the COSME programme to:

- develop world-class clusters with competitive industrial value chains that cut across sectors;
- support Industrial modernisation;
- foster Entrepreneurship in emerging industries with growth potential;
- improve SMEs' access to clusters and internationalisation activities; and
- enable more strategic inter-regional collaboration and investments in the implementation of smart specialisation strategies.

In order to address these goals, the Observatory provides a Europe-wide comparative cluster mapping with sectoral and cross-sectoral statistical analysis of the geographical concentration of economic activities and performance, made available on the website of the European Cluster Collaboration Platform (ECCP) [11]. The Observatory provides the following services:

- **Bi-annual "European Panorama of Clusters and Industrial Change"** that analyses cluster strengths and development trends across 51 cluster sectors and 10 emerging industries, and investigates the linkages between clusters and industrial change, entrepreneurship, growth, innovation, internationalisation and economic development;
- "**Cluster and Industrial Transformation Trends Report"** which investigates the transformation of clusters, new specialisation patterns and emerging industries;
- **Cluster policy mapping** in European countries and regions as well as in selected non-European countries;
- "**Regional Eco-system Scoreboard for Clusters and Industrial Change"** that identifies and captures favourable framework conditions for industrial change, innovation, entrepreneurship and cluster development;

[11] European Cluster Collaboration Platform, *Official Website*. Available at: https://www.clustercollaboration.eu/.

- **Updated European Service Innovation Scoreboard**[12] that provides scorecards on service innovation for European regions;
- **"European Stress Test for Cluster Policy",** including a self-assessment tool targeted at cross-sectoral collaboration, innovation and entrepreneurship with a view to boosting industrial change;
- **Customised advisory support services** to twelve selected model demonstrator regions, including expert analysis, regional survey and benchmarking report, peer-review meeting, and policy briefings in support of industrial modernisation;
- **Advisory support service to European Strategic Cluster Partnerships**, in order to support networking between the partnerships and to support exchanges of successful practices for cross-regional collaborations and joint innovation investments;
- **Smart Guides** for cluster policy monitoring and evaluation, and for entrepreneurship support through clusters that provide guidance for policy-makers; and
- **Brings together Europe's cluster policy-makers and stakeholders** at four European Cluster Policy Forum events, European Cluster Days, and at the European Cluster Conference in 2019 in order to facilitate high-level cluster policy dialogues, exchanges with experts and mutual cluster policy learning. Two European Cluster Policy Forums took place in February and April 2018, and the European Cluster Conference is scheduled for 14 to 16 May 2019 in Bucharest (Romania).
- Online presentations and publications, discussion papers, newsletters, videos and further promotional material accompany and support information exchanges and policy learning on cluster development, cluster policies and industrial change.

More information about the European Observatory for Clusters and Industrial Change is available at https://www.clustercollaboration.eu/eu-initiatives/european-cluster-observatory.

[12] Previous versions for 2014 and 2015 were developed by the European Service Innovation Centre (ESIC), see http://ec.europa.eu/growth/tools-databases/esic/index_en.htm.

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