

# **CLUSTERIX 2.0 RECOMMENDATIONS**

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## **1. OVERVIEW OF THE CLUSTERIX 2.0 RECOMMENDATIONS**

1. **MONITORING AND EVALUATION** – Improvement & adjustment processes need to reflect the growing role clusters play in regional innovation systems
  - a. To establish a common European platform for knowledge development and sharing on the topic
  - b. To provide specialised training on the topic for cluster stakeholders
  - c. To develop a menu of indicators within the cluster excellence labelling processes focused on results and long-term impacts
  - d. To develop common templates and guidance on the use of success stories
2. **Support for the MOBILITY OF CLUSTER STAKEHOLDERS (Cluster Management, Cluster Policy Makers, Cluster Members)**
  - a. To focus on bilateral learning processes to enhance trust and openness
  - b. The host organisation should define the theme jointly addressed
  - c. To keep the duration of the exchange flexible
  - d. To create a win-win situation for both host and guest by keeping purpose of the exchange on learning for improving
  - e. To enable interaction between both cluster managers and cluster policy makers levels
  - f. To allow the mobility scheme to take various forms (from simple – e.g. mobility voucher – to more complex ones) and be valid for all Member States and COSME countries
  - g. To use the learnings from a planned support under the COSME programme to integrate the learnings into the future “Single Market Programme” and ensure continuity.
3. **Support of the DEVELOPMENT / IMPROVEMENT of SERVICES FOR CLUSTER MANAGEMENT ORGANISATIONS**
  - a. To create a virtual information center for training (available training offers, the organisations offering)
  - b. To implement the use of knowledge vouchers
  - c. To open up regional/national services for training for all European cluster organisations
  - d. To stimulate and facilitate the knowledge exchange through a direct matchmaking tool at cluster management level

- e. To set-up a modular training programme for cluster management at European level.
4. Further Development and Improvement of the CLUSTER EXCELLENCE Approach
- a. To keep the approach of quality assessment via a labelling system, while strengthening the qualitative vs. quantitative aspects
  - b. To ensure a stronger correlation between the labelling and training processes
5. EU - WIDE PROGRAMME FOR COLLABORATIVE INNOVATION PROJECTS involving large and small companies
- a. To maintain the proposed budget for interregional cooperation in order to strengthen the linkages between public authorities as well as researchers, businesses and civil society among European regions for a better exploitation of synergies based on smart specialisation strategies.
  - b. To support the “Joint Cluster Initiative” proposed by the European Commission under the “New Single Market Programme”
  - c. To enable a broader participation of clusters in the ERA-Nets, such as “Collective Research-NETwork” (CORNET)
6. PUBLIC PROCUREMENT FOR INNOVATION
- a. To undertake further actions to enhance the knowledge related to the implementation of public procurement for innovation instruments (capacity building) and the involvement of clusters in the process.
7. Make use of Clusters to address the TRANSFORMING POWER OF NEW TECHNOLOGIES (Digitalization, Additive Manufacturing, etc.)
- a. To make use of the trust and “routine” of cooperation between triple-helix to address the digitalization issue within the cluster
  - b. To bundle the demand and offer for education and training in the field, enabling access to tailor-made training ranging from “beginners” up to “expert” levels
  - c. To provide joint infrastructure such as digital innovation hubs and digitalisation vouchers supporting the testing of new technologies
  - d. To foster the exchange of “use cases”, good and bad practices.

## 2. INTRODUCTION

There are few regions or Member States in Europe that do not have a cluster policy. For most of regions/Member States the cluster policy is a constant tool both for the industrial policy strategy and – especially – for the regional and national innovation strategies. Cluster policies in Europe have already a history of more than two decades – and „being on the policy agenda“ for such a long time shows that they are not a fashionable, short-term instrument. Overcoming the challenge of adapting to political changes that are inevitable needs a lot of efforts and belief in the concept, as well as a dedicated commitment. The fact that the cluster policies are of actuality today just as they were for decades clearly demonstrates the importance clusters play in regional innovation industrial development.

Cluster policies can be implemented at regional or national level and they can be integrated in industrial/economic policies or innovation/R&D policies creating a large variety of approaches of cluster development. While the attempt to align them from a conceptual perspective could be not only very difficult but also with a questionable effectiveness given the very diverse and different framework conditions in regions and Member States, it is important to emphasize the vital importance of the long-term approach. If it may be challenging to ask for the institutionalisation of cluster initiatives by law (like universities or development agencies), if they are considered key instruments for the (regional) innovation and economic development, their operational timeframe should be at least aligned to that of smart specialisation strategies. In order to be able to harvest best the results of cluster performance, they should operate under a reliable and lasting support plan needed for the implementation of their activities.

However, the clusters and the policies supporting them were and are in constant transformation, adapting to the inherent changes of the industry (sector) and its needs, whether by inducing changes in the framework conditions, adjusting the focus to addressing (new) value-chains and driving the positioning in global value-chains. When it becomes too difficult or too costly to innovate within one singular sector, the approach may change by looking into the potential offered by other sectors, leading to cross-sectorial cluster cooperation that has an important role in the emergence of new industrial sectors.

At European level, the aim of European cluster policy is to further promote the development of world-class clusters with competitive industrial value chains that cut across sectors, similar to the "European Silicon Valleys" referred to in the White Paper on the Future of Europe<sup>1</sup> towards „clusters as tool for smart specialisation“.

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<sup>1</sup> [https://ec.europa.eu/commission/sites/beta-political/files/white\\_paper\\_on\\_the\\_future\\_of\\_europe\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/white_paper_on_the_future_of_europe_en.pdf)

The renewed EU Industrial Policy<sup>2</sup>, the EU Strategy for Strengthening Innovation in Europe's Regions<sup>3</sup> and the EU Strategy for Startup and Scale up<sup>4</sup> are laying out the EU policy framework for the design of modern cluster policies (Figure 1)<sup>5</sup>:



**Figure 1: EU Policy Framework for Clusters**

In the current programming period, industrial development based on innovation is strongly anchored in the Smart Specialisation Strategies and clusters are recognized as important pillars in this context, making them the heart of strong territorial innovation ecosystems. For this reason, both DG GROWTH and DG REGIO launched funding schemes supporting the set-up of:

- European Strategic Cluster Partnerships for smart specialisation investments (ESCP-S3) aiming to boost industrial competitiveness and investment within the EU. These partnerships shall facilitate cluster cooperation in thematic areas related to their RIS3 and hereby increase the involvement of the industry in the [Smart Specialisation Platform for Industrial Modernisation](#).<sup>6</sup>
- thematic, transnational partnerships of regional stakeholders (regional authorities, clusters, universities, research centres, SMEs, etc.) to pilot interregional innovation projects aimed at facilitating the commercialisation and scale-up of interregional innovation projects and to incentivise business investment.<sup>7</sup>

<sup>2</sup> EC (2017a) Investing in a smart, innovative and sustainable industry; A renewed EU Industrial Policy Strategy, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017DC0479>

<sup>3</sup> EC (2017b), Strengthening Innovation in Europe's regions: strategies for resilient, inclusive and sustainable growth.

[http://ec.europa.eu/regional\\_policy/en/information/publications/communications/2017/strengthening-innovation-in-europe-s-regions-strategies-for-resilient-inclusive-and-sustainable-growth](http://ec.europa.eu/regional_policy/en/information/publications/communications/2017/strengthening-innovation-in-europe-s-regions-strategies-for-resilient-inclusive-and-sustainable-growth)

<sup>4</sup> EC (2016), Europe's next leaders: the Start-up and Scale-up Initiative. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0733&from=EN>

<sup>5</sup> Input paper on modern EU policies for the first meeting of the European Cluster Policy Forum <https://www.clustercollaboration.eu/news/first-european-cluster-policy-forum-sets-agenda-discussions-eu-countries>

<sup>6</sup> <https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-s3>

<sup>7</sup> <https://www.clustercollaboration.eu/open-calls/call-expression-interest-thematic-partnerships-pilot-interregional>

## **CLUSTERIX 2.0 – New Models of Innovation for Strategic Cluster Partnerships**

ClusteriX 2.0 is a project financed under the Interreg Europe programme that addresses the improvement of regional innovation policies by making better use of clusters. ClusteriX 2.0 looks forward into new ways of facilitating intra and inter-regional cooperation. This shall be done by focusing on the identification and structured use of complementary industrial and research competences and by introducing new models of innovation through the implementation of strategic cluster partnerships. New models of innovation are needed because globalization and digitalization cause rapidly changing value chains and business models. The policy makers need to be aware of such developments to keep the pace and be able to provide fast and flexible support for emerging industries in order to make/keep a region competitive at global scale.

What is the motivation behind a partnership's initiative to work together on developing a set of recommendations? It is because the joint effort to look for key issues that need to be addressed by the policy agendas at different levels helps to identify and prioritise „common denominators“, those themes that are relevant for more than just one region, for more than just one country. It is because it helps the partnership speak with a joint and stronger voice („the power of WE“) about the needs to be addressed by the policy level, especially when it comes to communicate in a broader, European context.

**Out of the numerous and intensive thematic discussions carried out by the partners and experts involved in exchanging good practices and experiences over almost 3 years time emerged this set of recommendations. They reflect the own views of the participants.**

It is important to mention that they are based on a previous INTERREG IVC project “ClusteriX – Cluster cross-linking Innovation” and its set of recommendations<sup>8</sup> developed in 2014. 4 years later, in the process of structuring the CLUSTERIX 2.0 recommendations we also took the time to look back at the needs expressed in the past and evaluate their actuality. Some of them have already been considered and are under implementation, some are still „open“. We shall refer to them in the respective context of the new recommendations (see Chapter 4).

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<sup>8</sup> <https://www.ecoplus.at/media/2880/clusterix-recommendations.pdf>

### 3. CLUSTERIX 2.0 RECOMMENDATIONS

#### 3.1 MONITORING AND EVALUATION – IMPROVEMENT AND ADJUSTMENT PROCESSES NEEDS TO REFLECT THE GROWING ROLE CLUSTERS PLAY IN REGIONAL INNOVATION SYSTEMS

Monitoring and Evaluation has been identified by the CLUSTERIX2.0 partners as one of the top themes addressed within the project and a special Working Group was set up to discuss it more in detail, where partners could introduce to each other their methodologies, including indicators and approaches. One important finding: there are hardly two methodologies alike, even in regions in the same country that have similar operational structures of the cluster organisations. The exchange between partners was enriched with knowledge provided by experts involved in the TCI Working Group on Cluster Evaluation.

A second finding is the fact that the role of cluster organisations in their geographical and political-economical context strongly grew in complexity over the last decade. From a pure triple-helix approach, clusters are now at the very heart of regional innovation ecosystems, pillars of the S3 strategies, they are the motors of the regional innovation ecosystem. “Clusters are huge impact multipliers”<sup>9</sup>. However, the views on what needs to be evidenced, and the methodologies behind monitoring and evaluation have not necessarily followed this development and do not capture and reflect the broader impact cluster initiatives have.

The recommendations coming out from the joint learnings are:

- a. To establish a common European platform to support knowledge development and dissemination around the topic of monitoring and evaluation of clusters and other types of collaborative initiatives. The platform should link to and build on existing efforts, networks and results of the TCI Working Group on Cluster Evaluation (which already fulfills this function)<sup>10</sup>.

It is suggested that the Platform, which could be embedded as part of the European Cluster Collaboration Platform, provide cluster stakeholders with a structured access to a larger pool of materials and services to support monitoring and evaluation practices. These could include:

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<sup>9</sup> Bianca Dragomir, Manager of AVAENSEN cluster and European Cluster Manager of the Year 2016-2018 in an interview on Aug.28,2018 <https://www.clustercollaboration.eu/news/european-clusters-are-called-move-away-being-clusters-usual-becoming>

<sup>10</sup> See <http://www.tci-network.org/evaluation>



- A short “framing” guide on cluster monitoring and evaluation – with links to other materials and tools provided on the platform. The guide could build on or be a revised version of the forthcoming “Smart Guide to Cluster Evaluation” (foreseen within the European Observatory for Clusters and Industrial Change).
  - A collection of (and free access to) a wider repository of existing frameworks, methods and tools for cluster monitoring & evaluation
  - A collection of (and free access to) a repository of completed evaluations (or summaries of these) and articles/publications already available
  - A list of contact names/pool of experts who could serve as peer reviewers and/or in mentor/mentee arrangements for those working with cluster programme/policy design and implementation
  - A forum for ongoing exchange of policy/practice (beyond existing Interreg Europe projects)
- b. To provide a series of half-day specialized trainings and/or webinars for free to interested cluster stakeholders – covering cluster monitoring and evaluation basics, how cluster M&E relates to smart specialization strategies, and highlighting available frameworks and tools (as presented in the Smart Guide/framing document mentioned above). The trainings/webinars should be communicated both via the platform embedded within the ECCP, as well as the S3 Platform.
- c. To leverage and build on existing practices within the labelling/quality assessment processes to develop (a menu of) indicators focused on results and longer-term impacts, and a more structured follow-up on cluster initiatives’ own KPIs/targets. The menu of indicators<sup>11</sup> should relate to the cluster initiative’s own strategy and development scenario, and should be leveraged in discussions of results, as well as to highlight results in success stories. In addition, a possible add-on service for coaching and mentoring on results achievement could be considered.
- d. To develop common templates and guidance on the use of success stories as an integrated part of regular monitoring processes to highlight the role that cluster initiatives are playing to contribute to smart specialization strategies and other broader, system-level results. Additionally, new approaches can leverage peer reviews of success stories (within and across regions) to foster deeper understanding, learning and communication of results in this regard.

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<sup>11</sup> i.e. concrete indicators for each of the thematic action areas could be listed and used for inspiration in discussions of KPIs/results

### **3.2 SUPPORT FOR THE MOBILITY OF CLUSTER STAKEHOLDERS (CLUSTER MANAGEMENT, CLUSTER POLICY MAKERS/IMPLEMENTORS, MEMBERS OF THE CLUSTER)**

The CLUSTERIX2.0 partnership organized bilateral staff exchanges that enabled a deeper and more focused exchange between the involved cluster stakeholders that led to a different level of learnings and „take-overs“ in each other’s processes. We would like to draw the attention that these staff exchanges were not the first „encounters“ between the exchanging partners, but a follow-up of previous meetings organised via the project that already enabled a first get-to-know each other and the areas of expertise the respective partners have.

Based on the staff-exchange experiences we would like to make the following recommendations:

- a. The exchange is more focused if it happens at bilateral level. The participation/involvement of more partners/regions creates already the feeling of a meeting/event, it is more difficult to align their interests and to create the atmosphere of trust and openness.
- b. At the core of the whole staff exchange process is the theme addressed – this is the real match-maker, at the core of the exchange and learning process. However, to reach the full potential of the exchange, we recommend that the theme is defined by the host organisation.
- c. The duration of the exchange can/should be kept flexible – we recommend between a couple of days and 2 weeks.
- d. The purpose of the exchange should be learning for improving – that could be around many shapes such as framework conditions in both regional contexts, approaches, instruments, detailed specific discussions. The outcome of such exchanges is mostly the understanding how other cluster ecosystems work, using the knowledge as inspiration to improve (cluster excellence approach).
- e. Such an exchange visit should create a win-win situation: a clear benefit for the host and the guest
- f. Such an exchange enables the interaction between cluster managers and cluster policy makers. This cross-dialogue between the different levels is key for the learning and particularly acceptance process.
- g. We see various possibilities of implementing a cluster mobility scheme, from a „light“ version, based on „mobility vouchers“ (similar to innovation vouchers and creative industries vouchers) up to more intense interaction like the programme

Erasmus for Young Entrepreneurs offers. It is important that the mobility scheme is rapid, flexible and open for all Member States/COSME countries.

- h. We appreciate the planned support for cluster mobility under the COSME programme and ask for integrating the learnings from this call in a continuation under the future “Single Market Programme”<sup>12</sup>.

### **3.3 SUPPORT OF THE DEVELOPMENT / IMPROVEMENT OF SERVICES FOR CLUSTER MANAGEMENT ORGANISATIONS**

The discussions carried out in several meetings of a special Working Group dedicated to this theme were fruitful and complex. We acknowledged from the beginning the fact that the set-up of the cluster organisation (public funded or private driven) influences its accessibility to services. We looked into the identified providers of services that can be agencies or intermediaries, commercial businesses or networks/associations of clusters at regional, national, or European level. We looked as well into the typology of services used by cluster organisations that can be analyses, classroom trainings or webinars, working groups/workshops, study visits, benchmarking exercises, matchmakings, mentoring, etc. And we also had a look at the needs and objectives in relation to activities and skills.

The important element at the core of the issue is the funding of the services, i.e. either from the public sector programme owners or from own resources of the cluster management organisations.

We all acknowledge the important role cluster networks and associations play in the provision and facilitation of services for cluster management organisations. We found out that public funding can take various shapes:

- Funds dedicated by national or regional sources to purchase services for a larger group of cluster organisations (at regional, national or even European level)
- Funds dedicated to buying services as part of the budget awarded to the cluster organisation that can administrate them according to its needs.
- Financing the servicing of the cluster organisations via a dedicated organisation (e.g. in case of the region of Catalonia, the public budgets of the cluster organisations are rather low, but they benefit a lot from the intense support activities offered for free by the innovation agency ACCIO).

Our recommendations are (in random order):

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<sup>12</sup> [Proposal EU Regulation Programme for Single Market, Competitiveness of Enterprises](#)

- a. Create a virtual information center accessible for all cluster organisations enabling them to learn about the available training offers on the market, as well as about the organisations offering such trainings.
- b. Open up regional or national services or training for cluster management organisations outside the region.
- c. Implement the use of Knowledge vouchers – flexible and easy accessible (possible at regional, national or European level).
- d. Stimulate and facilitate knowledge exchange and sharing good practices between cluster managers by providing a virtual platform, which also includes a matching tool/market place where needs of cluster managers for more insights in certain services are matched to clusters with in experiences in these services.
- e. Set-up a modular training programme developed for cluster managers and employees of the cluster management organisation at European level. This training programme should focus on those elements that help the cluster management staff to improve the performance of the clusters. It would therefore make sense that this training programme would be linked to the cluster excellence criteria. The programme should be made modular, as relevant modules may differ from person to person (experiences, regional context, etc.) and the new modules should take into consideration the existing trainings on the market. Where there is a gap, perhaps forces can be joined to develop something. The programme could also be seen as a kind of guideline on which skills should be well developed, perhaps added with links to possible training or a description of which kind of training may be relevant.

### **3.4 FURTHER DEVELOPMENT AND IMPROVEMENT OF THE CLUSTER EXCELLENCE APPROACH**

All CLUSTERIX 2.0 partners agree that cluster excellence is a vital element of the cluster policy and efforts should be continued to support at all levels the improvement of the cluster management performance. The partners have already acquired a good experience with a labelling system, both on European level (ESCA) as well as on national level (e.g. Hungarian cluster accreditation system).

Our recommendations in this regard concern:

- a. The approach of assessing quality, pushing for excellence via a label system is good and should be kept.
- b. The existing European Cluster Management Excellence Labelling shall be further improved, e.g. by strengthening qualitative aspects in the assessment more than quantitative ones.

- c. We recommend a stronger correlation between the labelling process and the training processes, as well a centralized place to find all the offers available on the market.

### 3.5 EU-WIDE PROGRAMME FOR COLLABORATIVE R&D&I PROJECTS INVOLVING LARGE AND SMALL COMPANIES

The CLUSTERIX 2.0 partners agree with the statements of the European Parliament, the European Commission and the Competitiveness Council on the need for stronger strategic inter-regional partnerships:

“Stronger strategic inter-regional cooperation and sustainable linkages between regional ecosystems along smart specialisation priority areas can increase competitiveness and resilience.”<sup>13</sup>

The European Parliament “regrets the lack of interregional cooperation on the basis of the smart specialisation theme” and “calls for facilitation of the development of strategic cluster partnerships”.<sup>14</sup>

The Competitiveness Council “calls for the further development of the European cluster policy, with the aim of linking up and scaling-up regional clusters into cross-European world-class clusters, based on smart specialisation principles, in order to support the emergence of new value chains across Europe”.<sup>15</sup>

The discussion among CLUSTERIX 2.0 partners on how to strengthen further interregional strategic cluster partnerships showed that there is a need for an instrument supporting:

- Europe-wide cooperation
- bringing together researchers, small, medium sized and large businesses, civil society and public administrations involved in smart specialisation strategies established at national or regional levels.

Recommendations:

- a. To maintain the proposed budget for interregional cooperation in order to strengthen the linkages between public authorities as well as researchers, businesses and civil society among European regions for a better exploitation of synergies based on smart specialisation strategies. We recommend capitalizing on the knowledge and trust established among policy makers but also regional stakeholders such as cluster organisations with the essential help of Interreg

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<sup>13</sup> EC Communication „[Strengthening Innovation in Europe’s Regions](#)“, July 2017

<sup>14</sup> [EP resolution of 13 September 2016 on Cohesion Policy and RIS3 \(2015/2278\(INI\)\)](#)

<sup>15</sup> [COMPET Council conclusions \(12/03/2018\) on EU industrial policy strategy](#)

Europe. We support the new Interreg component “Interregional Innovation Investments” as an instrument to strengthen EU-wide strategic collaboration of ecosystems along smart specialization priorities in order to build and re-shape European value-chains by encouraging the synergies of investments in different regions.

- b. We support the “Joint Cluster Initiative”, a new initiative proposed by the European Commission under the “New Single Market Programme”<sup>16</sup> that states:

*“Clusters are a strategic tool for supporting the competitiveness and scaling-up of SMEs as they offer favourable business environments. Joint Cluster Initiatives should achieve critical mass to accelerate the growth of SMEs. By connecting specialised eco-systems, clusters create new business opportunities for SMEs and integrate them better in European and global strategic value chains. Support should be provided for the development of transnational partnership strategies and the implementation of joint activities, supported by the European Cluster Collaboration Platform. Sustainable partnering should be encouraged with continuation funding if performance and participation milestones are reached. Direct support to SMEs should be channelled through cluster organisations for the following: uptake of advanced technologies, new business models, low-carbon and resource-efficient solutions, creativity and design, skills upgrading, talent attraction, entrepreneurship acceleration, and internationalisation.*

*Other specialised SME support actors should be associated to facilitate industrial transformation and implementations of smart specialisation strategies. The Programme should thus contribute to growth and build linkages with the European Union's (digital) innovation hubs and investments made under the Cohesion Policy Programme and Horizon Europe. Synergies with the Erasmus programme can also be explored.”*

- c. Another option for financing collaborative RDI projects is the participation in ERA-Nets, i.e. joint coordinated calls of national/regional funding programmes, such as the “Collective Research-Network – CORNET”. CORNET supports cooperation of enterprises of the same branch (or even across sectors) with a common pre-competitive problem. The project consortium receives funding for assigning a research organisation with the task of solving their problem. The projects are usually accompanied by an SME organisation/cluster organisation, who also have the task to widely disseminate the results after the end of the project.

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<sup>16</sup> [Proposal EU Regulation Programme for Single Market, Competitiveness of Enterprises](#)

### 3.6 PUBLIC PROCUREMENT FOR INNOVATION

As facilitators of the dialogue between the industry, research and public bodies, cluster organisations can play an important role in involving their SMEs in the processes of public procurement for innovation. This instrument was already identified four years ago within the Interreg IVC project ClusteriX as a powerful instrument to generate innovation. Although legal regulations for more flexible public procurement cooperations with more innovative solutions are available, the implementation is not easy, also because of a lack of knowledge on how to apply the new public procurement law (training needed).

Public Procurement represents approximately 14% of the EU GDP. However, less than half of this budget is purchased from SMEs. Public procurement of innovation (PPI) broadly refers to any public procurement that has one or both of the following aspects:

- buying the process of innovation;
- buying the outcomes of innovation.

The Region of Southern Denmark shared its experience in the use of public procurement instruments in collaboration with hospitals and the Welfare Tech Cluster, companies and public institutions. We acknowledge the fact that a call was recently published to support the [co-financing of consortia for public procurement for innovation under the COSME programme](#) (supporting the involvement of SMEs) and recommend that further actions are undertaken to enhance the knowledge related to the implementation of public procurement for innovation instruments (capacity building) and the involvement of clusters in the process.

### 3.7 MAKE USE OF CLUSTERS TO ADDRESS THE TRANSFORMING POWER OF NEW TECHNOLOGIES (Digitalization, Additive Manufacturing, etc. )

The CLUSTERIX 2.0 project is looking at the role of clusters (as tool for regional innovation policy) in enhancing new technologies causing fundamental business model innovation, such as digital transformation or additive manufacturing.

The transformative power of digitalisation as a transversal driver challenges and changes each sector. Digital solutions such as IoT, Big Data analysis, AI and machine learning are increasingly in the center of innovation processes looking to integrate the solutions in products or processes. Also Additive Manufacturing (AM) has been seen as a game changing technology helping to reduce material input, boosting the trend of personalized goods, enabling new business models, etc. These new technologies not only imply technological challenges but most of all new thinking of engineers and business model innovation.



Clusters – working at the interface of researchers, companies and policy makers - can help the successful implementation by connecting know-how, infrastructure and market, interpretation and prioritization of needs with the help of open innovation methods, pooling experiences and enabling innovation across disciplines / business sectors, bundeling education and training needs, etc.

Recommendations:

- a. Digital transformation requires a more holistic view and more communication / cooperation across departments and organisations. We recommend making use of existing trust and routines of cooperation between triple-helix stakeholders involved in clusters and eco-systems.
- b. There is a big demand for education and training. We recommend bundeling education offers and providing modular seminars to enable tailor-made training for digitalization “beginners” up to expert training in specific fields. It is important to make visible such training offers via a platform, irrespective on who coordinates the process in the region or at national level.
- c. We recommend providing joint infrastructure such as digital innovation hubs and digitalisation vouchers offering companies support to test new technologies.
- d. Focus support for research on the most important technical topics defined in a common Entrepreneurial Discovery Process.
- e. Foster the exchange of application examples (“use cases”), good and bad practices.



## 4 REVIEW CLUSTERIX (Interreg IV C) RECOMMENDATIONS AFTER 4 YEARS

The CLUSTERIX2.0 recommendations presented in chapter 3 are a follow-up of the set of recommendations developed in 2014 in a previous INTERREG IVC project “ClusterIX – Cluster cross-linking Innovation”<sup>17</sup>. 4 years later, in the process of developing and structuring the CLUSTERIX 2.0 recommendations we also took the time to look back at the needs expressed in the past and evaluate their actuality. Some of them have already been considered and are under implementation, some are still „open“. Below you will find an update of these recommendations.

### 4.1. Support the development of cross-cluster management platforms and cross-sector/inter-disciplinary open innovation platforms

Thanks to several initiatives developed in various programmes and in various ways, we currently see the following opportunities for cluster managers „to exchange experience both in order to improve the management of clusters through mutual learning as well as to trigger ideas for cross-cluster collaboration“:

- The European Cluster Collaboration Platform (ECCP) re-launched in 2016 enables cluster managers free access to existing information on cluster management trainings. It also offers an open space for cluster managers to meet at its matchmaking events. Some of these are especially designed to address the needs for cross-sectorial collaboration. The platform provides not only the organisation of the meetings but also funding for cluster managers to attend. For the future, it is recommended that it also provides virtual spaces for groups of cluster managers interested to discuss special themes.
- The European Strategic Cluster Partnerships Going International (ESCP-4i) launched in 2016 and European Strategic Cluster Partnerships for Smart Specialisation Investment (ESCP-S3) (to be launched in 2018) are initiatives in the COSME programme supporting the interaction/exchange between cluster organisations and their members in small communities of clusters sharing a joint objective. Whether addressing markets outside Europe or working together across European regions to develop strong industrial collaboration and foster cross-linking industrial development by preparing projects for strategic investment.
- The projects funded through the Cluster Excellence Initiative in the COSME programme (launched in 2016) have the goal to support mutual learning between

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<sup>1717</sup> <https://www.ecoplus.at/media/2880/clusterix-recommendations.pdf>

cluster organisations in their efforts to increase their cluster management excellence.

#### **4.2. Create the awareness that clusters must present their specialisation in a better way and make pro-active efforts for more visibility.**

This recommendation is partly put into practice by the European Cluster Collaboration Platform that currently maps more than 800 profiles of European cluster organisation from all Member States and COSME countries. The profiles enable cluster organisations to communicate their missions and activities and their industrial focus and the platform supports the clusters to promote their activities within the large cluster community. The clusters however must embrace a pro-active attitude and put their content forward by publishing it in a free and easy manner. And also communicate more about role and impact on their smart specialisation strategies.

#### **4.3. Improve collaboration and coordination of administrative bodies and policy makers bridging sectors and regions, enhancing the role of institutions that deal with economic development and innovation.**

The recommendation to „raise awareness (at this level), re-think traditional structures but also to provide incentives for better coordination and collaboration of different governmental bodies, different departments and agencies. It would be beneficial to start a broad dialogue on new approaches related NACE classifications so that emerging industries could be much better spotted and analysed statistically“.

In 2017 DG GROWTH launched the new [European Observatory for Clusters and Industrial Change](#) (EOCIC) that has the objective to „help Europe's regions and countries in designing better and more evidence-based cluster policies and initiatives“.

In addition EOCIC hosts the European Cluster Policy Forum that gathers for the first time high-level representatives from each Member State in charge of the cluster policy bringing around the table the decision-makers, setting up a dialogue and identify and address jointly issues of top interest for the cluster policy development at European level.

Just as well, the Interreg Europe set up its [Policy Learning Platforms](#) that identified cluster development as a high priority theme and organises round tables with cluster policy makers/implementors to enable inter-governmental and cross-department collaboration. Such an open approach is most likely then to have an echo also at regional development.

#### **4.4. Identification of cross-sector collaboration opportunities /international smart observation**

We found out back then that „it is important for regional actors/policy makers to attend (themselves AND together with their clusters) match-making activities within RIS3 as well as networking activities where knowledge of common interest in existing and emerging industries can be discussed – at a regional, national and/or international level“.

Currently we see that there are matchmaking events organized for cluster managers and there are roundtables organised for policy makers/implementors. But there is still lacking a „joint option“. During the lifetime of CLUSTERIX2.0 the partners could experiment such a „joint option“ via the „staff exchanges“ activity that enabled bilateral visits of up to 1 week where the dialogue between cluster policy makers/implementors and cluster managers was direct and focused on pre-defined themes (see also the current recommendation on mobility).

We would like to point out that such dialogue is very different than the encounters enabled by large-scale matchmaking events organised during large European events (European Cluster Conference, EU Industry Days, European Week of Regions and Cities, GROW your REGION) usually attended by both groups. These are settings that enable a „speed dating“and raising the interest for a next encounter based on the quick exchange within a limited amount of time (10-15 minutes).

We still see this recommendation as valid and in relation to the current recommendation (number 2).

#### **4.5. Support the entrepreneurial education and culture ensuring the development of new value chains.**

This is definitely one recommendation that has kept unchanged its validity and importance. We acknowledge the fact that the European Cluster Collaboration Platform updated the structure of the cluster profile so that it can accomodate information about entrepreneurship within its ecosystem as well as the fact that the European Cluster Policy Forum has put entrepreneurship on its agenda for further development of cluster policy around this theme. We see that quite a few clusters already embrace the support of entrepreneurship by developing new services, competences and skills for their members, but this is not yet mainstream. Still many clusters have the „classic“ approach of the triple helix (industry, academy/research and public bodies) and we believe that there is a need for a broader awareness, discussion and action, e.g. introducing entrepreneurship-related aspects in the Cluster Excellence initiative (both the labelling and the training programmes).

#### **4.6. Ensure the long-term commitment of cluster support**

We definitely see this recommendation as still valid.

#### **4.7. Develop new financing mechanisms / cluster programmes supporting cross-sector collaboration**

Although we currently see the implementation of initiatives such as European Strategic Cluster Partnerships for Smart Specialization Investment (ESCP-S3) and the pilot projects launched by DG REGIO, the recommendation is still valid for the national and regional level.

#### **4.8. Use public procurement as a driver of innovation**

We definitely see this recommendation as still valid.

#### **4.9. Coordination of funding schemes**

We see this recommendation as still valid.

#### **4.10. Foster cross-sector cluster internationalisation strategies, along the value chain, and generation of critical mass**

This recommendation is fully implemented via the European Strategic Cluster Partnerships Going International (ESPC-4i). But we still see the potential of peer learning workshops on new international linkages – where for example partners from an ending ESCP-4i project (e.g. Strand 2) could share with newcomers their experiences made during the project lifetime.

#### **4.11. Support of international cross-fertilization processes and thematic platforms**

Over the last years we saw the emergence of the S3 Thematic Platforms on [AgriFood](#), [Energy](#) and [Industrial Modernisation](#) that are a good development in this direction.

#### **4.12. Support of the development and carrying out (at regional/national/European level) of joint international collaboration activities between cluster members**

We see this recommendation as still valid.