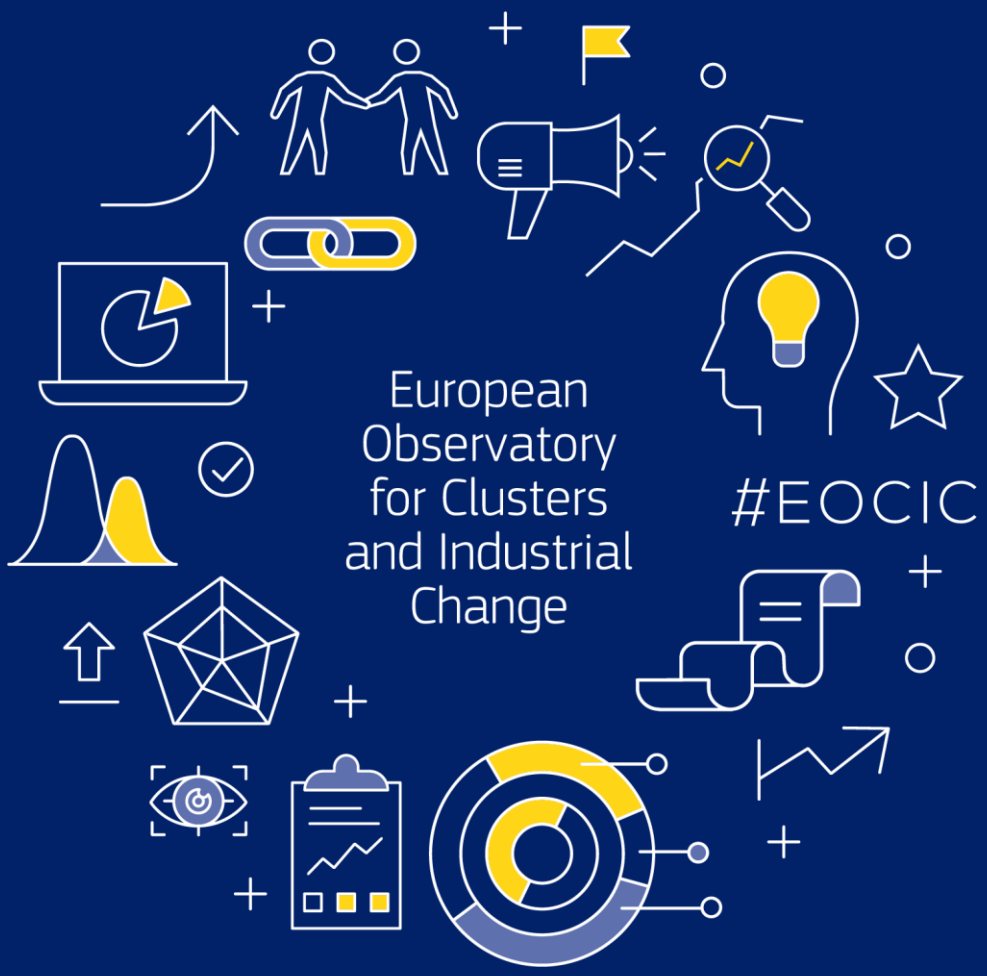
European Commission

European Observatory for Clusters and Industrial Change EASME/COSME/2016/035

29 March 2019



Smart Guide for European Strategic Cluster Partnerships

This study was carried out for the European Commission by

Authors

Mark Spinoglio, Hugo Magalhães and Samuel Almeida, Sociedade Portuguesa de Inovação (SPI)

Nordine Es-Sadki and René Wintjes, Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT), Maastricht University

Madalina Nunu and Tim Schreiber, Valdani Vicari & Associati (VVA)

For further information, please contact the European Commission Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Unit F.2: Clusters, Social Economy and Entrepreneurship per email: GROW-F2@ec.europa.eu
URL: https://ec.europa.eu/growth/industry/policy/clusters/Observatory_en

Luxembourg: Publications Office of the European Union, 2019.

Print	ISBN 978-92-9202-491-8	DOI 10.2826/461437	EA-01-19-459-EN-C
PDF	ISBN 978-92-9202-490-1	DOI 10.2826/597536	EA-01-19-459-EN-N

Acknowledgements

The authors would like to thank the following stakeholders that took the time to be interviewed for the development of the Smart Guide.

Name	Position	Organisation
Alex Rivera	Cluster Manager	INDESCAT
David Seoane	Project Coordinator	FUNDINGBOX ACCELERATOR SP ZOO (FBOX)
Emilie Romeo	Head of European Affairs	LYONBIOPOLE
José Ignacio Hormaeche	Managing Director	Basque Energy Cluster
Katherina Ulrich	Project Manager	BalticNet-PlasmaTec e.V.
Linas Eriksonas	Project Manager	LITEK
Marc Pattinson	Managing Director	INNO TSD
Marco Ramella-Votta, Chiara Ferroni, Silvana Sanfeliu Giaimo	-	Fondazione Torino Wireless
Maria Strömberg	Director Clusters & Innovation	Business Region Göteborg AB
Silvia Zinetti	Public Funding Manager	MESAP
Thiery Louvet	Directeur Europe et International	Systematic – Paris Region Digital Ecosystem
Thilo Schönfeld	Deputy Director International Affairs	Aerospace Valley
Vladimir Gumilar	Director/ Cluster Manager	Construction Cluster of Slovenia

Table of Contents

Executive Summary ..... **i**

1 Introduction **1**

1.1 European Strategic Cluster Partnerships and their importance 1

1.2 Purpose and target audience of the Smart Guide 2

1.3 Structure of the Smart Guide 2

2 European Strategic Cluster Partnerships put in context **4**

2.1 Overview of European Strategic Cluster Partnerships 4

2.2 Results and Impact 6

2.3 Lessons Learnt 10

3 Challenges facing European Strategic Cluster Partnerships **12**

3.1 Joint partnership strategy 12

3.2 Innovation 14

3.3 Cooperation 16

3.4 Internationalisation 16

3.5 Investment 17

3.6 Ongoing cluster partnerships 18

4 Recommended actions to set up a sustainable partnership strategy and joint activities **20**

4.1 Actions to establish a joint partnership strategy 20

4.2 Actions to foster innovation 24

4.3 Actions to foster cooperation 28

4.4 Actions to foster internationalisation 32

4.5 Actions to foster investments 36

5 Examples of European Strategic Cluster Partnerships good practices **40**

5.1 Overview of good practices 40

5.2 Building strong partnerships and develop a joint partnership strategy: Mobility Goes International 41

5.3 Promoting interregional collaboration: Future materials and products for advanced smart packaging 43

5.4 Fostering internationalisation of SMEs: EU4SportsClusters Alliance 44

5.5 Fostering SME innovation: joint incubation, entrepreneurship, business scale-up and growth acceleration: Renewables Energy InternaNAtionalisation ESCP project for European SMEs 46

5.6 Fostering joint smart specialisation investment of industry actors: <IMPACT> Connected Car 48

5.7 Disseminating partnership activities and results: ESCP on Personalised Healthcare 50

5.8 Monitoring the partnership's activities and evaluating the impact on SMEs: European Strategic Cluster Partnership in Photonics for Health 51

5.9 Leveraging funding sources for partnership sustainability: European Circular Construction Alliance 53

6 Conclusions 55

Annex 1 - List and presentation of European Strategic Cluster Partnerships 59

Presentation of ESCP-4i 62

Presentation of ESCP-S3 84

Annex 2 - European Observatory for Clusters and Industrial Change in brief 90

Table of Boxes

Box 1. Methodological approach to conduct a value chain analysis. 21

Box 2. Management and communication tools and channels to increase partnership engagement. 22

Box 3. SMART objectives defined by AdPack. 23

Box 4. Examples of events that foster collaborative opportunities. 24

Box 5. Examples of potential roles for brokers. 26

Box 6. INCluSilver innovation vouchers. 28

Box 7. Recommendations for successful partnerships. 29

Box 8. ECCP matchmaking events. 31

Box 9. Items to consider in the definition of an evaluation strategy. 32

Box 10. European Commission support to the internationalisation of SMEs. 34

Box 11. EU4SportsClusters Alliance and REINA Plus internationalisation case studies. 35

Box 12. EU4SportsClusters Alliance export groups. 36

Box 13. Smart Systems Integrated trademark. 37

Box 14. bioXclusters plus networking events. 37

Box 15. Technical assistance facility for industrial modernisation and investment. 39

Table of Figures

Figure 1. Industrial focus of the first generation of ESCP-4i. 7

Figure 2. Industrial focus of the second generation of ESCP-4i. 8

Table of Tables

Table 1. List of ESCP-4i (first generation). 59

Table 2. List of ESCP-4i (second generation). 60

Table 3. List of ESCP-S3. 61

Executive Summary

This Smart Guide provides guidance to European Strategic Cluster Partnerships (ESCP) on how to develop a successful partnership strategy and on possible actions to achieve joint projects and investments.

ESCP in context

One of the European Union's (EU) first cluster collaboration initiatives was launched in 2012 under the Competitiveness and Innovation Programme (CIP). The initiative, which funded six pilot projects, aimed to encourage European clusters to collaborate and develop joint internationalisation strategies to enter third countries.

In 2014, the European Commission launched, under the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) programme, the European Strategic Cluster Partnerships for Going International (ESCP-4i). The ESCP-4i aim to encourage clusters to work together to develop and implement a joint strategy that supports the internationalisation of SMEs in third countries. In 2018, the European Commission launched the European Strategic Cluster Partnerships for Smart Specialisation Investments (ESCP-S3), which aim to facilitate cluster cooperation in shared smart specialisation priority areas linked to industrial modernisation.

These ESCP support their members, who are facing global competition, through the implementation of joint innovation and investment projects and the access to third countries across the world.

A first call for ESCP-4i (first-generation) projects was launched in 2014, which resulted in 25 partnerships, 15 having received EU funding. The 25 projects (running from 2016-2017) involved approximately 150 cluster organisations in 23 EU countries and focused on areas such as aeronautics and space, mobility and transport, ICT and digitalisation, health, agro-food and farming. The first generation ESCP identified 26 different countries as potential target markets, with the USA, China, Canada and Brazil being the most common target market countries.

The second call for ESCP-4i (second-generation) was launched in 2017, which resulted in 25 projects (two addressing earth observation and two operating in the defence and security sector). The projects started in 2018 and will run until 2019. The main sectors targeted include smart cities, mobility and transport, energy and environment, and agro-food and packaging. The second-generation of ESCP identified 32 different countries as potential

target markets, with the USA, China and Canada being the most referred countries.

The first nine ESCP-S3 were launched in October 2018. The nine cluster partnerships involve 57 partners from 19 European countries active in various industrial sectors such as agro-food, automotive, aerospace, textile and health.

Challenges facing ESCP

The main challenges and barriers faced by ESCP, particularly those involved in the first-generation ESCP-4i, were identified through a series of interviews with representatives of ESCP, cluster organisations and experts. Challenges and barriers were identified for seven areas: (1) joint partnership strategy, (2) innovation, (3) cooperation, (4) internationalisation, (5) investment and (6) ongoing cluster partnerships.

- **Joint partnership strategy**: There is often a challenge of identifying relevant partners with a similar industry structure or with an added value industry. Thus, cluster organisations should understand what their members do and what they can offer to the partnership. Experience from previous collaborations are valuable to increase the success of partnerships, which should also focus on creating an environment of cooperation rather than competition. The lack of common objectives can hinder the success of partnerships, and thus a common strategy with clear tasks is important, supported by a complementary partnership with limited overlap.
- **Innovation**: SMEs are the main enterprises in clusters and often have difficulty in identifying competitive, efficient and reliable partners, as well as support in understanding the forecasts and demands of a particular market. Innovation-focused events should involve companies' top-level technical and R&D managers that can share knowledge on relevant technical challenges, market demands and opportunities. There is often a challenge in obtaining funding to engage in networking activities to identify collaboration opportunities.
- **Cooperation**: Differing businesses and cultures are simultaneously seen as a challenge but can be overcome if partners' interests are aligned. Different levels of interest from cluster partners and cluster members is also a challenge, which increases with the size of the partnership. Thus, it is also important to identify and involve the most motivated SMEs and ensure interests are aligned.
- **Internationalisation**: There is an evident challenge in identifying real cooperation opportunities for cluster SMEs. Fact finding actions are a good opportunity for SMEs aiming to internationalise their activities,

which can benefit from being done alongside larger enterprises looking to enter new markets. It is important to create an environment where SMEs benefit from one another or from larger firms' success in international markets. For example, SMEs operating as a group rather than in competition may be more appealing to potential clients.

- **Investment**: Having access to larger or more established firms is a challenge for SMEs, which is important to support their decision-making process when investing. Ensuring credibility is also a challenge from a financial investment perspective. Credibility is important to both the partnership members and potential investors. The establishment of a collective trademark is an opportunity to increase credibility. Creating opportunities for SMEs to showcase their products and services to investors is important, and can be facilitated by increased participation in selected networking events and tradeshows.
- **Ongoing cluster partnerships**: Implementing an effective evaluation of the partnership is often a challenge, which can limit the opportunities to improve the partnership. Impact is also difficult to measure, which makes it a challenge to identify areas of improvement for the partnership. Partnerships should aim to be open to other clusters across Europe as this provides more opportunities for collaboration rather than only looking within the partnership.

Recommendations to set up a partnership strategy and joint activities

Establish a joint partnership strategy

A successful joint partnership strategy can benefit from the involvement of organisations that share a similar focus and have aligned objectives. A thorough analysis of competences, complementarities and synergy potential should be carried out to effectively achieve the partnership strategy's objectives. This can be achieved with a value chain analysis, which allows the collection of information about the competences and complementarities, priorities, interests and needs of clusters and their members.

A partnership coordinator is responsible for ensuring trust, commitment, a shared ambition and the complementarity of the partners. To increase the success of the partnership, an inclusive coordination should be adopted where all partners have a proactive participation, including in the drafting of the partnership strategy.

All partners should be involved in defining the partnership strategy's objectives, which should be few in number, clear and precise (following the SMART objectives approach) so that the strategy is focused and progress can be

assessed easily. Furthermore, objectives should benefit the SMEs and not only the cluster organisations, universities or research institutes.

Foster innovation

Often some organisations will have an idea for something innovative, but will lack the resources to implement the idea. In such situations, there is an opportunity for collaboration that may be difficult to realise without external support. Therefore, the organisation of events (e.g. business-to-business matchmaking, open innovation labs, innovation jams) with cluster members may help identify collaborative opportunities and foster innovation.

Innovation is often successful when actors of the Triple Helix Model (i.e. universities, industry and government) work together. However, the relationship between these actors is sometimes a difficult process that requires an intermediary. The involvement of a broker, innovation or partnership focused, can help clusters and their members identify and implement collaborative opportunities, help organisations achieve higher value and productivity, and can help manage the activities and efficiency of a partnership.

Although intra-cluster cooperation has been successful, it is more difficult to encourage inter-cluster cooperation. Therefore, it is important to find the best incentives and instruments to achieve this cooperation. Several instruments are available (e.g. INNOSUP-1) that channel funds through clusters to support cooperation in innovation.

Foster cooperation

To achieve successful cooperation opportunities, it is important to ensure the establishment of a balanced and manageable cluster partnership, where partners' interests in the cooperation are aligned. This entails involving partners from different clusters, with complementary competences and clear roles, which allow the partnership to achieve its objectives.

The organisation of cooperation enabling events (e.g. pitch sessions, speed networking, matchmaking events) can contribute to increased synergies between cluster organisations and their members. Cluster managers play an important role in this process, as they should engage with each other to organise these events and facilitate potential synergies.

It is also important that cluster organisations, with the support of the cluster manager, conduct systematic reviews and evaluations of ongoing cooperation activities to measure their success and, if necessary, adjust the cooperation strategy. Evaluations may focus on cooperation agreements achieved, jobs created, additional turnover resulting from cooperation activities, among others.

Foster internationalisation

Cluster SMEs with internationalisation potential can benefit from a better understanding of possible markets to explore and the best organisations with whom to cooperate with. Therefore, it is important to conduct a market study on pre-identified (i.e. which have previously been assessed) and shared (i.e. markets that are of interest to multiple SMEs) countries to increase cooperation opportunities.

Once relevant markets have been identified, it is important to travel to these markets, understand their business reality, evaluate the market strategy developed and establish initial contacts with local organisations. It is also important that these visits are carried out with the support of local/ national organisations. Involving SMEs or organisations with previous experience in the target markets can also support a more successful mission.

The development and implementation of cooperation structures such as joint export groups can facilitate the identification and selection of the best target markets to explore. These joint export groups should include various SMEs from different partner clusters to facilitate the sharing of resources and leverage synergies with other organisations.

Foster investments

Collective trademarks can be powerful instruments in any sector, enabling SMEs (or other organisations) to benefit from the collective reputation of a product or portfolio of products. With the ESCP, collective trademarks can help establish an identity for the cluster/ESCP and increase their investment potential and attractiveness. Thus, it is important to explore the creation of a collective EU trademark covering products related to the specific industrial or cross-sectoral area of each ESCP project.

The development of competitive products and services requires that enterprises identify the right partners or investors. In this process, ESCP can help enterprises enter global markets and develop long-term partnerships through specialised business services (e.g. training activities, B2B matchmaking sessions). It is important that cross-regional networks of investors be built and that networking events targeting these actors are organised (e.g. alongside tradeshows) to facilitate finding new partners outside their own region and to bring SMEs' products and services to the market.

ESCP aim to foster collaboration between enterprises, technology centres and clusters towards joint investment projects. These projects should be related to smart specialisation priority areas linked to industrial modernisation that help boost industrial competitiveness in the EU. To fine-tune these projects, it is important to explore the technical assistance available at the EU level.

1 Introduction

In order to place this Smart Guide in proper context, the following chapter presents the policy framework of the European Strategic Cluster Partnerships (ESCP) and shows the importance of these partnerships. The purpose and target audience of the Smart Guide and its structure are also discussed.

1.1 European Strategic Cluster Partnerships and their importance

In recent years, the importance of clusters as drivers of innovation has been recognised, enabling "open innovation" and the creation of new ideas through cooperation between companies and research institutions.

As emphasised in the Europe 2020 Flagship Initiative Innovation Union[1], "*internationally competitive clusters play a vital role in bringing together (…) large companies and SMEs, universities, research centres and communities of scientists and practitioners to exchange knowledge and ideas*".

More recently, the 2017 renewed EU Industrial Policy Strategy entitled "Investing in a smart, innovative and sustainable industry" [2] claims the promotion of growth at the EU level calls for clusters to create favourable business environments and innovation ecosystems. Therefore, clusters are key actors for business and R&D, providing an important boost to competitiveness and innovation. They play a role in the diagnosis, design and delivery of policies that often support the creation of jobs, growth and investments.

While the EU does not lack clusters, there is still an issue regarding the extent to which cooperation (or lack thereof) influences their capacity to generate critical mass and innovation, and face existing global competition.

One of the EU's first cluster collaboration initiatives was launched in 2012[3] under the Competitiveness and Innovation Programme (CIP) with the objective of encouraging clusters in Europe to work together and promote the development of joint internationalisation strategies towards third markets. Following a call for expressions of interest, six pilot projects for cluster internationalisation were funded[4].

[1] http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication-brochure_en.pdf
[2] http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=9252
[3] https://ec.europa.eu/growth/industry/policy/cluster/internationalisation_en
[4] More details about the six pilot projects can be found at https://www.clustercollaboration.eu/eu-initiatives-categories/european-cluster-consortia

To further encourage European clusters to increase collaboration, the European Commission launched in 2014 (under the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (SMEs) – COSME programme) the European Strategic Cluster Partnerships for Going International (ESCP-4i)[5] and in 2017 the European Strategic Cluster Partnerships for Smart Specialisation Investments (ESCP-S3)[6].

ESCP-4i aim to encourage clusters to work together to develop and implement a joint strategy that supports the internationalisation of SMEs in third countries.

ESCP-S3 aim to facilitate cluster cooperation in shared smart specialisation priority areas linked to industrial modernisation.

Both ESCP-4i and ESCP-S3 are important elements to help their members (especially SMEs) face global competition as they can support interregional activities for the preparation and implementation of joint innovation and investment projects. They can also facilitate the access to other countries and regions across the EU and on an international scale.

1.2 Purpose and target audience of the Smart Guide

The purpose of this Smart Guide is to provide guidance to existing and future ESCP on how to develop a sound partnership strategy, a list of shared actions and an implementation roadmap to achieve joint projects and investments.

The guide offers practical help by outlining some of the challenges faced by ESCP, presenting examples of good practices of individual ESCP projects and providing a collection of recommended actions to set up a sustainable partnership strategy and joint activities.

The guide is addressed to ESCP (both ESCP-S3 and ESCP-4i), but can be relevant to cluster-like networks in general.

1.3 Structure of the Smart Guide

In addition to the Introduction, the Smart Guide includes the following chapters:

- Chapter 2. European Strategic Cluster Partnerships put in context – provides an overview of ESCP, including the number of partnerships established and a summary of their profile. The

[5] https://ec.europa.eu/easme/en/cos-cluster-2014-3-03-cluster-go-international

[6] https://ec.europa.eu/easme/en/cos-clustpartn-2017-3-02-european-strategic-cluster-partnerships-smart-specialisation-investments

chapter also presents some of the main results and impact achieved in the framework of ESCP and main lessons learnt.

- Chapter 3. Challenges facing European Strategic Cluster Partnerships – presents an overview of the main challenges facing ESCP based on interviews with key stakeholders. For the challenges presented, possible actions to address them are also suggested.
- Chapter 4. Recommended actions to set up a sustainable partnership strategy and joint activities – provides a selection of recommended actions to set up a sustainable partnership strategy and joint activities based on interviews with key stakeholders and the results available from ESCP that have been completed or are ongoing.
- Chapter 5. Examples of European Strategic Cluster Partnerships good practices – presents good practices of individual ESCP projects in selected areas based on interviews with representatives of the partnerships and the results available. For each good practice, some recommendations that can be helpful to future ESCP are also suggested.
- Chapter 6. Conclusions – considering the results obtained in the framework of ESCP that have been completed or are ongoing, as well as the collection of information obtained through interviews with relevant stakeholders, provides several conclusions on the success of ESCP and suggests actions to further improve the next generation of cluster partnerships.
- Annex 1 - List and presentation of European Strategic Cluster Partnerships – provides the list and a short description of ESCP that have been labelled by the European Commission.

2 European Strategic Cluster Partnerships put in context

An overview of ESCP, including the number of partnerships established and a summary of their profile, is presented within the following chapter. The chapter also discusses some of the main results achieved in the framework of ESCP and main lessons learnt.

2.1 Overview of European Strategic Cluster Partnerships

ESCP were launched by the European Commission with the objective of encouraging European clusters to intensify collaboration across regions and sectors.

Specifically, the cluster partnerships are expected to combine resources and knowledge with the objective of working together on joint strategies and carry out activities that are in the interest of their SME members. Ultimately, ESCP are expected to boost economic growth and EU competitiveness.[7]

As mentioned earlier, two partnership categories have been established: the European Strategic Cluster Partnerships for Smart Specialisation Investments (ESCP-S3) and the European Strategic Cluster Partnerships for Going International (ESCP-4i).

European Strategic Cluster Partnerships for Smart Specialisation Investments (ESCP-S3)[8]

ESCP-S3 have the objective of boosting industrial competitiveness and investment within the EU. This is achieved by supporting collaboration among enterprises, especially SMEs, and interaction with technology centres within clusters and across regions and sectors. The collaborations focus on generating joint actions, investment projects and a sustainable partnering process to engage in interregional collaboration in shared smart specialisation priority areas linked to industrial modernisation.

These partnerships aim to facilitate cluster cooperation in various thematic areas related to regional smart specialisation strategies and to increase the involvement of the industry in the context of the Smart Specialisation Platform for Industrial Modernisation[9]. The focus of the partnering process is on key drivers of industrial

[7] https://www.clustercollaboration.eu/eu-cluster-partnerships
[8] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-s3
[9] http://s3platform.jrc.ec.europa.eu/industrial-modernisation

modernisation, such as: key enabling technologies (KETs), digital transformation (ICT), service innovation and creativity, and resource efficiency.

Established partnerships are expected to carry out activities that address the preparatory, implementation and investment phases of joint innovation and investment projects. The **Preparatory Phase** can include partnership building, the development of joint strategies and implementation roadmaps, execution of SME surveys, and value chain mapping. The **Implementation Phase** can include matchmaking activities, demonstration projects and pilots, and the preparation of bankable proposals. The **Investment Phase** can include the leveraging of additional private or public funding, acceleration of support and the showcasing of results. Activities in these three phases are supplemented by dissemination and sustainability actions.

The first nine[10] ESCP-S3 were launched on October 25, 2018 during a Partnering Event in Brussels, Belgium. The nine cluster partnerships involve 57 partners from 19 European countries active in various industrial sectors such as agro-food, automotive, aerospace, textile and health.[11]

European Strategic Cluster Partnerships for Going International (ESCP-4i)

ESCP-4i have the objective of developing and implementing joint internationalisation strategies that support the internationalisation of SMEs in third countries. The partnerships support the development of common actions, such as cluster and business missions and cooperation agreements that facilitate the access of European SMEs to selected international markets and the establishment of a long-term cooperation with partners in these countries.

Within the framework of ESCP-4i, two "Cluster Go International" calls for proposals were launched. The first call[12] was launched in 2014 for projects to run from 2016 to 2017. Applicants were invited to submit proposals to one of two strands. In **strand 1**, activities were expected to focus on supporting preparatory actions for the establishment and shaping of new ESCP. Key expected outputs included the development of a partnership agreement, an internationalisation strategy and an implementation roadmap. In **strand 2**, activities were expected to support the implementation, testing and further

[10] The list of the first nine ESCP-S3 launched on October 25, 2018, including target sectors, priority areas, no. of SME involved and partnership composition can be found here: https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-s3/profiles

[11] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-s3

[12] https://ec.europa.eu/easme/en/cos-cluster-2014-3-03-cluster-go-international

development of ESCP. Key expected outputs included the implementation of collaboration activities with international partners as part of previously developed internationalisation strategies, and a monitoring scoreboard with verifiable indicators.

The first call resulted in 25 selected partnerships, with 15 projects having received €4.3 million in funding (first generation)[13]. The other 10 "voluntary" partnerships agreed to carry out their proposed cooperation agenda without European Commission co-funding. The 25 projects involved approximately 150 cluster organisations in 23 EU countries.

The second call[14] was launched in 2017 for projects to run from 2018 to 2019. Applicant consortia were invited to submit proposals to one of two phases (Preparatory or Implementation) and strands. The **Preparatory Phase** includes two strands: **strand 1.a** supports the establishment of ESCP open to a wide range of industrial sectors and value chains; strand 1.b supports specifically clusters involved in earth observation applications. The **Implementation Phase** has a single strand, which supports the implementation, testing and further development of ESCP.

The second call resulted in an initial 23 projects (including two partnerships on earth observation) and €5.79 million in funding (second generation)[15], followed by an additional two partnerships operating in the defence and security sector. The 25 projects and partnerships involve 135 cluster organisations in 25 EU countries.

2.2 Results and Impact

The first generation of ESCP-4i successfully finished at the end of 2017, having supported around 2,000 SMEs in their internationalisation activities. The second generation started early in 2018 and the framework is also favourable to support a similar number, if not more, SMEs. Due to the timing of ESCP-4i and ESCP-S3 projects, this section presents some of the main results achieved in the two generations of ESCP-4i. As mentioned, the first nine ESCP-S3 started on October 25, 2018, and thus results are not available.

ESCP-4i – First generation (2016-2017)

As mentioned before, the first generation of ESCP-4i gathered about 150 cluster organisations from 23 European countries in 25 partnerships, representing an average of six clusters per partnership.

The cluster partnerships focused on diverse industrial areas including aeronautics and space, mobility and transport, ICT and digitalisation, health, agro-food and farming, among others.

[13] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/first-generation/achievements
[14] https://ec.europa.eu/easme/en/cos-clusint-2016-03-01-cluster-go-international
[15] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/second-generation

Figure 1 represents the industrial focus areas of the first generation of ESCP-4i.

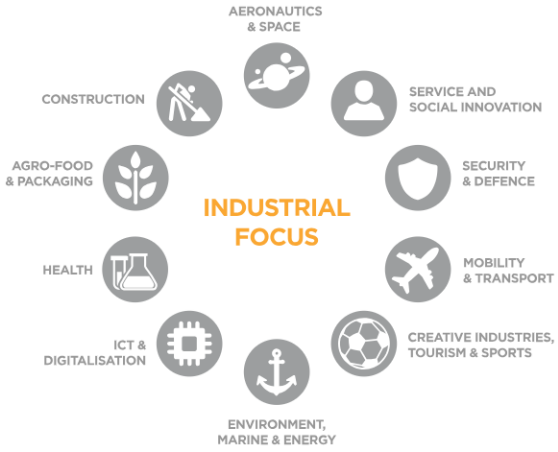


Figure 1. Industrial focus of the first generation of ESCP-4i[16].

The sectors presented in Figure 1 are broad categories that capture the more specific industrial areas addressed by the partnerships[17]. It is considered that the environment, marine & energy industry was the most targeted sector with approximately seven partnerships, followed by agro-food and packaging with four partnerships. Mobility & transport and ICT & digitalisation are both estimated to be the focus of three partnerships.

Regarding targeted third countries, data was available for 24 of the 25 cluster partnerships [18] . The 24 partnerships identified a total of 26 different countries as their target markets. The USA was the most indicated target market (18 partnerships), followed by Canada and China (11 partnerships each). Brazil was also targeted by 10 partnerships. Furthermore, several markets were identified by five or more partnerships (Chile, Colombia, India, Japan and Mexico).

The 25 ESCP-4i first generation partnerships involved about 2,000 European SMEs [19] that participated in specific activities targeting international third-markets, which resulted in 85 business cooperation opportunities with international partners. The partnerships organised 370 cluster-to-cluster events and more than 3,000 business-to-business meetings. These resulted in approximately 40 Memoranda of Understanding (MoU) and 45 collaboration projects having been implemented between the EU clusters and international peer organisations.[20]

Looking at the target markets and cooperation cases that were established (either led by clusters or SMEs), it can be noted that China and the USA represent

[16] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/first-generation

[17] Contrary to the second-generation partnerships, the exact number of partnerships addressing each sector is not available and only estimates can be made based on existing information: https://www.clustercollaboration.eu/sites/default/files/Table%20of%20European%20Cluster%20Strategic%20Partnerships-4i_VF%20for%20publication.pdf

[18] As of Mach 01, 2019. Data is only available for nine of the 10 ESCP-4i Voluntary Partnerships. Information on targeted markets is not available for two of the ESCP-4i Voluntary Partnerships. https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/profiles?generation=1

[19] From over 17,000 SMEs that are part of the 25 first generation ESCP.

[20] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/first-generation/achievements

the countries with the highest number of cooperation cases. Cluster partnerships established with China seven collaboration projects, 10 formal agreements (e.g. MoU) and 14 business projects; and with the USA nine collaboration projects, five formal agreements and 10 business projects. On the other hand, countries such as Australia, Peru and South Korea represented at most three cooperation cases.

The USA, Brazil and Mexico were identified as the most attractive markets for cluster SME members to organise events. A total of 29, 18 and 15 events were organised in these three countries, respectively. It is considered that the organisation of these events may have had an impact and been beneficial to the clusters and SMEs as the number of cooperation cases established in these markets was high. In addition to the aforementioned case of the USA, Brazil involved 17 cases of cooperation (including six formal agreements and seven business projects); while Mexico involved 16 cases of cooperation (including four collaboration projects, three formal agreements and eight business projects).

ESCP-4i – Second generation (2018-2019)

The second generation of ESCP-4i started in February 2018 and will run for two years. As aforementioned, 23 EU co-funded partnerships were initially launched, including two partnerships on earth observation, followed by an additional two partnerships operating in the defence and security sector, which launched in September 2018.

Similar to the first-generation partnerships, those involved in the second generation also targeted specific industrial areas, such as energy and environment; agro-food and packaging; health, cosmetics and biotech; ICT, Internet of Things (IoT) and micro-electronics; among others.

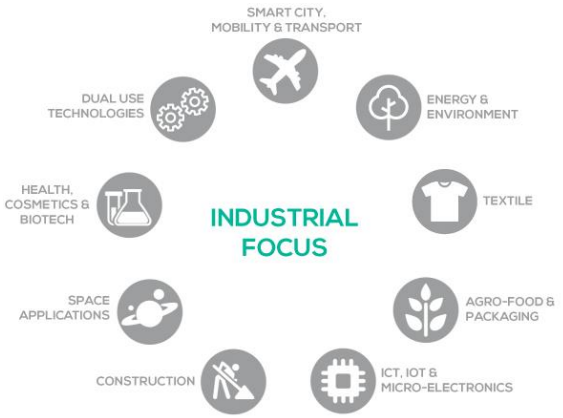


Figure 2. Industrial focus of the second generation of ESCP-4i[21].

Of the 25 co-funded cluster partnerships, 12 partnerships have one of three sectors/ industries as their main focus: smart city, mobility and transport (four partnerships), energy and environment (four partnerships), and agro-food and packaging (four partnerships). The construction and textile sectors are the least represented, with one partnership each.

Regarding target third countries, data is only available for 20 of the 25 second

[21] https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-4i/second-generation

generation ESCPs[22]. The 25 partnerships identified a total of 32 different countries as their target markets. The USA was the most indicated target market (11 partnerships), followed by Canada (9 partnerships) and China (8 partnerships). In the second generation ESCP-4i, several new targeted third countries were identified, including from Central (e.g. Kazakhstan, Kyrgyzstan, Turkmenistan, and Uzbekistan) and Southeast Asia (e.g. Vietnam and Indonesia.

Regarding the second-generation cluster partnerships, the total number of SMEs that will participate is not available, but the participating clusters represent over 17,000 EU SMEs that may eventually participate in specific activities, clustering events and the signing of formal agreements.

Lastly, with regard to the 123 participating cluster organisations, the most represented country is France with 29 clusters, followed by Spain with 18 clusters, Italy with 14 clusters, and Belgium and Germany, both with 12 clusters each.

Comparison of the first and second generation of ESCP-4i

While data is incomplete or not yet available for the second generation of ESCP-4i, it is possible to make some initial comparative considerations about the two generations of ESCP-4i.

With regard to the industrial focus, it can be seen that there are similarities in terms of interests. Specifically, energy and environment, agro-food and packaging, and the ICT industry (the last with some differences) are three of the most targeted industries in both generations. The fact that the main industry areas remain similar from the first to the second generation can suggest these industries represent a greater economic and social impact, both within and outside the EU.

Considering the main targeted third countries, there is some variation from the first to the second generation. In the first generation, the partnerships identified on average more target markets (4.6 countries/ partnership), but showed a tendency for less country diversity (26 different countries); while in the second generation, the partnerships are more selective in the average number of target markets identified (2.9 countries/ partnership) and more diverse in the countries (32 different countries). In fact, as presented above, there is a difference of six countries from the first to the second generation. Furthermore, there are seven countries that were targeted in the first generation and not in the second; and 12 countries targeted in the second generation and not in the first.

There was also a decrease in the number of partnerships that targeted the same country in the first generation compared to the second. For example,

[22] As of March 01, 2019.

Brazil was identified by 10 partnerships in the first generation and by one in the second; the USA was identified by 18 partnerships in the first generation and 11 in the second. This can suggest that new partnerships feel some countries are already sufficiently explored and that other countries could be an interesting opportunity for their SMEs to discover new cooperation opportunities. It also suggests that a well-developed market study (see Section 4) can be very useful to identify the best target markets and filter out those where competition will be high.

2.3 Lessons Learnt

Considering the results presented and the outcomes and experiences of the ESCP, there are several lessons learnt that can be highlighted.

Lessons learnt from ESCP results

- The participation in events organised in the selected target markets can be an effective approach to interact with local organisations and to establish potential cooperation agreements. The countries where the highest number of events were organised represented, in most cases, the countries with which a greater number of cluster or business cooperation cases were signed. However, there were countries where the number of events organised were smaller, but in which the number of cooperation cases established in the country was quite high (e.g. China).
- The development of a detailed internationalisation strategy can be important to identify the best markets where cooperation opportunities may emerge. It is important that cluster partnerships analyse and understand the extent to which a target market is saturated and the likelihood of cooperation opportunities being available. The fact that the second-generation partnerships targeted several new countries compared to the first generation can suggest that their market studies allowed them to identify the markets with the most potential for cooperation.

Lessons learnt from ESCP experiences

- It is important to organise additional cross-clustering meetings with other ESCP projects to discuss results and organise joint activities [AdPack[23]; ECCA[24]; LASER-GO[25]].
- As cluster partnerships are very dynamic, they should be open to new partners in an ongoing manner. Funding for the new partners should also be made available to facilitate their integration in the partnership [ECCA].
- ESCP should have the capacity to act as an intermediate funding agency.

[23] https://www.clustercollaboration.eu/escp-profiles/adpack
[24] https://www.clustercollaboration.eu/escp-profiles/ecca
[25] https://www.clustercollaboration.eu/escp-profiles/laser-go

They could provide vouchers to support projects (involving partners that would be useful to the partnership) or activities not initially foreseen in the original proposal [ECCA].

- There is an opportunity to increase synergies between ESCP projects, respective missions and other initiatives, such as the EU Gateway[26] and Horizon 2020 projects. One approach could be the development of a common database of missions to facilitate the establishment of synergies [EnW[27]].
- ESCP-4i are effective tools to increase the critical mass and impact of SMEs involved in internationalisation initiatives. Nevertheless, missions could be more effective when SMEs from different clusters participate, rather than SMEs from a single cluster [EnW].
- The budget made available to support cluster SMEs and start-ups should be increased to allow their participation in more project activities [MobiGoIn[28]].
- Key Performance Indicators (KPIs) and other quantifiable outcomes proposed by ESCP should be questioned by the European Commission to ensure that ESCP are not excessively ambitious and can in fact achieve the proposed targets [MOVE[29]].
- A 24-month period may be insufficient to implement all internationalisation activities planned. Additional time is often needed to develop and strengthen business relationships [bioXclusters plus[30]; NATUREEF[31]; Silicon Europe Worldwide[32]].
- There is limited flexibility in adapting the project, especially at the beginning, which could be improved. [EU4SportsClusters Alliance[33]].
- Targeting more than three countries can be difficult to manage, but provides SMEs a unique opportunity to know more markets. Activities in targeted countries should be led by a consortium partner with a deep knowledge of the market. This will avoid spending excessive time studying the market rather than implementing actual internatio-nalisation activities [NATUREEF].
- It is important to have a point of contact or representative in the targeted country to facilitate collaborative efforts [REINA PLUS[34]].

[26] https://www.eu-gateway.eu/
[27] https://www.clustercollaboration.eu/escp-profiles/enw
[28] https://www.clustercollaboration.eu/sites/default/files/mobigoin_phase_1_0.pdf
[29] https://www.clustercollaboration.eu/sites/default/files/move_phase_1_0.pdf
[30] https://www.clustercollaboration.eu/escp-profiles/bioxclusters
[31] https://www.clustercollaboration.eu/escp-profiles/natureef
[32] https://www.clustercollaboration.eu/escp-profiles/escip
[33] https://www.clustercollaboration.eu/escp-profiles/eu4sports
[34] https://www.clustercollaboration.eu/escp-profiles/reina-plus

3 Challenges facing European Strategic Cluster Partnerships

The first generation of ESCP-4i faced several challenges that remain relevant to future ESCP and similarly structured partnerships. This chapter presents an overview of the main challenges faced by ESCP and specific barriers reported in 9 interviews with key stakeholders [35]. The interviews were held with either representatives of cluster organisations of established ESCP, or other cluster organisation, and with professionals with expertise related to the objectives of the Smart Guide[36]. The topics that were covered in the interviews were 1) challenges of establishing a joint partnership, 2) challenges of fostering innovation, 3) challenges of fostering cooperation, 4) challenges of fostering internationalisation, 5) challenges to foster investments, and lastly 6) challenges to improve cluster partnerships. The chapter closes with challenges related to improving clusters. This topic was not specifically probed during the interviews; however, the topic was mentioned by the interviewees on several occasions. It is important to note, several interviewees mentioned that particular barriers and challenges can be cluster or industry specific.

3.1 Joint partnership strategy

Key challenges of establishing a joint partnership strategy

- Identifying relevant and well organised partners with a similar industry structure or with an added value industry - From the outside partners might look compatible, but practically this is not always the case, therefore it takes time to create value together. Cluster organisations should have a good knowledge of what their members do, and what they can offer. According to Bask Energy Cluster a strong cluster organisation should lead with another 1 or 2 strong cluster organisations sharing the workload. This depends on expertise, knowledge and skilled personnel.
- Establishing reliability and critical mass - Similar to the first challenge, the partners must have shared interests that encourage reliability

[35] See the acknowledgements in the beginning of the report for a list of the interviewed persons.

[36] The interviews focussed on topics that were identified in the methodology report for the provision of advisory support to the ESCP-4i. European Observatory for Clusters and Industrial Change EASME/COSME/2016/035. Towards modern cluster policy for industrial change and growth. D.5.1a | Methodology report for the provision of advisory support to the European Strategic Cluster Partnerships (ESCP-4i). March 29, 2018.

and have sufficient numbers to achieve the ESCP objectives.

- Ensuring relevant previous experience exists within the partnership. The Basque Energy Cluster for instance had the advantage of extensive experience with ESCP-4i as they have been coordinators of two COSME "Cluster Go international" projects. The experience from the GAIA cluster organisation is similar. They know their alliances very well as they were created through previous projects.
- Creating an environment of cooperation instead of competition between the partners - Partners may enter ESCP with their own agendas and a priority to support their members' needs first. This is natural and to be expected. Nevertheless, to ensure the success of the partnership, an environment of cooperation is necessary and must be established. Pro-active involvement by the coordinator is essential to achieving a cooperative environment. Organising continuous joint activities is crucial, such as monthly phone calls, co-organising business events, and working on joint projects.
- Setting the correct expectations - The cluster organisations should be encouraged not to sell on behalf of their members. They should instead facilitate the process of marketing and providing firm exposure. This approach can potentially lead to higher returns for individual members beyond the level they individually could achieve.
- Identifying and prioritizing common objectives - Being able to establish common objectives depends on the priorities of the partners involved. In many cases, the partners have different market orientations. Individual SMEs have their preferences as well. This challenge can be mitigated from the start by selecting the right cluster partners.
- Setting-up an internationalisation strategy - The strategy is not always straightforward for companies involved and is challenging to develop in a way that has buy-in of all partners.
- Developing a common strategy that outlines clear tasks with benefits to the industry and not only to the cluster organisations, universities or research institutes – This can be considered an extremely difficult task, which can be overcome by applying a phased approach allowing for input and requiring commitments from every partner.
- Conducting a value chain analysis - How to conduct a value chain analysis is a challenge for cluster organisations. Methodological guidelines on how to conduct such an analysis are needed. Currently value chain analysis is mostly done in a practical method based on own experiences. There are services/ reports available that conduct analyses, but they are very costly.

- Overcoming shortcomings identified by value chain analysis - In many cases, there is not enough understanding of what each cluster can offer to the partnership in terms of complementarities / synergies. According to interviewees, mapping happens in most cases after funding is granted, which may show issues in the partnership that cannot be corrected.

  Certain funding schemes also give little room to conduct these analyses, for instance in the INNO-SUP H2020 program, a minimum of 75% of the funding has to go to SMEs. This gives cluster organisation little room to explore new possibilities in finding out what other cluster organisation are able to offer. This is particularly the case for cluster organisations that are willing to internationalise. With these types of funding schemes, cluster organisations are basically only able to run their day-to-day activities, and are more likely engaging with existing partners instead of exploring new collaborative opportunities.
- Creating a diverse set of partners that can provide services / products for different segment of a value chain - It is challenging not to have too much overlap of activities, but try to fill each other's 'gaps'.

3.2 Innovation

Key challenges of fostering innovation

- Identifying competitive, efficient and reliable partners - The majority of cluster member organisations are SMEs. One of the major reasons why SMEs join clusters is to gain access to the right partners. In this regard, it is difficult for SMEs to identify competitive, efficient and reliable partners. Often these partners turn out to be bigger players in the markets of interest. For example, in the partnerships there is currently not enough involvement of larger players and of end customers that are able to provide a vision for the future of a particular market, share their needs and challenges, and propose to SMEs what kind of innovations are expected to be developed. For SMEs, this kind of insight would be beneficial to understand the demands and future trends in the markets where they operate, and to identify opportunities and possibilities to innovate.
- Linking different partners and providing access – There may be partners that look for a solution and partners that sell a solution. The key here is making sure these two parties meet each other, preferably in person.
- Involving top level technical and R&D personnel - The networking events, workshops, B2B meeting

should involve top level technical and R&D managers of companies (and also engineering and purchasing department managers). These people are able to share technical challenges and opportunities for SMEs to innovate. In most of the currently organised workshops a general presentation is given about the company and how successful they are (often by sales, marketing, or corporate representatives), but there is very little information provided to better understand the market and technical challenges and demands of the end-user. This issue could be addressed by the partnership through arranging specific working groups at the event, which include knowledge sharing.

- Obtaining the necessary amount of funding to network in order to identify collaborative opportunities that result in innovations - Face to face networking is much more beneficial, but providing this option is costly given that it only leads to an opportunity and not yet a direct benefit for the SME.
- Gaining the interest and commitment of cluster members to cooperate on innovation activities – It can be difficult to gain the interest and commitment from the cluster member SMEs especially if the innovation activities involve cross-border or cross-cluster organisations. Finding the right incentives is challenging.
- Learning from other cluster management organisations - There are fixed patterns of collaboration. It is important to keep learning from other cluster organisation even those that are in different value chains. For instance, as shared by the AgriFood Capital cluster: in North East Brabant there are many pig and goat farming companies. AgriFood capital, works around three themes 1) nutrition and health, 2) food security, and 3) sustainable and circular economy. Grain companies work around the same themes but look at them differently than pig and goat farmers. By having a different perspective one can learn from another cluster. Identify core competencies of a cluster is a first step and from there one can collaborate or advise other parties.
- Establishing the fostering of innovation as a priority within the ESCP project - ESCP are seen as more business oriented. Most of the cluster members already have innovated products / services. Fostering them is therefore not the case. Nevertheless, there are possibilities to further improve or innovate through partnerships.
- Lacking access to financial support - Access to financial support such as innovation vouchers including vouchers for interregional cooperation is a challenge and often limits the level of innovation pursued.

3.3 Cooperation

Key challenges of fostering cooperation

- Differing business and/or cultures - There are mixed comments when it comes to business or cultural differences. Some mention it as a challenge; others say that it can be overcome if partners have their interests aligned.
- Ranging levels of interest – There are always varying degrees of interest at the cluster partner and cluster member levels. How the ranging interests are managed to gain the cooperation of all is the challenge. The larger the consortium, and / or cluster members within the ESCP project, the greater the challenge becomes. On the other hand, there should also not be too few members in a cooperation.
- Filtering out SMEs that are not really interested in a particular opportunity or are not suited to cooperation - The selection of SMEs is an important step in order to filter out SMEs which are not really interested in a particular project or are not suited to cooperate. The SMEs that are involved should have aligned interests.
- Identifying and matching the value chains and focus – It can be difficult to identify and match the cluster members to value chains and particular focus of interest regardless of their technology readiness level being low or high.
- Providing a wide range of services to foster cooperation - The ability to provide a wide range of services is challenging for cluster organisation. The GAIA cluster has worked hard to organise activities horizontally. By doing so, they are able to offer other clusters a wide range of services and collaboration opportunities.
  This is very different compared to the Aerospace industry in the EU, which is very structured and consolidated with only a few main players in Europe such as Airbus, Rolls Royce and Safran. All enterprises in the supply chain work for these few companies and end customers. The large players have strong influence on the market.

3.4 Internationalisation

Key challenges of fostering internationalisation

- Identifying real opportunities for the cluster member SMEs - There have to be real opportunities for the SMEs involved. The SMEs are very pragmatic in this regard and not always interested in international cluster networks. Sometimes opportunities are explored by investing where there is already an established cooperation. Other interests are in finding partners to cooperate or apply for funding jointly or participating at international events. The Health Valley cluster occasionally surveys their members to identify needs and interests to collaborate. Promoting established

collaborations in other regions of Europe with their national members can however be a challenge.

- Creating opportunities for fact finding events or missions - Fact finding actions to identify export opportunities can be effective for SMEs trying to internationalise. This can be done alongside a larger enterprise that is for example exploring new markets. Another approach is joining thematic missions with partners or within a cluster.
- Creating an environment where SMEs benefit from other SMEs' or larger firms' success in internationalisation – There are benefits to utilising the success of some SMEs to establish opportunities for further SMEs. For instance, establishing an SME delegation that can offer a wide range of products and services for a particular value chain could be more effective than a delegation of competing SMEs. The delegation would be even more effective if it utilised established export channels of existing SMEs within the delegation. The potential client in those cases can find this appealing as the delegation operates as a group, with proven success of at least one in the group, and all (or most) of the products required are offered by this group.
- Varying objectives and views on internationalisation - SMEs involved in cluster organisations have very different objectives and views when it comes to internationalisation as they have different capabilities and capacities to engage in international activities.
- Managing synergies and complementarities between ESCP cluster partners and relevant chambers of commerce - Several interviewees mentioned collaborations with chambers of commerce can be very fruitful when there are win-win opportunities for the chamber's members and the cluster organisation's members. The SMEs then travel together with the chamber of commerce. However, there is in some cases a mismatch of services provided in this regard between the chamber of commerce and the cluster organisation due to different core competences available in the different organisations. The cluster is best suited to cover the innovation part whereas the chamber of commerce has more knowledge on how to establish a new business and distribution channels.

3.5 Investment

Key challenges of fostering investment

- Having access to larger or more established firms is a challenge for many SMEs - For SMEs, it is important to have high level companies, engineering firms, EPC developers and end-users included in their decision making process when investing. These end-users are

able to provide information on what they need in the next 2-years or where they would like to reduce costs. This kind of information could allow SMEs to invest in activities with more certainty.

- Establishing credibility from a financial investment perspective - Credibility of the cluster organisation is crucial, not only for its members but also their investors. A collective EU trademark can be a sign that increases credibility for investors.
- Creating opportunities for the cluster member SMEs to gain exposure - SMEs like to find exposure for their products and services with venture capitalists, larger enterprises and other private investors. They are looking for opportunities to market their business. Attending networking events connected to relevant tradeshows, while targeting large companies as investors, can be a challenge and require efforts from the partnership members.
- Lacking venture capital sources - There is little venture capital in Europe that can address the needs of a growing number of start-ups. To the contrary, venture capital is more readily available for companies in later stages. This is a critical challenge that cluster organisations need to address on behalf of their members.

3.6 Ongoing cluster partnerships

Key challenges to improving cluster partnerships

- Conducting effective and meaningful evaluations that improve the partnerships - Evaluation is a crucial element in the successful cooperation of cluster organisations. What have they achieved that goes beyond networking, marketing and creating opportunities? For instance, the French government asks cluster organisations to provide figures related to achievements. The impact is however difficult to measure, which makes identifying potential areas of improvement even more difficult.
- Being open towards other clusters in Europe - Having a European identity provides strength to the cluster partnership. It provides more opportunities that would otherwise not be achieved if the partnership would act similar to an individual SME or individual cluster. This also adds another level of credibility to the cluster partnership in establishing an identity and brand.
- Creating an environment that fosters a high level of interaction between the ESCP partners – Maintaining a high level of interaction between ESCP partners will ensure greater cooperation benefiting the cluster member SMEs. This can be achieved in many ways, such as having an ability to share success stories across the partnership.

- Identifying what is good practice and applicable in the ESCP project's particular environment – Becoming knowledgeable of good practices and approaches taken by other partnerships, and applying what may be relevant to the particular partnership can be quite beneficial. This Smart Guide attempts to address this challenge.

4 Recommended actions to set up a sustainable partnership strategy and joint activities

The results obtained in the framework of the ESCP and INNOSUP-1 projects that have been finalised or are ongoing, as well as the collection of information obtained through the partnering event and phone interviews with relevant stakeholders involved in the ESCP, are the basis for this chapter's recommended actions to establish sustainable partnership strategies and joint activities.

4.1 Actions to establish a joint partnership strategy

Action 1 – Conduct a value chain analysis on cluster members' competences and complementarities.

A successful joint partnership strategy will benefit from the involvement of organisations with a similar focus and capable of generating critical mass. As identified in the challenges of establishing a joint partnership strategy (see Section 3.1), partnerships will often involve organisations that are not aligned in their objectives, value and contributions to the partnership due to the misunderstanding of the organisation's priorities and needs.

It is recommended that a thorough analysis of competences, complementarities and synergy potential is carried out to effectively achieve the strategy's objectives.

This can be achieved by conducting a value chain analysis (VCA) that allows the collection of information on competences and complementarities, as well as the priorities, interests and needs of clusters and their members (Box 1).

A VCA can be defined as the primary and support activities in an organisation and relates them to the analysis of the organisation's competitive strength. A VCA assesses the value that each activity adds to the organisation's products or services.

Within the context of a joint partnership strategy, a VCA can be understood as the evaluation of the value that each member adds to the implementation of the defined strategy. Assuming one or more members contribute to an activity, a VCA evaluates the value of each member's contributions to the activities as part of the delivery of a product or service. Furthermore, only an organised structure and management of activities can lead to a successful implementation of the joint partnership strategy.

Box 1. Methodological approach to conduct a value chain analysis.

A value chain analysis can follow different methodological approaches. One suggested approach is based on the methodology proposed in the document "Methodology report for the provision of advisory support to the European Strategic Cluster Partnerships (ESCP-4i)", developed in the framework of the EOCIC.

A suggested methodological approach includes the following steps:

1. Define the value chain, which will depend on the topic and can be more specific or general;

2. Define the different components of the value chain and design the value chain, showing the interrelations of its different components;

3. Apply the value chain model to map members of participating clusters, assigning relevant members to each of the components of the value chain.

Within the framework of a joint partnership strategy, the proposed VCA-based methodology would work as follows:

In the **first step**, the definition of the value chain can be equated to defining the objectives (see Action 3), outcomes and expected impact of the partnership strategy. These should allow an initial identification of the most suitable cluster members to participate in the partnership, which should be based on proven knowledge and previous experience in achieving similar outcomes.

In the **second step**, the definition of components can be equated to identifying and defining the activities required to achieve the proposed objectives of the partnership strategy. The interrelations between the activities must also be identified, including their chronological implementation and any interdependences. Furthermore, the competences required to do the activities must be identified to assess which partners can carry them out.

In the **third step**, the mapping of potential partnership members should be conducted. Depending on the nature of the activity, one or more partners should be assigned. How each of them contributes to the activity should be clear as well as the competences they have to support its achievement. If an activity requires more than one partner or if there are interdependences between activities, it is important to identify how the partners involved complement each other to ensure an effective transfer of knowledge between them.

Through this suggested methodological approach, the establishment of a more balanced joint partnership is expected, where the role of each partner is clearly defined, where overlap is limited and where the achievement of the strategy's objectives and the creation of value for the industry is attainable.

Action 2 – Adopt an inclusive coordination where all actors proactively engage in the definition of the joint partnership strategy.

A successful partnership can depend on many factors, including ensuring trust,

commitment and mutual respect, a shared ambition, different and complementary competences (see Action 1), among many others. It is the responsibility of the partnership coordinator to ensure these factors are present and that all partners share a responsibility in ensuring the success of the partnership.

To increase the partnership's success, it is recommended that an inclusive coordination is adopted where all partners participate in a proactive manner and engage and interact with each other frequently. An inclusive coordination should be understood as one in which all participants are involved equally in the various aspects of the strategy, from the drafting of the joint partnership strategy to the implementation of its activities.

In the case of participating in the drafting of the strategy, the involvement of all partners will, on the one hand, allow them to share their experience and knowledge on the best way to set up and implement the strategy, the activities that should be developed, the outcomes that should be delivered and how they can best contribute to the strategy as a whole; on the other hand, it will create an increased sense of responsibility and accountability for the good implementation of their tasks. By fostering an inclusive coordination, partners are likely to be more proactive in the delivery of their tasks and in engaging with other partners in this regard.

Adopting an inclusive coordination implies setting up efficient management and communication channels and tools that can be used for partners to engage and interact frequently with each other. Conducting regular activities is found to be challenging as identified in Section 3.1. Box 2 lists a set of tools and channels to be considered.

Box 2. Management and communication tools and channels to increase partnership engagement.

Project management platforms

Project management platforms (such as Asana and Basecamp [37]) are versatile and can guarantee an efficient project implementation. They are bundled with multiple features that allow the setup of smaller teams, identification of activities and tasks, assignment responsibilities, scheduling of deadlines, time tracking, editing of documentation, and facilitating communication.

Frequent online meetings

Organising online meetings (e.g. every two weeks) is a good way to keep partners up to date on the progress of activities and have responsible partners report on what has been achieved, upcoming activities and any

[37] Asana is a platform designed to improve team collaboration and work management. It helps teams manage projects and tasks in one platform. Teams can create projects, assign work to teammates, specify deadlines and communicate about tasks directly in Asana. More information can be found at https://asana.com/
Basecamp is one of the preferred project management platforms due to its modern social media-like interface and carefree team collaboration features. More information can be found at https://basecamp.com/

difficulties faced. This provides an opportunity for partners not directly involved in a specific activity to weigh in and provide inputs and suggestions.

Face-to-face meetings

Face-to-face meetings should be organised whenever possible. They will normally increase participation as people are in the same room and will also ensure engagement, as people are less likely to get distracted with other issues.

Mailing lists

Mailing lists should be used with caution but are a good way to make sure all individuals on the list receive the same information and the same documentation. Mailing lists can be used alongside project management platforms.

Action 3 – Identify common objectives that are easily assessed and that benefit the industry.

Developing a strong and detailed joint partnership strategy is crucial to avoid conflicts between the cluster partners and to give the project a clear focus. As identified in the challenges of fostering a joint partnership strategy (see Section 3.1), partners can have different priorities (e.g. in the ESCP-4i projects, partners have different market orientation, i.e. on what market the project will focus on), which need to be aligned.

Therefore, it is recommended to involve all partners in the identification of common objectives (see Action 2). These objectives should be few in number, clear and precise so that the strategy is focused and progress can be assessed easily (see Action 9). Furthermore, these objectives should benefit the SMEs and not only the cluster organisations, universities or research institutes.

This can be achieved by developing specific, measurable, attainable, realistic and time-bound (SMART) objectives.

Specific means that the objectives should be simplistically written and clearly define what the partnership is going to do in the project. **Measurable** is related with the definition of specific indicators for measuring progress toward the accomplishment of each objective set so that the partnership can measure and keep track of its progress. **Attainable** requires the partnership to outline clear tasks so that the objectives set can be achieved. **Realistic** indicates that the objectives set in the joint partnership strategy can be accomplished within the timeframe of the project. **Time-bound** means the objectives set by the partnership must have a clearly defined time frame including a starting date and a target date.

Box 3 provides more details about the SMART objectives defined for the AdPack.

Box 3. SMART objectives defined by AdPack.

The AdPack[38] was an ESCP project promoted by five European clusters and focused in the emerging industry of advanced packaging.

During the project (more concretely in May 2017), a joint internalisation strategy was developed. This joint strategy included six

[38] https://www.clustercollaboration.eu/escp-profiles/adpack

specific objectives to be accomplished until the end of 2019.

For each of the objectives, a quantitative indicator (such as number of SMEs that participate in the internationalisation mission conducted to each target country until the end of 2019 and investment in the SME partnership members until the end of 2019) was identified and clear tasks were defined by the project partners.

4.2 Actions to foster innovation

Action 4 – Organise events to identify collaborative opportunities to foster innovation.

Broadly, innovation can be understood as the act of developing or improving new products, services, processes or similar. Innovation can be carried out by a single entity, but can also benefit from collaboration between various organisations. Some organisations may have an idea for something innovative, but do not have the resources to implement it and reach the desired outcome. In such a scenario, there is an opportunity for collaboration between two or more organisations to reach the desired innovative outcome. However as identified in that challenges of fostering innovation (see Section 3.2), identifying these collaborative opportunities may be difficult and thus require external support.

It is recommended that events be organised with cluster members to facilitate the identification of collaborative opportunities that can lead to new innovations. There are many different types of events and activities that can bring organisations together to identify and facilitate collaborative opportunities.

A selection of events that can be considered for this purpose include business-to-business (B2B) matchmaking events (making use of a common platform such as the B2Match platform[39]), open innovation labs and innovation jams (Box 4). These examples each have their advantages and disadvantages and can contribute to fostering collaboration and innovation in different ways.

Box 4. Examples of events that foster collaborative opportunities.

B2B matchmaking events

B2B matchmaking events facilitate business meetings between two entities with similar interests. The B2B meetings are normally organised in advance and participants will know beforehand who they will be meeting. B2B meetings are commonly short in duration (e.g. 20 minutes). Therefore, it is important that participants are well prepared and have defined their objectives for the meeting. It is also important to end the meeting having defined next steps and deadlines for both parties. Good collaboration opportunities may be discussed at the B2B meeting, but will only be put into action if a thorough follow-up is carried out.

Open Innovation Labs

Open Innovation Labs aim to co-create new ideas with an innovation potential. The concept

[39] https://www.b2match.com/

is sometimes linked to the Design Thinking[40] process, which involves five stages: empathise, define, ideate, prototype and test. Open Innovation also suggests being open to opportunities and ideas from external sources to generate better innovation.

Innovation Jams

An Innovation Jam (initially introduced by IBM in 2001) is one approach to catalyse internal innovation activities and can be defined as a moderated and time-limited session focused on a specific pre-defined challenge[41]. Innovation jams also allow the involvement of new individuals in the creation of ideas.

Action 5 – Assign brokers to help implement collaborative opportunities and connect clusters members.

Clusters can be considered a strategic instrument for the practical implementation of the Triple Helix model [42], which involves university, industry and government relationships. The Triple Helix is a model for capitalising knowledge (e.g. available at universities) to pursue marketable innovation (e.g. by industry) supported by funding and a favourable regulatory environment (e.g. facilitated by the Government) [43]. However, the relationships between these three actors are part of a dynamic and sometimes difficult process. The involvement of an intermediary and interdisciplinary organisation in this process can facilitate the relationships and increase the fostering of innovation.

In inter- and intra-cluster relationships, it is recommended that a broker be assigned to help clusters and their members establish relationships and identify and implement collaborative opportunities.

An innovation broker may be a single person or a larger entity that intervenes at specific moments to help organisations achieve higher value and productivity by gaining access to innovation assets at each stage of the development process.[44]

In turn, partnership brokers can operate in various scenarios, as shapers, facilitators, co-ordinators or process managers. Furthermore, they can

[40] https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

[41] Innovation Jams as vehicles for innovation: An extended perspective on internal innovation jams. Elerud-Tryde, A. Chalmers University of Technology, 2016. http://publications.lib.chalmers.se/records/fulltext/245365/245365.pdf

[42] The Triple Helix model was proposed in the 1990s by Etzkowitz (1993) and Etzkowitz and Leydesdorff (1995). This model is based on the assumption that the potential for innovation and economic development in a knowledge society lies in a more prominent role for the university and in the interaction of elements from university, industry and government to generate new institutional and social formats for the production, transfer and application of knowledge. More information can be found at https://triplehelix.stanford.edu/3helix_concept.

[43] The Role of Innovation Brokers in a Knowledge Economy. Collaborative Economics. 2013. http://www.channelingreality.com/Corporations/Collaborative_Economics_RoleInnovationBrokers_KnowledgeEconomy_web.pdf

[44] *Ibidem.*

operate inside or outside of a partnership.[45]

Considering the different stages of a partnering cycle (i.e. scoping and building, managing and maintaining, reviewing and revising, and sustaining outcomes) [46], and extrapolating to clusters and cluster members, a broker can implement collaborative opportunities and connect cluster members in many aspects (Box 5).

Box 5. Examples of potential roles for brokers.

Scoping and building

- Initiating the idea of partnering
- Scoping the possibilities for collaboration
- Managing expectations
- Initial planning
- Helping partners reach agreements

Managing and maintaining

- Secure resource (financial) commitments
- Define partnership governance arrangements
- Support in problem solving
- Develop a communication plan
- Agree on benchmarks for evaluation

Reviewing and revising

- Assess the impact of the partnership
- Review the efficiency of the partnership
- Review the added value to the partners
- Support in making changes to partner agreements
- Define partnership governance arrangements

Sustaining outcomes

- Support the recognition of the achievements
- Support agreement on information to disclose to the public
- Support efforts to ensure outcomes are sustained
- Facilitate the closing/ next steps of partnership

In the **scoping and building** stage, a broker can establish the initial idea for collaboration, by identifying a need and opportunity between two or more members. The broker can then analyse (scope) the possibilities in regard to the type of collaboration that can be established (e.g. exchange of knowledge, mobility of personnel, support in the commercialisation of a specific product), which will depend on those involved in the collaboration. Lastly, the broker can support the partnership in planning and establishing their strategy for collaboration, and help outline the required agreements, including roles and responsibilities.

In the **managing and maintaining** stage, a broker can help partners secure required financial support to aid their collaboration (e.g. innovation vouchers). The broker can help solve problems that emerge in the course of the collaboration, such as problems with the commitment of selected partners. Lastly, they can also help the partnership develop a communication plan, which will increase the external awareness of the partnership and the activities being developed by the partners.

In the **reviewing and revising** stage, a broker can help the partnership assess both the impact and efficiency of the partnership by looking at the actual

[45] What do Partnership Brokers Do: An enquiry into practice. Partnership Brokers Association. 2010. http://partnershipbrokers.org/w/wp-content/uploads/2010/07/What-do-Partnership-Broker-Do.pdf
[46] *Ibidem*.

outcomes produced and the processes used to achieve them. Where problems are identified, the broker can support the partnership in addressing these limitations or, if needed, support in making changes to the partnership.

In the **sustaining outcomes** stage, a broker can help the partnership review the outcomes of the work carried out and achievements made. Accordingly, they can help the partnership identify what information should be made public (to increase the visibility and value of their efforts) and what information should be kept confidential. Lastly, the broker can help the partnership finalise the collaboration agreement (if desired) or define future steps of a subsequent agreement (including to find additional funding sources at regional, national or European level).

Action 6 – Provide financial support for cooperation-based innovation projects using instruments available at European level.

In recent years, clusters have succeeded in creating a favourable environment for facilitating cooperation in innovation activities between their members (especially companies and research actors).

However, encouraging cooperation between members from different clusters and regions is more challenging, and therefore it is important to find the right incentives and instruments to do so.

Thus, it is recommended to provide financial support for cooperation-based innovation projects to intensify cross-border and cross-cluster collaboration.

There are several instruments available at the European level that channel funds through clusters to support these types of projects.

The INNOSUP-1 initiative[47], which aims to develop new cross-sectoral industrial value chains across the EU, by building upon the innovation potential of SMEs, is one of these instruments.

To achieve this objective, INNOSUP-1 supports (through a mix of different tools such as innovation vouchers, lump sums and prizes) structured innovation projects driven by SMEs from different sectors and countries in collaboration with other innovation actors. It is important to mention that, for each INNOSUP-1 funded project, at least 75% of the total proposed budget shall be allocated to support innovation in SMEs directly.

The vouchers provided in the INCluSilver for innovation projects including actors from different sectors and regions are a good example of financial support (Box 6).

[47] https://www.clustercollaboration.eu/eu-initiative/innosup-calls

Box 6. INCluSilver innovation vouchers.

The INCluSilver project [48] aims to support collaboration between actors in different sectors (agro-food, health, ICT, packaging, and creative industries) and regions to bring innovative ideas in the field of personalised nutrition for the silver population (group of citizens over 50 years of age).

For this purpose, the INCluSilver project offers the following innovation vouchers:

Ideas Innovation Voucher – Aims to promote the development of relevant ideas and projects;

Scalability and Internationalisation Voucher – Aims to transfer an innovation to the market (inside and outside the EU);

Demonstration Voucher – Aims to support the demonstration of technology readiness in an operational environment in collaboration with living labs and large scale demonstrators;

Technology Transfer Voucher – Aims to assess the transferability potential of a technology to another sector or solve a technical problem to enable the transfer;

Economic Feasibility Analysis Voucher – Aims to provide a comprehensive analysis of competition (such as competitive firms and products) to support strategic decisions;

International Property Rights Innovation Voucher – Aims to protect the results of collaborative projects with the appropriate tools such as consortium agreements and patents.

These innovation vouchers (with amounts between €3,000 and €60,000) will benefit a range of 50-170 SMEs.

In order to guarantee that the innovation support provided will help SMEs to accelerate and scale up in the long term, needs from these companies must be identified in advance.

Clusters are best positioned to build mutual understanding between SMEs and innovation support providers. It is thus important to invest time in getting to know the exact needs of the SMEs, not only to provide innovation support but also to build the necessary trust to help them achieve their short and long-term objectives.

4.3 Actions to foster cooperation

Action 7 – Establish a balanced and manageable partnership where cluster members' interests in the cooperation are aligned.

The success of a joint partnership strategy can benefit from the analysis of partners' competences, complementarities and synergy potential (see Action 1). From the perspective of cooperation among clusters and cluster members, similar characteristics are important.

In fostering cooperation, it is recommended that a balanced and manageable cluster partnership be established where the interests of all partners in the cooperation are aligned.

A balanced partnership is one that involves partners from different clusters and with distinct and complementary competences that enable the achievement of the objectives defined for the cooperation. It also implies that the roles and contributions of each

[48] https://www.inclusilver.eu/

partner are clear and that duplication of roles is minimal or occurs due to justifiable reasons (e.g. partners with similar competences but with different market coverage).

The question of complementarity is also important to ensure the partnership consists of an adequate number of cluster members. As identified in the challenges for cooperation (see Section 3), there are difficulties with cooperation when too many or too few members are involved. Therefore, a manageable partnership is one that is also balanced in the number of partners.

As also identified in the challenges for cooperation (see Section 3), cluster managers can play an important role in the cooperation process. In addition to supporting cooperation among cluster members through specific events, cluster managers can provide valuable insights on their members, their value, competences and needs. By involving cluster managers in the establishment of cooperation opportunities, the process will be more efficient in the identification and selection of the most appropriate partners that share similar interests.

Box 7 presents a selection of other good practices and recommendations to establish a balanced, manageable and successful partnership[49].

Box 7. Recommendations for successful partnerships.

Create a shared vision and mission

Defining a vision and mission will make more or less sense depending on the type of partnership, but nonetheless, sets the stage for what the partnership should strive for. If partners are not aligned with these values, problems are more likely to occur.

Address each partner's needs and expectations

In a balanced partnership, each member has a reason for participating. In addition to the value they can bring, each partner might also have underlying expectations (e.g. obtaining new knowledge, connections). If these expectations are not met, the partnership can deteriorate. Therefore, it is important to identify all partner expectations at the beginning of the partnership.

Explore the competences of each partner

While each partner may have one or more key competences that justifies their participation in the partnership, partners may also have other strengths that are overlooked and are of value to the partnership. Each partner should make clear to other partners all competences they feel could benefit the success of the partnership.

Define partnership and individual goals

As part of the partnership strategy, partners should define clear and measurable goals (see Action 3), but also individual goals that can support the achievement of the partnership goals.

Action 8 – Facilitate synergies among cluster organisations and associated members through cooperation enabling activities.

Before cluster members can engage in innovative activities facilitated through

[49] https://www.businessknowhow.com/startup/partnership-tips.htm

innovation-driven events (see Action 4), it is important for clusters and their members (namely SMEs) to understand what other members are doing and can offer in a future cooperation (see also challenges of fostering cooperation Section 3.3).

It is recommended that synergies between cluster organisations and members should be facilitated through the organisation of cooperation enabling events.

Cluster managers assume an important role in this process as they should engage with other managers to organise these events and facilitate these potential synergies. One possible activity to consider is the organisation of cluster mobility programmes[50], which were also mentioned in interviews with stakeholders (see Section 3). These mobility programmes involve cluster managers going to one or more different clusters (for a few days to a week) to understand the visited cluster's ecosystem, their interests and needs, and members with interest in cooperating.

With regard to cooperation enabling activities, these can also assume the form of events. One example is a pitch session involving cluster organisations and members. In this type of event, each participating member is invited to pitch to the audience the activities they conduct, the products and/or services they provide and what they are looking for in a cooperation. Based on their pitches, they can later engage with other participants.

Another example is speed networking, which is a structured process to facilitate initial contacts between two organisations that have not previously engaged in cooperation. Speed networking will normally guarantee that all participants in the event have the opportunity to interact with each other. Each session between two participants will normally only have five minutes (depending on the total number of participants) and thus it is important that participants have their ideas ready.

A final example of cooperation enabling activities include matchmaking events. The European Cluster Collaboration

[50] Several Interreg Europe projects that involve clusters have already implemented mobility programmes. One interesting project is the CLUSTERIX 2.0, where staff exchange activities between project partners have been developed as an opportunity to gain deeper understanding of each other's structures and systems, reflect on one's own activities and to generate new ideas through discussions. As an example, one of the staff exchanges has allowed the transfer of information regarding the content of the cluster policies that enabled the Romanian Ministry for Research and Innovation establishing a new funding scheme for cluster management organisations financed by the Romanian national RDI Plan. More information about the CLUSTERIX 2.0 project can be found at https://www.interregeurope.eu/clusterix2/.
To mention also that the importance of cluster mobility programmes has been recognized by the European Commission, that introduced a mandatory "ClusterXchange" pilot scheme as part of the new European cluster excellence call launched in January 2019. More information about this call can be found at https://ec.europa.eu/easme/en/cosme/cos-cluster-2018-03-02-european-cluster-excellence-programme.

Platform (ECCP) has been organising these events[51] in recent years (Box 8).

Box 8. ECCP matchmaking events.

The ECCP has been organising matchmaking events for several years, in Europe and abroad. While these do focus more on clusters themselves, there are also benefits for the cluster members.

One of the first matchmaking events took participants to Brazil in September 2013. There have been other international events in Iran, Mexico, USA and Taiwan, for example. These have also been organised in Europe, including in Brussels, Hannover, Lyon, Milan and Thessaloniki.

Participants identify a number of advantages from participating in these events, including the opportunity to become more visible and to gain new insights on what is being developed by other clusters in adjacent industries.

Some ESCP have already benefited from the matchmaking events. One example is the COSMENERG-4i, which participated in the Taiwan event in 2018. As a result, COSMENERG-4i is negotiating a cooperation agreement with the Green Trade Project Office of Taiwan External Trade Development Council (TAITRA).

Action 9 – Conduct systematic evaluations of clusters' cooperation activities to measure their success or adjust the strategy.

Evaluation is a process transversal to any activity and involves collecting and analysing information on what has been carried out, effectiveness of the approach and outcomes. Evaluations allow to make findings about the activity, to improve its effectiveness and to update the activity as necessary. Conducting evaluations is however found to be a challenge (see Section 3.6).

It is recommended that cluster organisations, with the support of the cluster manager, conduct systematic reviews of the ongoing cooperation activities to measure their success and, if necessary, adjust the cooperation strategy in place. Evaluating the cooperation is important to understand what has been achieved that goes beyond regular networking activities. Based on interviews with key stakeholders, it is important to evaluate indicators such as additional turnover and jobs created by cluster members by having participated in cooperation activities.

Specifically, it is recommended that the evaluation strategy be developed early in the course of the cooperation, allowing those involved to be more effective in the implementation of their activities and delivery of outputs, simultaneously increasing their accountability.

Based on the outcomes of the evaluation, it might be necessary to adjust the strategy. This might include revising objectives, expected outputs, external stakeholders to be involved or partners involved in the cooperation.

One evaluation strategy that can be adopted combines both a quantitative and qualitative approach. The

[51] https://www.clustercollaboration.eu/event-calendar/eccp-matchmaking

quantitative strand measures, for example, direct effects on the partners involved (e.g. job creation, increased innovation activities) and indirect effects on cluster dynamics. The qualitative strand is an individual assessment based on interviews or similar to collect information on the implementation of the cooperation.[52]

Box 9 provides a selection of items that can be considered in the definition of an evaluation strategy.[53] These items can be adapted according to each cluster partnership or the desired evaluation.

Box 9. Items to consider in the definition of an evaluation strategy.

What do we want to evaluate?

The objective here is to define if the evaluation should focus on the implementation of the cooperation itself or the external impact of the cooperation. Whenever possible, the focus should be on both aspects. It is important to understand if the cooperation is being implemented effectively and with participation from all members, and equally important to understand what impact the cooperation has on cluster networking and dynamics.

How do we measure the impact of the cooperation?

The measurement of impact can be done by defining and measuring indicators that can represent the effects of cooperation. From a quantitative perspective, these can be related to wages, value added, innovation or others in the participating clusters and members.

How do we identify the real impact of the cooperation?

The objective here is to understand the extent to which the cooperation activities produced outcomes that were intended or unintended and to understand what other factors contributed to the verified outcomes. This item will normally involve several evaluation methods, including quantitative data provided by the clusters and their members, surveys to cluster members and interviews with cluster members and managers.

Taking into account these items, the following steps are suggested to develop an evaluation strategy:

1. Clarify the focus of the evaluation;
2. Establish a metrics system including defining indicators and establishing data collection protocol;
3. Trigger a continuous monitoring process. A good example of a monitoring process is the Silicon Europe Worldwide monitoring scoreboard[54];
4. Define responsibilities among the partners.

4.4 Actions to foster internationalisation

Action 10 – Conduct a market study on pre-identified and shared target markets to increase cooperation opportunities.

For SMEs entering international markets for the first time, this can represent a significant financial and human

[52] http://www.regx.dk/fileadmin/user_upload/Building_the_Cluster_Commons.pdf
[53] Ibidem.

[54] http://www.silicon-europe.eu/projects/silicon-europe-worldwide/monitoring-scoreboard/

resources investment. Consequently, there have to be clear and real opportunities for the SMEs. Cluster SMEs with significant innovation and internationalisation potential can benefit from a better understanding of the markets and of the most optimal organisations with whom to engage in cooperation activities.

Thus, it is recommended to conduct a market study on pre-identified and shared target markets to increase cooperation opportunities. Pre-identified implies background work has already been done on behalf of the cluster SMEs (possibly with the support of the cluster manager) on the best markets to explore for cooperation opportunities. Shared infers the identified markets are of common interest to at least a large group of the cluster SMEs.

The development of a market study will most-likely include the following six items: (1) target market, (2) market size, (3) market growth, (4) market profitability, (5) market trends, and (6) key success factors.

Target market: Refers to the group of customers that the cluster SMEs want to market their products and/or services to. To identify the target market, customer segmentations can be considered (e.g. geographic, demographic, attitudes, etc.).

Market size: Identifying the market size consists of four items: identifying the total available market, serviceable available market, the cluster SMEs' target market and their target share.

Market growth: Refers to making forecasts on the growth of the market and the four items mentioned for market size. One approach to calculate market growth is by extrapolating historical data into the future.

Market profitability: Refers to the analysis of the attractiveness and profitability of a market by analysing the different forces acting upon it.

Market trends: Refers to the analysis of the variables that can lead to new opportunities and threats. Examples of trends include changes in prices, demand and buying power.

Key success factors: Refers to the main factors that are required for the cluster SMEs to achieve their objectives in the market (e.g. capacity to attract qualified employees or to innovate quicker than potential competitors).

Once target countries are identified and market studies completed, providing some understanding of the market potential, it is important to explore those markets. The European Commission offers a number of support activities in this regard for SMEs[55] (Box 10).

[55] https://ec.europa.eu/easme/en/support-internationalisation-smes

Box 10. European Commission support to the internationalisation of SMEs.

There are two complementary EU projects that support the internationalisation of SMEs.

EU Gateway | Business Avenues[56]

This project aims to help European companies to establish long-lasting business collaborations in Asia. To achieve this objective, 56 one-week business missions for up to 2,700 companies will be organised. These business missions will be focused on a specific sector such as green energy technologies, environment and water technologies, healthcare and medical technologies, and contemporary European design.

Companies (including cluster members) will benefit from a range of business support services, which include coaching, logistical and financial support.

The Next Society[57]

This project aims at mobilising, promoting and reinforcing innovation ecosystems and economic development in the MENA (Middle East and North Africa) region. To achieve this objective, a four year action plan was developed, which includes a Cluster Booster Track that will help to develop the strategic cooperation between European and MENA clusters.

Clusters (including ESCP partners) who enrol in the Cluster Booster Track will get the chance to participate in matchmaking events organised during major EU trade fairs and other events in MENA countries, and host a delegation of MENA Clusters, a good occasion to present their members, boost visibility, and showcase their cluster management best practices.

Action 11 – Organise missions with cluster members to selected target markets with the support of local and national organisations.

Once target markets have been identified and a potential market strategy has been developed (see Action 10), it is important to travel to these countries to understand their reality, evaluate the market strategy at the local level and establish initial contacts with local organisations.

It is recommended that missions involving cluster members are organised to selected target markets and, when possible, with the support of local and/or national organisations. Carrying out international missions and activities on one's own is a challenge and, therefore, ESCP can benefit from the support of local organisations.

As mentioned in the challenges for internationalisation section (see Section 3), interviewees identified potential collaborations with chambers of commerce, business associations, SME agencies and trade promotion organisations to support the organisation of the missions as these have an extensive knowledge of the local business sector.

Another possibility to facilitate international missions is to involve and participate with SMEs that already have experience in the market. Furthermore,

[56] https://www.eu-gateway.eu/

[57] https://www.thenextsociety.co/

interviewees highlighted that a group of SMEs that participate together and offer goods and services in a specific value chain might be more appealing to a particular client who is interested in a complete package.

ESCP-4i focused strongly on the internationalisation of their members. Box 11 provides a summary of two ESCP-4i case studies.

Box 11. EU4SportsClusters Alliance and REINA Plus internationalisation case studies.

EU4SportsClusters Alliance[58]

EU4SportsClusters Alliance's main objective was the internationalisation of European companies working in the sports industry.

To facilitate the internationalisation of its members (SMEs), the participating clusters identified the main target markets and prepared market studies; organised trade missions to the USA and China (based on workshops and meetings); and promoted three joint internationalisation export groups.

In the trade mission to the USA, 16 SMEs participated and nine business contracts were signed. In the mission to China, 14 SMEs participated and signed 10 business contracts.

REINA PLUS[59]

REINA PLUS' main objective was the internationalisation of European SMEs in selected renewable energy markets, namely those with high growth potential and new potential markets.

The partnership organised 13 business missions to six international target markets, having involved 118 EU companies and established contact with more than 250 local companies and stakeholders.

As a result, 94 opportunities were identified in the target markets, which resulted in 30 collaboration agreements: seven in Mexico; seven in Brazil; six in Chile; five in Morocco; three in the USA; and two in Colombia.

Action 12 – Develop and support the implementation of cooperation structures.

SMEs involved in different cluster organisations may have distinct objectives and views when it comes to internationalisation activities.

To focus on areas where cooperation and shared interests are the strongest and to facilitate target markets identification and selection, it is recommended to develop and support the implementation of cooperation structures such as joint export groups.

These joint export groups should include a number of SMEs from different partner clusters to facilitate the sharing of resources and to take advantage of synergies with other complementary enterprises in the specific industrial or cross-sectoral areas.

For each joint export group, a long-term strategy should be defined. This long-term strategy should include:

- The definition of common internationalisation goals;
- The identification of target markets;
- The definition of initiatives to be successful in the target markets

[58] https://www.clustercollaboration.eu/sites/default/files/eu4sports_phase_2_0.pdf
[59] https://www.clustercollaboration.eu/sites/default/files/reina_plus_phase_2_0.pdf

(including organisation of trade missions and participation at trade fairs);
- The definition of evaluation mechanisms (see Action 9).

EU4SportsClusters Alliance has created three export groups (Box 12).

Box 12. EU4SportsClusters Alliance export groups.

During the project, three joint export groups were established (in the fields of football, skiing and outdoor), each consisting of up to five enterprises from different partner clusters.

These joint export groups did not aim to carry out an individual export action, but were usually part of a long-term strategy and a common internationalisation goal.

As an example, the skiing export group was created with the main objective of gaining a deeper analysis on the benefits of setting up a local office in the USA. For this purpose, costs of local offices, customs requirements, insurances among other legal requirements were analysed.

Based on the analysis, at least one of the companies has opened a subsidiary in the USA and is currently working with more than 40 ski resorts.

4.5 Actions to foster investments

Action 13 – Increase investment potential and attractiveness through a collective EU trademark.

Collective trademarks can be powerful instruments for groups of producers, business associations and cooperatives in any sector. They enable enterprises (especially SMEs) to benefit from the collective reputation of a product/ portfolio of products and from economies of scale. As identified in the challenges of fostering investment, credibility towards its members but also its investors is crucial to foster investments (see Section 3.5).

At a cluster/ ESCP level, collective trademarks can help establish an identity for the cluster/ ESCP and increase their investment potential and attractiveness.

Therefore, it is recommended to create a collective EU trademark covering products related to the specific industrial or cross-sectoral area of each ESCP project.

Among the benefits this collective EU trademark may provide are:

- An increased consciousness and perceived technological and economic value of the products;
- Greater visibility of the products through participation at international fairs and conferences.

The obtaining of a collective EU trademark by the partnership (through the European Union Intellectual Property Office (EUIPO) website [60]) includes among others the following steps:

1. Verifying the checklist;
2. Searching for existing trademarks;
3. Classifying the products that are covered;

[60] https://euipo.europa.eu/ohimportal/en/route-to-registration

4. Providing details about the ownership;
5. Completing an application form.

Box 13 shows an example of a collective EU trademark.

Box 13. Smart Systems Integrated trademark.

Smart Systems Integrated[61] is a collective EU trademark created by the European Technology Platform on Smart Systems Integration (EPoSS) and managed by the Mesap cluster.

Smart Systems Integrated covers a number of technologies in areas such as nanoelectronics, micro-electromechanics, magnetism, photonics, chemistry and radiation.

European individuals, enterprises, research organisations, universities and other legal entities can apply to this trademark.

Action 14 – Organise networking events connected to relevant tradeshows or investor pitching sessions.

To develop and produce globally competitive products and services, enterprises need to find the right partners or investors. However, this activity is often difficult for individual enterprises (in particular SMEs), as identified in the challenges of fostering investments (see Section 3.5).

ESCP can help them get into global markets and develop long-term partnerships through specialised business support services such as the promotion of training activities (including bootcamps and customised training with mentors) and organisation of B2B matchmaking missions (see Action 4). Other services that can be provided are raising investor awareness and marketing/ presentation of SMEs' products and services to venture capitalists, larger enterprises and other private investors.

Thus, it is recommended to build cross-regional networks of venture capitalists, larger enterprises and other private investors and to organise networking events targeting these actors that facilitate finding new partners outside their own region for bringing SMEs' products and services to the market.

To increase the impact, these networking events can be connected to relevant tradeshows. It is also suggested to organise pitch sessions for global companies as well as investors from the SMEs' own region or outside.

The networking events organised by bioXclusters plus are an example (Box 14).

Box 14. bioXclusters plus networking events.

The ESCP project on Personalized Healthcare (bioXclusters plus)[62] aimed to build a strategic cluster alliance in view of fostering internationalisation activities of SMEs with a focus on life sciences.

To achieve this objective, a series of networking events were organised during the two-year period (January 2016 – December 2017) such as dedicated workshops as part of international trade fairs (BIO International Convention in the

[61] https://www.smart-systems-integration.org/ssi-trademark

[62] https://www.clustercollaboration.eu/sites/default/files/bioxclustersplus_phase_2_0.pdf

USA and Bio-Europe in Germany), a European-Japanese partnering event and four international B2B sessions (including partnering meetings and pitch presentations).

bioXclusters plus was short listed in 2016 for the Best ESCP-4i during the European Cluster Conference in Brussels.

Action 15 – Provide support for joint investment projects using technical assistance available at European level.

Among the objectives set for ESCP (namely ESCP-S3), there is the fostering of collaboration and interaction between enterprises (especially SMEs), technology centres and clusters towards generating joint investment projects.

These joint investment projects should be related to smart specialisation priority areas linked to industrial modernisation and help boost industrial competitiveness in the EU (including in less economically advanced regions). To fine-tune the joint investment projects, it is recommended to benefit from the technical assistance available at European Level.

At present, the European Commission supports a number of advisory and support services including facilitating interregional cooperation (through the ReConfirm project that may provide structured analysis in specific industrial domains and organise strategic workshops to help build concrete ideas and develop a roadmap towards an investment agreement[63]) and launching an awareness-raising campaign (through Watify that may organise matchmaking events for cluster partnerships to boost cross-regional cooperation[64]).

In addition to these services, the European Commission launched in May 2018 the call "Technical and financial assistance facility for industrial modernisation and investment" that may help develop bankable joint investment projects (Box 15).

[63] The Regional Co-operation Networks for Industrial Modernisation Initiative (ReConfirm) is an EU funded project that aims to support European regions and industrial stakeholders to connect, form partnerships and reach agreements to cooperate and modernise industry together. The support provided includes: development of mapping papers to provide structured analysis of partnerships; organisation of collaboration LABs to agree strategic and operational partnership elements; and organisation of strategic workshops to help identifying and involving additional partners. More information about ReConfirm can be found at http://s3platform.jrc.ec.europa.eu/reconfirm .

[64] Watify is an EU funded project that aims to support the modernisation of Europe's industries and their technological transformation through an awareness-raising campaign. The campaign focuses on the technological transformation of traditional SMEs, promotion of regional digitisation and uptake of advanced technologies. More information about Watify can be found at https://ec.europa.eu/growth/tools-databases/dem/watify/

Box 15. Technical assistance facility for industrial modernisation and investment.

The technical assistance facility (TAF) support scheme will provide free-of-charge advisory services to eligible investment projects generated through the Smart Specialisation Platform for Industrial Modernisation (S3P-Industry) [65] . Through the scheme, project promoters will have the opportunity to work with business, corporate finance and legal experts from leading international business advisory firms in order to improve their business plans and boost their investment readiness. The TAF support scheme will be launched at the beginning of April 2019. In order to be considered, each project must satisfy among other criteria the following: the project must be established within the EU; the project must be linked to one of the thematic areas of the S3P-Industry; and the project must have an interregional dimension. This means that it must have participating organisations from two or more regions. In cases where participating organisations are from only one region, the project promoter should demonstrate clearly inter-regional associations/links of the project.

The application for the above noted services has to be filled out and submitted online via the requested form that will be available on the S3P-Industry website.

[65] http://s3platform.jrc.ec.europa.eu/industrial-modernisation

5 Examples of European Strategic Cluster Partnerships good practices

With the finalisation of the first generation of ESCP-4i in 2017, there is a wealth of examples established by the participating clusters and their members. This chapter presents a sample of good practices that support the establishment of sustainable partnership strategies and joint activities. Each good practice includes a short description of the ESCP project involved, and the attributes and actions relevant to the area.

5.1 Overview of good practices

The following overview presents eight good practices implemented by selected ESCP. The cases are based on interviews with representatives from the partnerships and complemented with desk research. These good practices are expected to help other partnerships, especially ESCP-coordinators, to reach successful results in view of the selected activities. The good practice areas and the partnerships selected for each activity are:

- **Building strong partnerships and developing a joint partnership strategy:** MobiGoIn successfully developed an internationalisation strategy and a strategic partnership agreement that defined the objectives, modalities and concrete steps of the cooperation.
- **Promoting interregional collaboration:** AdPack established the AdPack European Economic Interest Grouping to ensure long-term interregional cooperation between AdPack cluster members.
- **Fostering internationalisation of SMEs:** EU4SportsClusters Alliance identified target markets, organised trade missions to these markets and supported its member SMEs in creating internationalisation export groups.
- **Fostering SME innovation: joint incubation, entrepreneurship, business scale-up and growth acceleration:** REINA PLUS provided member SMEs with information about target markets, including funding options for innovative projects, and organised missions to these target markets.
- **Fostering joint smart specialisation investment of industry actors:** One of ICCAR's partners focuses on linking the project to the Smart Specialisation Platform. ICCAR also developed a tool-kit that replicates the project at the regional level.

- **Disseminating partnership activities and results:** bioXclusters plus made effective use of the internet and organised dedicated workshops at major international trade fairs to disseminate its activities and establish key partnerships.
- **Monitoring the partnership's activities and evaluating the impact on SMEs:** LASER-GO successfully developed KPIs to measure the progress of its activities and to evaluate the impact on SMEs.
- **Leveraging funding sources for partnership sustainability:** ECCA supported member SMEs in applying for financial support under the ICIP-call of the Horizon 2020 programme.

5.2 Building strong partnerships and develop a joint partnership strategy: Mobility Goes International

Description

The **Mobility Goes International** (**MobiGoIn)** partnership was funded from January 2016 to May 2017 under strand 1 (preparation phase) and focused on the transportation and logistics sector. MobiGoIn included four partner clusters: Baden-Württemberg: Connected e.V. [66] (Stuttgart, DE), MOV'EO [67] (Île de France, FR), Fondazione Torino Wireless [68] (Piemonte, IT) and Media Evolution Southern Sweden [69] (Sydsverige, SE). Around 1,100 SMEs were involved in MobiGoIn, which focused on sustainable, smart and safe mobility in metropolitan areas. MobiGoIn aimed to develop an internationalisation strategy to generate new collaborations between European SMEs and (new) third market players.

MobiGoIn represents a good practice example due to the strategy and agreement the partnership established that positively impacted its performance:

- "**MobiGoIn Internationalisation Strategy**". The strategy identified five target countries (Canada, China, Malaysia, Singapore and the USA) to be approached by MobiGoIn, established services for SMEs interested in operating in each one of these countries, and created a timeline of the internationalisation process.
- "**MobiGoIn Strategic Partnership Agreement**". The agreement included objectives, modalities of cooperation and an agenda of a long-term collaboration between partner clusters and third parties in Canada, China, Denmark, Malaysia and the USA.

[66] https://www.bwcon.de/english.html
[67] https://pole-moveo.org/en/moveo-2/the-moveo-cluster/
[68] https://torinowireless.it/en/
[69] http://www.mediaevolution.se/

Attributes

Some of the clusters involved in this partnership had collaborated previously, and therefore could build on the well-established relationship. The call for ESPC-4i was seen as an opportunity to formalise an existing collaboration, to include other partners and to develop a joint internationalisation strategy.

Actions

The main actions carried out by MobiGoIn to build strong partnerships and develop a joint partnership strategy were:

- Setting clear objectives regarding the scope of the collaboration;
- Involving member SMEs and other stakeholders in drafting the strategy;
- Establishing a long-term partnership agenda.

Regarding the definition of the internationalisation strategy, it was important to set clear objectives in terms of the scope of the collaboration. It was seen as useful to define few, but clear objectives, so that the strategy would be focused, and progress could be assessed easily. First, MobiGoIn mapped the competences of the clusters and the SMEs. Knowing the working methods and competences of each cluster helped to understand better what the network could offer. Second, MobiGoIn considered the inputs of all the actors involved, namely SMEs and stakeholders, when defining the strategy. This approach ensured the real needs and issues were being targeted by the strategy.

The main actions necessary to prepare the partnership agreement involved agreeing on the modalities of cooperation and on the short, medium and long-term agenda of the collaboration with concrete joint activities.

Recommendations

Based on MobiGoIn project's experience, the following recommendations can be drawn:

- Carefully map the clusters' competences before drafting a joint partnership strategy;
- Include all partners in the drafting of the joint partnership strategy;
- Establish clear modalities and timelines for partnership agreements with third parties;
- Ensure partnership agreements are flexible enough to offer customised partnerships to third countries.

Sources

- Interview with a representative of MobiGoIn (06/07/2018)
- https://www.clustercollaboration.eu/sites/default/files/mobigoin_phase_1_0.pdf
- https://www.clustercollaboration.eu/sites/default/files/profile-article/mobigoin_results_booklet.pdf

5.3 Promoting interregional collaboration: Future materials and products for advanced smart packaging

Description

The **Future materials and products for advanced smart packaging (AdPack)** partnership was funded from January 2016 to December 2017 under strand 1 (preparation phase) and focused on the smart packaging sector. AdPack included five partner clusters: BalticNet-PlasmaTec [70] (Mecklenburg-Vorpommern, DE), PackBridge [71] (Sydsverige, SE), Nanoprogres [72] (Severovýchod, CZ), Inovcluster [73] (Centro, PT) and Plastiwin[74] (Prov. Liège, BE). AdPack involved 373 SMEs.

In order to promote interregional collaboration, AdPack established a sustainable partnership in the form of the AdPack European Economic Interest Grouping (EEIG)[75]. The EEIG is a legal structure that was created with the objective of ensuring the long-term cooperation between AdPack clusters and the services for their SME members. The AdPack EEIG makes it easier for member companies, especially SMEs, from different countries to collaborate with members of other clusters.

Attributes

Some partner clusters were already experienced with the establishment of different legal structures, but not with the establishment of an EEIG. An EEIG is a legal entity that facilitates interregional and cross-border collaboration. The AdPack EEIG focuses on smart and intelligent packaging.

The AdPack EEIG was created with the participation of partners and other interested affiliated partners that signed the MoU. The EEIG ensures AdPack's strategy will continue to be implemented beyond the project's lifespan. It allows the partnership to engage in long-term cooperation with strategic partners in Europe and third countries and supports SMEs to find easier access to global value chains. The establishment of the EEIG was part of AdPack's intention to create a sustainable and long-term structure for

[70] http://www.balticnet-plasmatec.org/
[71] http://packbridge.se/
[72] http://nanoprogress.eu/en/home-page-5/
[73] http://www.inovcluster.pt/
[74] http://clusters.wallonie.be/plastiwin-en/
[75] A European Economic Interest Grouping (EEIG) has the objective of facilitating or developing the economic activities of its members by a pooling of resources, activities or skills. This is intended to produce better results than the members acting alone. An EEIG must have at least two members from different EU countries and can be formed by companies, firms and other legal entities governed by public or private law that are registered in the EU. It can also be formed by individuals carrying on an industrial, commercial, craft or agricultural activity or providing professional or other services in the EU. Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Al26015, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31985R2137

cooperation. The idea of establishing an EEIG was already included in the strand 1 and continued in the strand 2 action (2nd generation).

Actions

The main actions carried out by AdPack to promote interregional collaboration were:

1. Including the idea of establishing an EEIG in the original proposal;
2. Setting up the EEIG with consortium partners and interested affiliated partners.

The partners already included the idea of establishing an EEIG in their response to the call for proposals. It was supposed to fulfil the provision made by the European Commission to ensure sustainability of the partnership. The AdPack EEIG was created with the participation of AdPack's partners and interested affiliated partners that signed already the MoU. The EEIG was officially registered in the Czech Republic in February 2018 with all consortium partners involved.

The main challenges that had to be overcome to establish the EEIG included the different internal approval procedures of each partner involved. Moreover, the translation of the documents and the approval by public authorities took some time. As a result, the EEIG establishment process had been rather lengthy and cost-intensive.

Recommendations

Based on the AdPack project's experience, the following recommendations can be drawn:

- Think in advance about which structures to establish in order to promote interregional cooperation in the long term;
- Select a thematic focus of the EEIG in the beginning of the project.

Sources

- Interview with a representative of AdPack (12/07/2018).
- https://www.clustercollaboration.eu/escp-profiles/adpack
- https://www.clustercollaboration.eu/sites/default/files/adpack_phase_1_0.pdf

5.4 Fostering internationalisation of SMEs: EU4SportsClusters Alliance

Description

The **EU4SportsClusters Alliance** partnership was funded from 2016 to 2017 under strand 2 (implementation phase). It capitalised on the EU4SportsClusters project, a pilot project funded between 2012 and 2014 under the aforementioned CIP (see Section 1.1). The main objective of the partnership, which involved 316 SMEs, was to foster the internationalisation of European companies operating in the sports industry. The EU4SportsClusters Alliance included five partner clusters,

three of which had already participated in the previous project. These five clusters were: Sports&Technology [76] (Noord-Brabant, NL), European Platform for Sport Innovation[77] (Région de Bruxelles-Capitale, BE), Flanders Bike Valley[78] (Prov. Limburg, BE), INDESCAT - Catalan Sports Cluster[79] (Catalunya, ES) and Cluster Montagne[80] (Rhône-Alpes, FR).

EU4SportsClusters Alliance was selected as a good practice example due to the partnership's approach and achievements that include the following:

- Focused on providing European SMEs with the opportunity to go international;
- Identified common target markets (USA, China, Iran);
- Prepared market studies;
- Organised trade missions to China and the USA;
- Promoted the launch of three joint internationalisation export groups, which gathered several companies with similar target countries.

Attributes

EU4SportsClusters Alliance based its activities on previous work developed within the EU4SportsClusters project. Moreover, three of the partner clusters had already worked together in the previous project.

Actions

The main actions carried out by EU4SportsClusters Alliance to foster internationalisation of SMEs were:

1. Identifying target markets and preparing market studies;
2. Organising trade missions to China and the USA;
3. Promoting three joint internationalisation export groups.

As a result of different workshops and meetings, EU4SportsClusters Alliance identified China and the USA as the main target markets. The partnership prepared market studies, organised preparatory workshops and trade missions to both countries. The mission to China took place in February 2017 and involved 14 EU companies that signed ten business contracts and two cooperation agreements with local stakeholders. In September 2017, the mission to the USA was carried out by 16 EU companies who signed nine business contracts.

As a part of the project, three joint internationalisation export groups were established (in the fields of football, skiing and outdoor), each consisting of 3-5 companies from different partner clusters. These export groups did not

[76] http://sportsandtechnology.com/
[77] http://epsi.eu/
[78] http://www.flandersbikevalley.be
[79] http://www.indescat.org/
[80] http://www.cluster-montagne.com/

aim to carry out an individual export action, but were usually part of a long-term strategy and a common internationalisation goal.

Recommendations

Based on the EU4SportsClusters Alliance project's experience, the following recommendations can be drawn:

- Identify common target markets and organise trade missions;
- Support cooperation structures among member SMEs that allow for long-term internationalisation.

Sources

- Interview with a representative of EU4SportsClusters Alliance (03/07/2018).
- www.clustercollaboration.eu/escp-profiles/eu4sports
- www.clustercollaboration.eu/sites/default/files/eu4sports_phase_2_0.pdf

5.5 Fostering SME innovation: joint incubation, entrepreneurship, business scale-up and growth acceleration: Renewables Energy InternaNAtionalisation ESCP project for European SMEs

Description

The **Renewables Energy InterNAtionalisation ESCP project for European SMEs** (**REINA PLUS)** was funded from January 2016 to December 2017 under strand 2 (implementation phase) and focused on the electric power generation and transmission sectors. REINA PLUS included four partner clusters: Clean Tech Cluster[81] (Oberösterreich, AT), Cluster de Energía[82] (País Vasco, ES), Oy Merinova Ab[83] (Länsi-Suomi, FI) and EnergyIN[84] (Centro, PT). REINA PLUS involved 322 SMEs. The partnership aimed to support the internationalisation of European SMEs in selected renewable energy markets, namely Brazil, Chile, Colombia, Mexico, North Africa and North America.

REINA Plus was selected as a good practice example due to the partnership's approach and

[81] http://www.cleantechcluster-energie.at/der-ctc/ueber-uns.html
[82] http://www.clusterenergia.com/home
[83] https://www.merinova.fi/en/
[84] http://www.energyin.com.pt/

achievements that include the following:

- Organised target market meetings to provide objective information about target countries and to allow SMEs that had already operated in these markets to share their experiences with other SMEs;
- Organised 13 business missions to six international target markets with the participation of 118 European companies;
- Identified 94 projects and/or business opportunities in the target markets that have led to 30 collaboration or partnership agreements;
- Signed eight collaboration or partnership agreements with associations/ clusters from the target markets.

Attributes

The cooperation between the Austrian, Spanish and Finnish partners started in the previous REINA[85] project organised and funded by DG GROW under the call for the "Promotion and development of world-class clusters in Europe" – Strand 1: International cluster cooperation[86]. During this project, the three partners developed the objectives of REINA PLUS and the internationalisation strategy that was drafted as part of the project. The Portuguese partner was added to REINA PLUS partnership. The four partner clusters combined different market intelligence as they had already gained experience with some of the target markets.

Actions

The main actions carried out by REINA PLUS to foster SME innovation were:

- Providing SMEs with information about the target markets prior to the missions ("target market meetings");
- Organising missions to the target markets.

The partnership organised what was referred to as "target market meetings" as a first step before organising missions to the markets. The meetings helped participating SMEs without experience on the target markets to better understand the countries and their business environments. During these meetings, the partner clusters provided market updates, including information about political issues, regulations, economic situation and funding sources for innovation in the target countries. Afterwards, participating SMEs were divided into smaller groups according to their market sector to exchange their experiences.

In a second step, the partnership organised missions to the target markets (Brazil, Chile, Colombia, Mexico, Morocco and the USA) to

[85] https://www.clustercollaboration.eu/sites/default/files/eu_initiatives/reina_projectsummary.pdf
[86] https://ec.europa.eu/growth/content/call-proposals-promotion-and-development-world-class-clusters-europe_en

enable member SMEs to foster innovation.

Recommendations

Based on the REINA PLUS project's experiences, the following recommendations can be drawn:

- As a first step, provide participant SMEs with comprehensive information about target markets;
- Organise missions to the target markets;
- Focus on a specific market sector or technology rather than, for example, on the entire "energy sector".

Sources

- Interview with a representative of REINA PLUS (21/06/2018)
- https://www.clustercollaboration.eu/sites/default/files/reina_plus_phase_2_0.pdf
- https://www.clustercollaboration.eu/escp-profiles/reina-plus

5.6 Fostering joint smart specialisation investment of industry actors: <IMPACT> Connected Car

Description

The **<IMPACT> Connected Car (ICCAR)** partnership is currently being funded (running between April 2017 and September 2019) by the European Commission under the Horizon 2020 INNOSUP initiative. ICCAR focuses on the connected car emerging industry and aims to facilitate interaction between the ICT and automotive sectors in Europe. ICCAR is a collaboration of clusters, among other organisations, focused on taking advantage of synergies between the partners and their members on behalf of their members. ICCAR includes 17 partners, including five clusters, namely: CTAG-CEAGA[87] (Galicia, ES), Mov'EO[88] (Paris, FR), INSERO[89] (Horsens, DK), MSKA / Autoklastr[90] (Moravian region, CZ) and LPNT[91] (Lublin, PL).

ICCAR is considered a good practice example due to the partnership's planned approach that includes the following:

- Plans to link the project activities to the Smart Specialisation Platform[92];
- Develop a concrete tool-kit to replicate the ICCAR model at the regional level;
- Discuss ways to generate additional funding resources for SMEs that participate in smart specialisation initiatives.

[87] http://ctag.com/
[88] http://pole-moveo.org/en/
[89] http://insero.com/
[90] http://autoklastr.cz/
[91] http://lpnt.pl/
[92] http://s3platform.jrc.ec.europa.eu/

Attributes

Establishing links between automotive regions is the rationale behind the composition of the consortium. The five clusters involved in ICCAR cover important automotive-relevant regions in Europe.

The collaboration with the Polish Agency for Enterprise Development (PARP) focuses on smart specialisation investments. PARP raises awareness about the replication of ICCAR at the regional level with the "IMPACT Connected Car Smartisation Programme" tool-kit.

Actions

The main actions to be carried out by ICCAR to foster joint smart specialisation investments of industry actors are:

1. Involving PARP as a partner to link the project to the Smart Specialisation Platform;
2. Developing a tool-kit that allows to replicate ICCAR at the regional level;
3. Discussing the creation of a recognition/ label to provide additional funding for companies and regions that replicate the ICCAR model.

PARP is in charge of raising awareness about the replication of ICCAR at the regional level with the help of the tool-kit and by linking the project to the Smart Specialisation Platform, first in Polish regions and later in other European regions.

During the project, ICCAR will create a tool-kit for regions that includes the process of selecting start-ups, how to communicate with them, and the methodology used to reach and to accelerate them.

ICCAR is also considering to establish a recognition/ label similar to the Commission's Seal of Excellence for SMEs. In addition, there is a funding incentive for companies that participated in a connected car open call and that are part of a regional application for a project applying the tool-kit.

Recommendations

Based on the ICCAR project's experience, the following recommendations can be drawn:

- Collaborate with partners that focus on the linkage with smart specialisation;
- Find ways to foster participation of SMEs in smart specialisation programmes;
- Start raising awareness among regions early in the process.

Sources

- Interview with a representative of <IMPACT> Connected Car (27/06/2018)
- https://www.clustercollaboration.eu/eu-project-profile/connected-car

5.7 Disseminating partnership activities and results: ESCP on Personalised Healthcare

Description

The **ESCP on Personalised Healthcare** (**bioXclusters plus)** was funded from January 2016 to December 2017 under strand 2 (implementation phase) and focused on building a strategic cluster alliance to foster internationalisation activities of SMEs with an emphasis on life sciences. bioXclusters plus included four partner clusters: Lyonbiopole [93] (Rhône-Alpes, FR), Biocat[94] (Catalunya, ES), Bio[M] [95] (Oberbayern, DE) and bioPmed [96] (Piemonte, IT). The total number of SME members in the partnership was 880, which mainly operate in the areas of personalised medicine, oncology, cardiovascular, inflammatory and infectious diseases, and the central nervous system.

bioXcluster plus was selected as a good practice example due to the partnership's approach and achievements that include the following:

- Focused on marketing activities, especially on the visual identity;
- Organised dedicated workshops as part of international trade fairs (BIO International Convention in the USA and Bio-Europe in Germany);
- Organised a European-Japanese partnering event;
- Cooperated with the European-American Chamber of Commerce in the USA, which significantly increased bioXclusters plus' visibility in the country.

Attributes

The cooperation between the four partners started in 2012 as part of the bioXclusters pilot project funded by the European Commission under the CIP-programme (see Section 1.1). A strong attribute of bioXclusters plus was its restricted consortium (only four partners), which allowed the partners to work closely together. The four partners agreed on the main communication messages, which helped in the successful dissemination of bioXcluster plus' activities and results. The early focus on marketing activities and the targeted communication approach resulted in highly effective dissemination.

Actions

The main actions carried out by bioXclusters plus to disseminate its activities and results were:

- Using the internet effectively;
- Organising dedicated workshops at major international trade fairs;
- Establishing key partnerships.

[93] https://lyonbiopole.com/en/
[94] http://www.biocat.cat/en
[95] https://www.bio-m.org/en/
[96] https://www.biopmed.eu/

bioXclusters plus created a dedicated blog [97] (website) and frequently used Twitter. [98] bioXclusters plus aimed to minimise its core messages, depending on whether it targeted member SMEs or international markets.

On several occasions, bioXcluster plus organised dedicated workshops as part of international trade fairs, notably the BIO International Convention (June 2017), which is the largest trade fair in the USA, and the Bio-Europe fair that took place in Germany (November 2016, 2017). From a marketing point of view, bioXcluster plus was very visible at these fairs. It was completely integrated in the programmes and managed to attract cluster organisations from Europe and beyond.

Additionally, bioXcluster plus cooperated with the Japanese Gateway Osaka Bio Headquarters. In October 2016, bioXcluster plus, in cooperation with the Japanese partner and the European-Japanese Centre, organised the European Biotech & Pharma Partnering Conference in Osaka. This was another occasion to disseminate the activities of bioXcluster plus. Moreover, cooperating with the European-American Chamber of Commerce in the USA was very effective in terms of visibility and dissemination, given the existing communication networks of the Chamber of Commerce.

Recommendations

Based on the bioXclusters plus project's experience, the following recommendations can be drawn:

- Focus on marketing activities from the beginning of the cooperation;
- Adapt the key messages according to the audience;
- Cooperate with other actors that have strong communication networks;
- Contact large companies in the sector to disseminate partnership activities.

Sources

- Interview with a representative of bioXclusters plus (28/06/2018)
- https://bioxclusters.eu/
- https://www.clustercollaboration.eu/sites/default/files/bioxclustersplus_phase_2_0.pdf

5.8 Monitoring the partnership's activities and evaluating the impact on SMEs: European Strategic Cluster Partnership in Photonics for Health

Description

The **European Strategic Cluster Partnership in Photonics for Health (LASER-GO)** was funded from March 2015 to September 2016 under strand 1

[97] https://bioxclusters.eu/
[98] https://twitter.com/bioXclusters

(preparation phase) and focused on the lighting and electrical equipment sector. LASER-GO included three partner clusters: LITEK [99] (Lietuva, LT), OpticsValley [100] (Île de France, FR) and Human.technology Styria [101] (Steiermark, AT). The partnership involved 231 SMEs. It aimed to establish links with other clusters in the field, to open access to new value chains and to plan visits and activities overseas.

LASER-GO was selected as a good practice example due to the focus and effort the partnerships placed on monitoring its activities and evaluating the impact on SMEs.

Attributes

By establishing and monitoring the proper KPIs, a strong focus was maintained on achieving the following two objectives:

1. Increasing exports by creating leads, then multiplying these leads and handing them over to companies for follow-up;
2. Supporting companies in increasing R&D expenditure by enabling them to reach collaborative agreements with companies from other countries.

Actions

The KPIs that were established and monitored include:

1. 90 SMEs having directly or indirectly benefited from the supported actions;
2. Increase in the percentage of turnover (ca. 5%) from international activities of the SMEs that benefited directly and indirectly from the supported actions as measured through a survey by the end of the project; and
3. Number and volume of resulting cooperation projects between the members of the clusters involved, which would be no less than €5 million in total.

KPIs were expected to help LASER-GO focus on concrete objectives. All partner clusters were involved in defining the KPIs, based on their assessment of what could be implemented within an 18-month period. Some of the KPIs were directly related to projects, while others were impact-related. The latter were often easier to achieve.

In general, it was a major challenge to quantify the impact of intangibles in order to assess the impact of LASER-GO's activities on SMEs. To evaluate the concrete impact of activities such as business trips, LASER-GO conducted follow-up assessments. The assessments included getting in touch with actors who had established contacts during the missions, and investigating what were the concrete

[99] http://litek.lt/
[100] http://www.opticsvalley.org/
[101] https://www.humantechnology.at/

impacts of these newly established contacts.

Recommendations

Based on the LASER-GO project's experience, the following recommendations can be drawn:

- Focus on a smaller number of KPIs that can be achieved within the limited project period;
- Involve cluster organisations in defining the KPIs;
- Ensure the quantifiability of impacts of intangible activities on SMEs.

Sources

- Interview with a representative of LASER-GO (26/06/2018)
- https://www.clustercollaboration.eu/escp-profiles/laser-go
- https://www.clustercollaboration.eu/sites/default/files/laser-go_phase_1_0.pdf

5.9 Leveraging funding sources for partnership sustainability: European Circular Construction Alliance

Description

The **European Circular Construction Alliance (ECCA)** partnership was funded from January 2016 to December 2017 under strand 1 (preparation phase) and focused on construction products and services. ECCA initially included three partner clusters: Construction Cluster of Slovenia [102], sEnERGIA Baltic Cluster [103] (Zachodniopomorskie, PL) and Cluster Construcción Sostenible [104] (Canarias, ES). During the project period, other clusters and organisations were invited to join the ECCA. A total of 28 ECCA partners and 10 supporting organisations signed the ECCA partnership agreement. ECCA, which aimed to foster innovation and internationalisation of products, services and technologies in the field of circular construction, involved 400 SMEs.

ECCA was selected as a good practice example with respect to leveraging funding sources for partnership sustainability due to the partnership's effectiveness in assisting member SMEs in applying for different calls and financial support under the Horizon 2020 INNOSUP programme.

Attributes

Since there is no tool to finance the interim period between the preparation phase (strand 1) and the implementation phase (strand 2) of an EU financed project, ECCA had to mobilise additional financing for this transitory period.

[102] http://www.sgg.si/
[103] Website not available.
[104] http://clusterccs.org/en-GB

Actions

The main action carried out by ECCA to leverage funding sources was supporting SMEs in applying for financing under the Horizon 2020 programme as part of the objective to create a co-financing agency.

One of the key strengths of clusters in general is the knowledge of public co-financing and the capacity to acquire co-financing from difference sources for their members and projects. ECCA plans to create a co-financing agency to provide co-financing to International Collaborative Innovation Partnerships (ICIPs). Through this agency, ICIP partners will be assisted in applying for co-financing in the different regions where they are eligible. In addition, ECCA will have a vouchering or another type of scheme to provide co-financing for ICIPs along the innovation cycle. The idea of a co-financing agency has been implemented by ECCA, providing support for its member SMEs in preparing the proposals for open calls under the Horizon 2020 INNOSUP programme. This support was seen as a follow-up activity of the ECCA alliance.

ECCA established a sustainability plan that focused on three aspects:

1. Establishing strong mutual connections between cluster members;
2. Supporting SMEs in applying for the co-financing agency schemes;
3. Setting-up co-financing follow-up activities by member clusters (which has not been realised).

Recommendations

Based on the ECCA project's experience, the following recommendations can be drawn:

- Develop funding tools to finance the transitory period between the preparation and the implementation phases of the project;
- Support SMEs in mobilising additional financial resources.

Sources

- Interview with a representative of ECCA (03/07/2018)
- https://www.clustercollaboration.eu/escp-profiles/ecca
- https://www.clustercollaboration.eu/sites/default/files/ecca_phase_1_0.pdf
- http://circularconstruction.eu/wp-content/uploads/2016/06/D4.2-Internationalization-strategy-plan-public-10p.pdf

6 Conclusions

Taking into account the results presented in the previous chapters, there are several conclusions that can be made on the success of ESCP and actions to further improve the next generation of cluster partnerships.

Since their launch, ESCP have supported European clusters to strengthen collaboration across regions and sectors, contributing to economic growth and competitiveness of European enterprises.

As presented in this Smart Guide, two main categories of ESCP have been launched: ESCP for Going International (ESCP-4i) and ESCP for Smart Specialisation Investments (ESCP-S3). ESCP-S3, which were launched in October 2018, aim to support cluster cooperation in thematic areas related to regional smart specialisation strategies.

ESCP-4i have the objective of encouraging clusters to collaboratively develop strategies to go international and ultimately help European SMEs access third markets. Two editions have been launched: the first generation having run from 2016 to 2017 and the second generation running from 2018 to 2019. The results from the 25 first generation projects suggest that these projects were successful in achieving the objectives of the ESCP.

The first generation of ESCP-4i involved more than 150 cluster organisations and 2,000 SMEs from 23 European countries, which demonstrates a significant EU participation and coverage. The partnerships, which focused on diverse sectors, identified 26 different third market countries as part of their internationalisation strategies. Through their missions, they organised 370 cluster-to-cluster meetings and more than 3,000 business-to-business meetings. As a result of these activities, MoU and collaboration projects were implemented between the EU clusters and partners in third countries.

The second generation ESCP-4i have been running since the beginning of 2018; thus, complete results are not yet available. The 23 initially co-funded cluster partnerships (complemented in September 2018 with two partnerships operating in the defence and security sector) account for over 17,000 EU SMEs and have targeted a wide array of industrial sectors. These partnerships have identified 32 different third countries, six more compared to the first generation, which also suggests a more detailed analysis of potential markets for cooperation activities. Furthermore, there are seven countries that were targeted in the first generation and not in the second; and 12 countries targeted in the second generation and not in the first.

The implementation process of these partnerships, the results achieved, and the discussions held with stakeholders involved in ESCP enabled a number of challenges and actions to be identified that, in turn, have led to the proposal of recommendations for the establishment of a sustainable partnership strategy and joint activities. These recommendations focus on five key areas: (1) establishing a joint partnership strategy; (2) fostering innovation; (3) fostering cooperation; (4) fostering internationalisation; and (5) fostering investments.

Establishing a joint partnership strategy

The establishment of a successful joint partnership strategy can benefit from the participation of organisations that share a similar focus and objectives. Therefore, with the support of a value chain analysis, it is important to carry out an analysis of the partners' competences, complementarities and synergy potential to effectively achieve the joint partnership strategy's objectives. A value chain analysis can help understand the value that each member can add to the implementation of the defined strategy.

Furthermore, the success of a joint partnership strategy also resides in each partner having a relevant role in its definition and implementation. The coordination of the partnership must guarantee that all partners participate proactively in this process and share the responsibility of ensuring its success.

As part of the development of the joint partnership strategy, it is important for the partners to identify and define objectives of common interest, that can be easily measured and that have a clear impact on the partnership and the industry. This can be achieved by defining specific, measurable, attainable, realistic and time-bound (SMART) objectives.

Fostering innovation

Innovation of products and/or services is a process inherent to the majority of companies. However, in many cases, innovation can only be achieved through a collaborative effort with other organisations. Therefore, it is important to create opportunities through, for example, the organisation of events for SMEs to engage with each other to identify new collaboration opportunities.

In more advanced cases, and where a collaborative opportunity has been identified, there may be difficulties to move the process forward. The involvement of a broker can assume a pivotal role in this process as they can help the organisations in various aspects of the collaborative process.

While intra-cluster innovation activities are commonly successful, encouraging inter-cluster cooperation in the absence of adequate incentives and instruments is challenging. Therefore, cooperation between members from different clusters and regions can benefit from

financial support at the EU level, which should consistently be made available.

Fostering cooperation

Successful cooperation activities require that all partners be on the same page and each have an important role in the cooperation. Therefore, it is important to establish a balanced and manageable partnership where partners' interests are aligned and where each partner has distinct and complementary competences that contribute to the achievement of the cooperation's objectives.

In some cases, for intra- and inter-cluster cooperation to happen, it is important for clusters and their members to get to know each other's potential and value in a cooperation process. Therefore, the organisation of cooperation enabling events, facilitated by cluster managers, can help in this information exchange and the establishment of synergies.

Once the cluster cooperation has started, it is important to ensure the respective cooperation activities are systematically evaluated. Cluster managers can assume an important role in the evaluation process assessing the activities being implemented, their effectiveness and making updates as necessary to ensure a successful cooperation.

Fostering internationalisation

The internationalisation process of an SME's goods or services can represent a significant investment, starting with the identification of the best international markets to explore. Therefore, it is important to help SMEs in the development of market studies to identify the most adequate market(s) for them and to increase the opportunities for cooperation.

When potential target markets have been identified and a market strategy has been developed, SMEs should participate in missions to these countries to test their strategy at the local level. The support and participation of local and/or national organisations with detailed knowledge of the market and sector can be of value to ensure participating SMEs interact with the most valuable local organisations.

While SMEs can have different objectives when it comes to internationalisation, it is important to identify areas where there are shared interests to facilitate market identification and selection. The definition of cooperation structures, such as joint export groups, can support this process, for which a long-term strategy should be defined.

Fostering investments

The establishment of a collective trademark for a cluster/ESCP can help them create a unique identity and also increase their members' investment potential and attractiveness.

However, with or without a collective trademark, there is still a challenge to

identify the right partners and/or investors. The organisation of networking events or pitching sessions where organisations can present their products and/or services to those with investment capacity can support this process.

The European Commission continues to play an important role in helping foster investments and collaboration between different stakeholders. In fact, ESCP aim to foster collaboration between relevant stakeholders through joint investment projects, especially related to smart specialisation areas linked to industrial modernisation. The implementation of these projects can benefit from the assistance at the European level.

In summary, while this Smart Guide suggests specific approaches to facilitate the definition, implementation and management of cluster partnerships, there are also considerations to be made regarding the role of the European Commission in ESCP.

There is an opportunity to increase the number of cooperative learning opportunities between ESCP, especially through the organisation of more cross-clustering meetings. This can help partnerships with less experience to benefit from the knowledge and good practices of those with more experience.

The amount of funding made available and the time to implement activities is also relevant. This is particularly important for ESCP-4i, where the costs of going to selected international markets may be quite high and thus limit the number of SMEs that participate in the activities. Furthermore, the 24-month period for the implementation of the project can in some cases be insufficient, especially to initially establish or consolidate cooperation agreements in countries with a more cautious business culture. This calls for some flexibility in this aspect if justifications are provided.

Lastly, there may be a need to adapt the project, especially at the beginning, which should be considered as a possibility to ensure the project's successful implementation. For example, the internationalisation strategies of ESCP can lead to unexpected situations that, in some cases, could benefit from an update to the project, if properly justified to the relevant authority.

Annex 1 - List and presentation of European Strategic Cluster Partnerships

This Annex presents the list and a short description of first and second generation ESCP-4i and ESCP-S3.

Table 1. List of ESCP-4i (first generation).

First generation		
Strand 1	**Strand 2**	**Voluntary**
1. **AdPack**: Future materials and products for advanced smart packaging 2. **ECCA**: European Circular Construction Alliance 3. **EnW**: Energy in Water 4. **LASER-GO**: European Cluster Partnership in Photonics for Health 5. **MobiGoIn**: Mobility Goes International 6. **MOVE**: Moving the Future 7. **New Frontiers in Food:** New Frontiers for Emerging Industries in Food 8. **SmartCityTech:** Internationalisation of cross-domain Smart City Solutions powered by ICT 9. **SPACE2ID:** Space Clusters International Industrial Diversification	1. **bioXclusters plus**: ESCP on Personalised Healthcare 2. **EACP Abroad**: Activities and Businesses from Real Opportunities for Aerospace Developments 3. **EU4SportsClustersAll**: EU4SportsClusters Alliance 4. **NATUREEF**: Natureef ESCP 5. **REINA PLUS**: Renewable Energy Internationalisation ESCP project for European SMEs 6. **Silicon Europe Worldwide**: European Semiconductor Cluster Internationalisation Project	1. **3BI**: 3BI 2. **CROSSCUT**: European Strategic Cluster Partnership on Sustainable Construction 3. **DECISION**: DElivering Cluster International Strategies into Overseas Networks 4. **ELCA4i**: European Lighting Cluster Alliance for Internationalisation 5. **EU4FOOD**: Global Alliance for the Development of International Food Bio-Based Clusters 6. **FoodPackLab**: Photonics-Packaging Partnership for Food Innovation 7. **GIVE**: Green Ict development 8. **PERES**: Promoting European Rail Excellence outSide EU 9. **SeaMICI**: Seabed Mining Clusters for SMEs Internationalisation 10. **WIINTECH 2020**: Wiintech 2020

Table 2. List of ESCP-4i (second generation).

Second generation	
Strand 1	**Strand 2**
1. **ALLIANCE**: Alliance for international business development of advanced materials and connectivity for defence and security markets 2. **Cosmetics4Wellbeing (C4W)**: a driver to international wellbeing industry 3. **DIA**: European Digital Industry Alliance 4. **ELBE**: Europe Leading Blue Energy 5. **EU KETs4Dual-Use**: European Key Enabling Technologies for Dual-Use Worldwide 6. **FoodNet**: Food in Eco Network 7. **FoodPackLab**: Photonics-Packaging Partnership for Food Innovation 8. **GCA**: Global Content Alliance 9. **GEO-ENERGY Europe**: Geo-Energy for the XXIst Century 10. **GIVE**: Green ICT development 11. **IDEEO**: Internationalisation & Diversification of European Earth Observation 12. **MAGIA**: Medtech Alliance for Global InternationAlisation 13. **PERES Partnership**: Promoting European Rail Excellence outSide EU 14. **PIMAP Partnership**: Photonics for International Markets and Applications 15. **SENTINEL:** Cluster Network for Hospitality Sustainable Development and Internationalization 16. **SpaceWave**: Clusters waving the flag to the internationalisation of European SMEs taking advantage of the cross-sectoral dimension of Earth observation for Blue Growth market	1. **AdPack2**: European Strategic Cluster Partnership for Advanced Smart Packaging 2. **COSMENERG-4i**: Global Clusters for Renewable Energy and Environmental Technologies 3. **EC2i**: European Cleantech Internationalization Initiative 4. **ESCT Go Global**: European SmartCityTech Go Global 5. **EU-TEXTILE2030**: EUROPEAN ADVANCED TEXTILE MATERIALS WORLD-CLASS CLUSTER EU-TEXTILE2030 6. **LASER-GO Global**: European Cluster Partnership in Photonics for Health 7. **MobiGoIn – Action**: Mobility Goes International - In Action 8. **NF4**: New Frontiers in Food Fast Forward 9. **SPACE2IDGO**: Space Clusters International Industrial Diversification

Table 3. List of ESCP-S3.

ESP-S3
1. **AI4Diag**: Strategic Cluster Partnership for increased competitiveness of European Medical Diagnostics SMEs thanks to Artificial Intelligence 2. **Connsensys**: Connsensys 3. **CYBER SECURE LIGHT**: Cyber Secure IoT Lighting and Home Automation systems for Smart Building 4. **DIGICLUSTERS**: ESCP S3 for speeding up industrial modernisation of agrofood packaging sectors towards Industry 4.0 and digital transformation by Cluster- Facilitated X-Industry Hackathons 5. **EACN**: European Automotive Cluster Network for Joint Industrial Modernisation Investments 6. **EACP-EUROSME**: aErospace inter-clUster smaRt specialization actiOns for SMEs competitiveness in the circular economy approach 7. **S3martMed**: S3martMed 8. **TEX4IM**: Textile clusters for industrial modernisation 9. **TRACK**: Tracking opportunities to develop and strengthen data collection and big data in agri-chain to increase competitivity of SMEs

Presentation of ESCP-4i

First generation – Strand 1

AdPack

Partners: Nanoprogress z.s. (CZ), Packbridge (SE), PLASTIWIN (BE), InovCluster - Associação do Cluster Agroindustrial do Centro (PT) and BalticNet-PlasmaTec e.V. (DE)

Objectives:

To bring together competencies that enable to strengthen the advanced smart packaging global value chain and foster a cross-sectoral approach.

Main activities:

- Identification of strategic partners in Europe and target third countries
- Organisation of four working missions in four different countries
- Definition of the services to be provided by AdPack based on good practices
- Establishment of a legal structure to ensure further development and sustainability of the partnership

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/adpack

ECCA

Partners: sEaNERGIA Baltic Cluster (PL), Cluster Construcción Sostenible (ES) and Construction Cluster of Slovenia (SI)

Objectives:

To establish a meta-cluster to collaborate for innovation and internationalisation of products, services and technologies in the field of circular construction.

Main activities:

- Mapping international opportunities in third countries and development of a roadmap with a detailed plan for implementation highlighting the different roles and steps
- Organisation of an international conference dedicated to all stakeholders interested in the area of the construction sector and circular economy

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/ecca

EnW

Partners: Stichting Water Alliance (NL), ZINNAE - Asociación para el uso eficiente del agua (ES), CD2E - Centre de Création et de Développement des Eco-Entreprises (FR), The Water Cluster (Anglia Ruskin University) (UK), EA Éco-entreprises Association (FR), AVAESEN - Asociación Valenciana de empresas del sector de la Energía (ES) and CLEAN (DK)

Objectives:

To identify common transnational thematic priorities at the water-energy nexus and conduct a complementarity, compatibility and readiness check of participating entities to produce an integrated view of the nexus and a Europe-wide hub for innovation.

Main activities:

- Organisation of international trade missions to Morocco and Colombia
- Development of a free-to-access online database of SMEs and companies working in the energy-water nexus space
- Development of a market screening (including SWOT analysis) looking at the emerging opportunities and challenges in which the EnW consortium (and its SMEs) could seek to position themselves

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/enw

LASER-GO

Partners: OPTICSVALLEY (FR), Human.technology Styria GmbH (AT) and LITEK (LT)

Objectives:

To create leads for high-growth companies to access the value chains in the targeted markets by exploring the market needs for specific uses of photonics-driven technology applications developed and commercialized by the cluster companies across the partnership.

Main activities:

- Organisation of overseas missions to five countries (the USA, Canada, South Africa, Singapore and Iran)
- Identification of Key Performance Indicators (KPIs) to measure the success of the partnership
- Identification and contact potential clusters in the field of medical technologies to further develop the partnership

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/laser-go

MobiGoIn

Partners: Baden Württemberg: Connected e.V. (DE), MOV'EO (FR), Fondazione Torino Wireless (IT) and Media Evolution Southern Sweden (SE)

Objectives:

To establish a smart mobility focused ESCP to promote clusters' internationalisation by developing a joint strategy aimed at supporting SMEs in their internationalisation process across and beyond Europe.

Main activities:

- Definition of MobiGoIn's Smart Mobility focus, meaning the kind of solutions and applications the project will help internationalise and the different technologies they involve
- Development of MobiGoIn "Map of competences and Scenario design", a document that brings a global outlook of the different fields of competencies and the envisaged complementarities between the Clusters' members and their network
- Dissemination of the project in events at national and European level

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/mobigoln

MOVE

Partners: Cluster Green Transport (BG), E-Mobility Cluster Regensburg (DE), Bavarian IT-Logistics Cluster (DE), North South Logistics & Transport Cluster (PL), Bulgarian Cluster Telecommunications (BG), CLEVER (IT), Electric vehicles industrial cluster (BG), Canary Cluster for Transports and Logistics (ES), NUMELINK (FR) and Logistics in Wallonia (BE)

Objectives:

To create a new value chain from cross-sectorial and cross border cooperation, as well as to foster SMEs' internationalisation in North Africa and Latin America.

Main activities:

- Perform a study and analysis of strategic partners in Europe
- Analysis of the third countries (Brazil and Morocco) markets
- Organisation of brokerage events targeting third countries (particularly Brazil and Morocco)

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/move

New Frontiers in Food

Partners: FoodValleyNL (NL), VALORIAL (FR), Wagralim (BE) and Vitagora (FR)

Objectives:

To develop a joint internationalisation strategy focusing on three complementary value chains that represent great opportunities of growth at an international level (the market of connected food, the market of functional food and healthy ingredients and the market of processed food product).

Main activities:

- Organisation of missions targeting third countries (Brazil, China, Canada, the USA and South Korea)
- Development of newsletters focusing on the food markets in the target countries

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/new-frontier-food

SmartCityTech

Partners: ADVANCITY (FR), AMEC - Association of the Internationalized industrial companies (ES), Cambridge Cleantech (UK), Cluster SCC - Fondazione Smart Cities & Communities – Lombardia (IT), BrainsBusiness - ICT North Denmark (DK), GAIA - Association of Knowledge and Applied Technologies industries in the Basque Country (ES), Systematic Paris-Region (FR), BICCnet Bavarian Information and Communication Technology Cluster (DE) and DSP Valley (BE)

Objectives:

To facilitate global cooperation between city and smart systems stakeholders aiming at the development and realization of innovative value models for urban areas enabled by smart systems.

Main activities:

- Development of a joint internationalisation strategy focused on three target countries (India, Singapore and the USA)
- Participation in activities organized by other smart city and smart systems stakeholders

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/smartcitytech

SPACE2ID

Partners: Madrid Sustainability and Renewable Energies Cluster (ES), Madrid Aerospace Cluster (ES), TeRN (IT), Logistics in Wallonia (BE), Klaster Inteligentnych Systemów Transportowych (PL), Aerospace Valley (FR), Skywin (BE), CAT.AL, High Technology Agrifood Lombardy Cluster (Parco Tecnologico Padano) (IT), gi-Cluster (EL) and si-Cluster (EL)

Objectives:

To create a sustainable ESCP between European space clusters and other key European business clusters focused on five sectors (referred as MELCA sectors): mobility (i.e., transport of people); energy; logistics (i.e., transport of goods); creative industries (i.e., design, games and music); and agriculture.

Main activities:

- Analysis of the international markets and opportunities of downstream space technologies applications in the MELCA sectors
- Identification of all European and international stakeholders in the MELCA sectors and analysis of the related new value chains
- Organisation of sessions to train the various clusters to the potential of space-based data

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/space2aid

First generation – Strand 2

bioXclusters plus

Partners: BioM Biotech Cluster Development GmbH (DE), bioPmed / Bioindustry Park (IT), Biocat (Bioregion of Catalonia) (ES) and LYONBIOPOLE (FR)

Objectives:

To address the next-decade European challenges related to healthcare and SMEs growth, thanks to a common vision of personalised healthcare as the paradigm for future global healthcare solutions.

Main activities:

- Organisation of eight cluster-to-cluster (C2C) sessions, three fact-finding missions (in Japan, China and the USA) and three inbound missions
- Participation in major international conferences, such as BIO-Europe and BIO USA fairs
- Provision of tailored support services to SMEs (information package, missions abroad, B2B meetings)

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/bioxclusters

EACP ABROAD

Partners: Aviation Valley / Dolina Lotnicza (PL), Aerospace Cluster Auvergne-Rhône-Alpes (FR), Eskisehir Chamber of Industry (TR), HEGAN – Basque Aerospace Cluster (ES), Hamburg Aviation e.V. (DE), Niedersachsen Aviation (DE), AERA – Asociación Aeronáutica Aragonesa (ES) and Aerospace Valley (FR)

Objectives:

To initiate an active exchange of information and knowledge between all partners and to develop and realize concrete steps for long-term trans-national cooperation between clusters and companies for a stronger and more competitive European position in the world aerospace markets (Brazil, Canada, Japan, Mexico, United Arab Emirates and the USA).

Main activities:

- Development of a cluster-level frame of collaborations with six international target regions (those targeted by the joint EACP internationalisation strategy)
- SME-level tangible actions (such as trade missions, BtoB meetings and participation to road-shows), benefiting from cluster-to-cluster collaborations
- Key international opportunities shared with EACP clusters members, and invitations to international partners to participate to European events, to maximize the impact of actions on European SMEs
- Open on complementary horizons and build cross-partnerships collaborations, at cluster level and for clusters members

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/abroad

EU4SPORTSCLUSTERSALL

Partners: Sports&Technology (NL), European Platform for Sport Innovation (BE), Flanders Bike Valley (BE), INDESCAT – Catalan Sports Cluster (ES) and Cluster Montagne (FR)

Objectives:

To implement and test a Joint Internationalisation Strategy for a European Strategic Sport Clusters Partnership (ESSCP), maximizing the potential of its cross-sectoral nature, developing new value chains and exploiting international opportunities for SMEs, especially those existing in third markets outside the EU. The partnership proposes an innovative approach to exploit the cross-sectoral nature of the sports industry. It defines one final consumer (the sports practitioner) and three main value chains: i) sport events ii) sport facilities iii) consumer goods and services.

Main activities:

- Organisation of two international standard actions to China, Japan or the USA

- Cooperation agreements to set up joint international groups to attract new markets
- Reverse missions aligned with EPSI (European Partnership for Sport Innovation) major events
- Study tours to learn from other ESCPs experience in managing international cooperation tools and monitoring methodologies

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/eu4sports

NATUREEF

Partners: VEGEPOLYS (FR), INBIOM – The Danish Innovation Network for Biomass (DK), biomastec (DE), Green Chemistry Cluster (PL), INNOSKART ICT Cluster (HU), FEMAC (ES), CREA Hydro&Energy, z.s. (CZ), Green Synergy Cluster (BG) and Animaforum – Associação para o Desenvolvimento da Agro-Indústria (PT)

Objectives:

To design and implement a joint strategy promoting cross-sectoral cooperation and facilitating the internationalisation of small and medium companies (SMEs) through SMEs mentoring and through the dissemination of their innovative technologies considering a new Natural Efficient Resource Concept.

Main activities:

- Cooperation building with third countries (Brazil, Chile, China, Colombia, Mexico, Peru, Philippines), establishment of cooperation agreements
- Identification of actors, working groups and synergies, including the establishment of ambassadors
- Mentoring support to companies

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/natureef

REINA PLUS

Partners: Oekoenergie-Cluster (AT), Basque Energy Cluster (Cluster de Energía) (ES), Oy Merinova Ab (FI) and EnergyIN – the Competitiveness and Technology Cluster for Energy (PT)

Objectives:

To support and reinforce the internationalisation of European SMEs in selected target markets with high growth potential (Mexico, Brazil, and Chile), and new potential markets

(North America and North Africa) with relevant opportunities, by fostering the collaboration and integration of capacities of companies involved in the four European Energy Clusters.

Main activities:

- Organisation of three business missions to six target markets (Mexico, Brazil, Chile, Morocco, the USA and Colombia)
- Identification, preparation and launch of specific business collaboration initiatives in the target markets, involving SMEs from different European clusters to take advantage of their skills and strengths in an efficient and sustainable way
- Participation in dissemination events to share experience with other ESCPs

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-profiles/reina-plus

Silicon Europe Worldwide

Partners: High Tech NL (NL), Silicon Saxony (DE), Minalogic (FR), mi-Cluster (EL), Fondazione Distretto Green & High Tech Monza Brianza (IT) and DSP Valley (BE)

Objectives:

To implement the internationalisation strategy of Silicon Europe (FP7 project) strengthening the global impact of this European cross-regional ecosystem.

Main activities:

- Organisation of two outbound missions and three inbound missions to Taiwan
- Organisation of one outbound mission and one inbound mission to North Eastern region of the USA
- Selection of third region for the continuation of the internationalisation activities

Website/ ECCP profile: http://www.silicon-europe.eu/projects/silicon-europe-worldwide/project-description/

Second generation – Strand 1

ALLIANCE - Alliance for international business development of advanced materials and connectivity for defence and security markets

Partners: TECHTERA (FR), Cluster SAFE (FR), Pole SCS (FR), POINTEX - Polo Innovazione Tessile (IT), Next Tecnotessile (IT) and SIIT SCPA (IT)

Objectives:

To build a European metacluster in the domain of smart textiles for security and defence, as well as to develop and implement a joint internationalisation strategy to support SME members establishing business and technology collaborations.

Main activities:

- Promote cooperation in the smart textiles sector for safety and defence applications
- Organisation of matchmaking and internationalisation missions in target countries
- Identification of new industrial value chains
- Test and transfer of defence/dual use technologies and products

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/alliance

C4W- Cosmetics4Wellbeing: a driver to international wellbeing industry

Partners: Beauty Barcelona Cluster (ES), AEBB - Beira Baixa Business Association (PT), Cosmetic Valley (FR), France Cluster (FR) and Transylvania Lifestyle Cluster (RO)

Objectives:

To foster cooperation in the European cosmetics sector and related industries, namely technology, health and agrofood, aimed at supporting the internationalisation and strengthen the sustainability of SME members, placing Europe as an international reference in cosmetics.

Main activities:

- Development of new value chains along the cross-sectoral cosmetics industry
- Identification of international trends and most promising markets beyond Europe
- Implementation of an exploratory mission opened to SMEs on a potential target market
- Training sessions to upgrade SMEs and clusters' staff internationalisation competences
- Implementation of the international forum "Cosmetics Clusters Rendez-vous"

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/cosmetics4wellbeing-c4w

DIA - European Digital Industry Alliance

Partners: MITC - Malardalen Industrial Technology Center (SE), GAIA - Association of Knowledge and Applied Technologies Industries in the Basque Country (ES), MESAP Innovation Cluster - Smart Products and Manufacturing (IT), TICE.PT - Associação para o Pólo das Tecnologias de Informação, Comunicação e Electrónica (PT), BalticNet - PlasmaTec e.V.v (DE) and SCS - Secured Communicating Solutions cluster (FR)

Objectives:

To support the development, commercialisation and internationalisation of digital technologies, products and services applied to manufacturing and industry ("Industry 4.0"), driving the innovation and competitiveness of the SME members.

Main activities:

- Building a global value chain based in digital technologies applied to manufacturing and industry
- Commercialisation of different technologies, products and services developed by the consortium
- Formulation of an 'universal' method for cross-sectoral collaboration between clusters at a European interregional level to develop and commercialise frontline innovations, which can be transferred to other sectors and contexts, namely, smart specialisation strategies
- Identification of European clusters and relevant initiatives to establish cooperation agreements
- Organisation of regional workshops, study visits and mentoring activities to increase cross-fertilisation and cross-knowledge

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/discp

ELBE- Europe Leading Blue Energy

Partners: Aberdeen Renewable Energy Group (UK), Flanders' Maritime Cluster (BE), OffshoreVäst (SE), Offshoreenergy.dk (DK) and Basque Energy Cluster (Cluster de Energía) (ES)

Objectives:

To position Europe as the world technological and industrial leader in Blue Energy, laying the foundations to build a pan-European cross-border and cross-sectoral value chain in Blue Energy with a clear internationalisation focus.

Main activities:

- Identification of business and internationalisation opportunities in the Blue Energy sector
- Establishment of strategic collaborations with companies and R&D entities in leading countries
- Implementation of exploratory missions to potential target markets
- Identification of key technology challenges in terms of affordability, performance or standardisation
- Attendance to specific sectorial conferences across Europe

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/elbe

EU KETs4Dual-Use - European Key Enabling Technologies for Dual-Use Worldwide

Partners: Photonics cluster OPTITEC (FR), CenSec (DK), Estonia Defence Industry Association (EE) and Minalogic (FR)

Objectives:

To act as a "springboard" for European dual-use companies wishing to integrate global value-chains and facilitate the development of sustainable long-term partnerships, notably to support the internationalisation of SME members.

Main activities:

- Narrow down the number of strategic market segments to be addressed
- Trailblazing the KETs dual-use markets by organising fact-finding missions in selected third countries
- Building a sustainable partnership able to foster internationalisation of SMEs

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/eu-kets4dual-use

FoodNet - Food in Eco Network

Partners: LODZistics Logistics Business Network of Central Poland (PL), Latvian logistics association/ Latvian Supply chain Cluster (LV), Logistics in Wallonia (BE), Asociatia Clusterul Agro-Foodind Napoca (RO) and Asociacion de Organizaciones de Productores de Frutas y Hortalizas de Almeria (ES)

Objectives:

To establish an EU wide meta-cluster to support innovation, market-uptake, and marketing of competitive products, services and technologies in the field of food and eco-logistics and support SME members in global competition.

Main activities:

- Enhance SMEs capability to be more competitive on the food market
- Local training for clusters to improve business processes and learn from new business models
- Bring added value to the all participants through different activities
- Implementation of eco-management aimed at lowering negative impact on environment
- 1st and 2nd FoodNet conferences and Food in Eco Network set-up

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/foodnet

FoodPackLab - Photonics-Packaging Partnership for Food Innovation

Partners: Photonics cluster OPTITEC (FR), Packaging Cluster (ES), foodRegio (DE), OPTICSVALLEY (FR), Food-Processing Initiative e.V. (DE) and SECPhO - Light Technologies Cluster (ES)

Objectives:

To foster synergies between photonics, packaging and food industries towards current worldwide challenges such as food processing, security and hygiene, reducing of food waste and circular economy in packaging procedures, to position Europe as an international reference in the food sector.

Main activities:

- Development of new food value chain methodologies, with special emphasis in food packaging
- Enhance SMEs capability to be more competitive on the food market
- Support SME members exports to third countries facing challenges in this sector
- Organisation of partnership building and brokerage events

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/foodpacklab

GCA - Global Content Alliance

Partners: Transmedia Bayern (DE), Pole Media Grand Paris (FR), TWIST (BE) and Media Evolution Southern Sweden (SE)

Objectives:

To reinvent the Live Experience and Live Entertainment thanks to new innovative, interactive and immersive content formats, services and technologies, and extending such new user experiences to other markets, i.e. leisure parks, tourism, museography, fairs, events, education, training, smart city, mobility or well-being. It also intends to optimise SMEs business models by adopting digital marketing approaches and emerging digital technologies

Main activities:

- Scouting and identification of new possible clusters to be included in the ESCP
- Identification of additional public and private co-financing opportunities to ensure sustainability
- Definition and establishment of a common scope and governance model

- Promote and participate in events to find new partners/customers and market-entry facilitators.

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/gca

GEO-ENERGY EUROPE - Geo-Energy for the XXI Century

Partners: GeoEnergy Celle e.V. (DE), AFPG – GEODEEP (FR), Jeotermal Elektrik Santral Yatırımcıları Derneği (TR), POLE AVENIA (FR), GEOPLAT (ES), Geoscience Ireland (IE) and Cluster of Applied Earth Sciences (HU)

Objectives:

To build a European label focused in the sustainable use of the subsurface for energy, or "Geo-Energy", promoting export opportunities, cooperation in know-how and technology transfer with third countries in the field.

Main activities:

- Partnership showcase at an international event in a third country with high market potential
- Promotion of deep geothermal energy industry, in line with the European energy transition goals

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/geo-energy-europe

GIVE - Green Ict deVElopment

Partners: Automotive Cluster Bulgaria (BG), Green-Tech Cluster (LV), Automobilski klaster Srbije (SRB), ICT Cluster of Central Serbia (SRB), MASIT - ICT chamber of commerce (MKD), ICT Cluster (BG), Albanian ICT Association (ALB) and Cluj IT Cluster (RO)

Objectives:

To build up a sustainable cross-industry partnership in the field of smart green technologies among three vital industries - automotive, renewable energy and ICT - aimed to find smart solutions for addressing global environmental challenges.

Main activities:

- Organisation of three focus groups meetings to lay the foundations of GIVE
- Support SME members internationalisation in target markets beyond Europe
- Implementation of internationalisation capacity building webinars for cluster managers and SMEs
- Develop commercially valuable and trustworthy relations among GIVE partners

- Foster complementarities among ICT, automotive and green technology sectors
- Raise local awareness and dialogue on cross-clusters and cross-industry collaboration and SME internationalisation in the field of smart green technologies, automotive and ICT

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/give-0

IDEEO - Internationalisation & Diversification of European Earth Observation

Partners: Cluster Lucano di Bioeconomia (IT), EARSC - European Association of Remote Sensing Companies (BE) and Pole Mer Bretagne Atlantique (FR)

Objectives:

To internationally promote the European Earth Observation (EO) capability, facilitating the internationalisation of SME members within those sectors with the highest export potential such as marine, agriculture, energy, etc.

Main activities:

- Participation in European events to promote IDEEO
- Identification of sectors with a great export potential for the European EO based solution companies
- Implementation of workshops, matchmaking events and internationalisation missions
- Signature of memorandum of understanding with relevant organisations

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/ideeo

MAGIA - Medtech Alliance for Global InternationAlisation

Partners: Life Science Nord (DE), BioWin (BE), bioPmed / Bioindustry Park (IT) and LYONBIOPOLE (FR)

Objectives:

To foster internationalisation, strengthen competitiveness and enhance SMEs visibility through a solid alliance of European value in the medtech sector, based on cooperation and resource-sharing, to promote innovation and constitute a single-entry point for global players, ultimately strengthening the position of the European medtech industry on the global scale.

Main activities:

- Promote knowledge exchange and adoption of best practices among members

- Provide a coordinated, joint strategic support to SMEs
- Mutual study visits and detailed assessment of internationalisation needs
- Training actions to prepare clusters and SMEs towards market needs
- Implementation of fact-finding and networking missions in the target markets identified

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/magia

PERES Partnership - Promoting European Rail Excellence outSide EU

Partners: Rail Alliance (UK), Railway Cluster for South-East Europe (SBR), DITECFER - District for Rail Technologies, High Speed, Safety & Security (IT), BTS Rail Saxony (DE) and TTP i-Trans - competitiveness cluster (FR)

Objectives:

To promote cross-border and cross-sectoral cooperation between SMEs and other relevant stakeholders in the European railway sector and to identify the most suitable channels and tools to facilitate their internationalisation processes outside the EU.

Main activities:

- Exploit and promote existing support programmes for SME internationalisation among RSI members
- Support preparatory actions for the establishment and shaping of the PERES ESCP-4i
- Widen the application domains and markets, identifying and anticipating emerging innovation trends and helping companies build their competitive position upon them
- Catalyse interregional opportunities to deliver appropriate solutions to the market
- Identify good practices, methodologies and tools for internationalisation of SMEs
- Implement training programmes directed towards cluster managers, to improve their internationalisation competences

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/peres-0

PIMAP Partnership – Photonics for International Markets and APplications

Partners: ALPHA-RLH Route des Lasers et des Hyperfréquences (FR), Joensuu Science Park (FI), PRODUTECH - Production Technologies Cluster (PT) and Triple Steelix 2.0 / Jernkontoret (SE)

Objectives:

To support clusters, their SMEs and other regional ecosystem actors to leverage photonics and microwave technologies in key emerging industries, driving the industrial modernisation in Europe, providing a springboard for SME members, and promoting European growth.

Main activities:

- Development of cross sectoral collaborations between photonics technology and advanced manufacturing applications and solutions in relevant European industrial sectors
- Implementation of actions aimed to support Smart Manufacturing at regional and European level
- Exploitation and deployment of photonic enabled industrial applications in target markets
- Find complementarities in the consortium to present complete and consolidated PIMAP value chains
- Reinforce the positioning of photonics led cross fertilisation into the regional development schemes and influence regional policy makers and related stakeholders regarding the Smart Specialisation Strategies and Industrial Modernisation policies
- Formalise cooperation agreements with relevant European and international clusters
- Support and awareness raising to SMEs members and prepare them confront global markets, unlock opportunities and find the right partners

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/pimap-partnership

SENTINEL - Cluster Network for Hospitality Sustainable Development and Internationalisation

Partners: CWP - Catalan Water Partnership (ES), CENFIM (ES), Fondazione Torino Wireless (IT) and Oekoenergie-Cluster (AU)

Objectives:

To enable SMEs going international, integrating themselves in a global value chain, towards emerging markets in the hospitality sector.

Main activities:

- Develop market intelligence studies on new and emerging markets where hospitality is growing
- Enable SME members to acquire the necessary skills to start an internationalisation process
- Integrate complementary clusters in a global value chain for the hospitality sector within Sentinel
- Team building visits for cluster staff and online networking activities for SME members
- Implementation of exploratory missions to validate the target markets considered

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/sentinel

SpaceWave - Clusters waving the flag to the internationalisation of European SMEs taking advantage of the cross-sectoral dimension of Earth observation for Blue Growth market

Partners: Aerospace Valley (FR), Distretto Tecnologico Aerospaziale (IT), Marine South East Ltd (UK) and Pôle Mer Méditerranée - Business & Innovation Sea Cluster (FR)

Objectives:

To position Europe in the most promising international markets of downstream Earth Observation in Blue Growth, anticipating emerging trends and sectoral challenges where EO could provide value-added solutions.

Main activities:

- Identification of Blue Growth market trends and the most promising EO technologies
- Enabling expansion into international markets for Earth Observation SMEs in Blue Growth
- Definition and establishment of value chains capable of delivering EO services for Blue Growth
- Promotion of members expertise at European and international level
- Collaboration with other actions that support SMEs business deployment

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/spacewave

Strand 2

Adpack2 - European Strategic Cluster Partnership for Advanced Smart Packaging

Partners: Packaging Cluster (ES), Nanoprogress z.s. (CZ), PLASTIWIN (BE), InovCluster - Associação do Cluster Agroindustrial do Centro (PT), BalticNet-PlasmaTec e.V (DE) and Secured Communicating Solutions cluster (FR)

Objectives:

To foster cross-sectoral cooperation between the European clusters in the partnership and their SME members, as well as to support their SME members in going international and positioning them in the advanced smart packaging global value chain.

Main activities:

- Training and knowledge sharing actions to prepare SMEs to go international
- Cooperation agreements with international business and research intermediaries in target countries
- Implementation of fact-finding and business internationalisation missions
- Establishment of ambassadors in target markets (Canada, China and US), to provide services to AdPack2 SMEs

- Support the establishment of business partnership agreements to develop joint collaborative projects
- Exit strategy in order to continue internationalisation support activities after the project lifetime

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/adpack2

Cosmenerg – 4i - Global Clusters for Renewable Energy and Environmental Technologies

Partners: Instytut Maszyn Przepływowych im Roberta Szewalskiego Polskiej Akademii Nauk - Baltic Eco-Energy Cluster (PL), Netzwerk Energie & Umwelt e. V. (DE), Cluster for ecological culture and ecological energy Ecopanonia (RS), ArchEnerg Cluster (HU) and GREEN ENERGY Romanian Innovative Biomass Cluster (RO)

Objectives:

To foster international networking and collaboration and to actively engage in globally competitive value chains in the emerging industries of eco-, bio-energy, renewable energy and environmental technologies to enhance the technological transfer from environmentally destructive business processes to a green economy at European level and beyond, with a view to support growth, jobs and investment in Europe.

Main activities:

- Reinforce cluster collaboration to support the internationalisation of members in target markets
- Provide SMEs concrete opportunities for internationalisation through training, networking and matchmaking events, joint business initiatives, joint technology and investment forums and integrating them into globally competitive value chains
- Foster and generate joint projects with selected partners from the target markets (Indonesia, Israel, Jordan, Malaysia, Qatar, Singapore, United Arab Emirates and Viet Nam)

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/cosmenerg-4i

EC2i - European Cleantech Internationalization Initiative

Partners: TENERRDIS (FR), Green Tech Cluster Styria (AT), Sustainable Business Hub (SE), TWEED (BE) and CLEAN (DK)

Objectives:

To stimulate internationalisation of innovative European SMEs into large and dynamic cleantech markets with high growth potential (the US and China). In addition to this,

establishing and developing strategic partnerships with stakeholders in the target markets through the identification of local market opportunities, raising the profiles of European SMEs, and pursuing opportunities for collaborative business development.

Main activities:

- Organise four matchmaking missions in the target countries (United States and China)
- Develop tools to help SMEs enter new markets, guide them in forming cross-sectoral, multinational consortia along value chains to deliver integrated products and services
- Arrange meetings between project owners and solutions suppliers as well as potential local partners

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/ec2i

ESCT Go Global - European SmartCityTech Go Global

Partners: House of Energy (DK), AMEC - Association of the Internationalized industrial companies (ES), Cluster SCC - Fondazione Smart Cities & Communities – Lombardia (IT), BrainsBusiness - ICT North Denmark (DK), GAIA - Association of Knowledge and Applied Technologies industries in the Basque Country (ES), Systematic Paris-Region (FR), BICCnet Bavarian Information and Communication Technology Cluster (DE) and DSP Valley (BE)

Objectives:

To obtain international visibility and recognition through the development of international activities in the SmartCityTech field and the promotion of the collaboration among stakeholders from the different regions by pushing the increase of international partnerships and agreements between international stakeholders in the SmartCityTech field.

Main activities:

- Organisation of twelve workshops
- Organisation of four matchmaking events
- Attendance to four international exhibitions
- Establishment of relationships with smart city stakeholders in target markets (India, Singapore, United States)

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/esct-go-global

EU-TEXTILE2030 - European Advanced Textile Materials World-Class Cluster EU-TEXTILE2030

Partners: SACHSEN!TEXTIL (DE), Polo Innovazione Tessile - POINTEX (IT), TECHTERA (FR), UP-tex (FR), CLUTEX - klastr technicke textilie, z.s. (CZ), AEI TÈXTILS (ES) and ATEVAL-Asociación de Empresarios Textiles de la Comunidad Valenciana (ES)

Objectives:

To implement joint international activities for the direct benefit of the clusters' members, by targeting four countries of great potential in terms of business (supply/demand) and technological opportunities.

Main activities:

- Organisation of official trips, including meetings, visits to key research infrastructures, trade fairs, etc.
- Coaching to companies participating in the official trips
- Establishment of contacts with international partners in order to organize joint activities
- Preparation of cooperation agreements between the partnership and international business and/or research intermediaries in the target countries (Colombia, Israel, Japan, South Africa, Taiwan)
- Participation at international exhibitions with a joint stand

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/eu-textile2030

LASER-GO GLOBAL - European Cluster Partnership in Photonics for Health

Partners: Optence e.V., Kompetenznetz Optische Technologien Hessen/Rheinland-Pfalz (DE), MEDICEN PARIS REGION (FR), OPTICSVALLEY (FR), Human.technology Styria GmbH (AT), LITEK (LT) and Biocat (Bioregion of Catalonia) (ES)

Objectives:

The project aims to further develop the European Strategic Cluster Partnership in Photonics for Health into a Global Value Network bringing together six clusters from five EU countries from the healthcare, health tech and photonics sectors.

Main activities:

- Development of value mapping analysis tools that will gather intelligence about the unmet market needs in the target markets and create a network of technology scouts and the network representatives from the local photonics and health tech ecosystems
- Organisation of trade missions to the US West Coast, the US East Coast, South Korea, Japan and Israel for clusters and SMEs internationalisation
- Showcase 30 European champions

- Preparation of a roadmap for the development of the partnership after the completion of the project

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/laser-go-global

MobiGoIn-Action - Mobility Goes International - In Action

Partners: Baden Württemberg: Connected e.V. (DE), MOV'EO (FR), Fondazione Torino Wireless (IT) and Media Evolution Southern Sweden (SE)

Objectives:

Support the internationalisation of the European SMEs related to smart mobility and smart cities. For that purpose, this project aims to build a Cooperation Partnership with international stakeholders in two identified World Regions (1. USA-Canada and 2. China-Singapore) and initiate business collaborations for European SMEs in two target markets (Automotive and Smart Cities) in the field of technological innovation for smart mobility.

Main activities:

- Organisation of acceleration workshops for selected European Smart Mobility SMEs and start-ups focused on the target markets: 1) USA-Canada, 2) China-Singapore
- Organisation of European matchmaking events for the companies focused on the target markets: 1. USA-Canada in Nov. 2018 at Paris. 2. China-Singapore in 2019
- Organisation of International Missions to the target markets: 1. USA-Canada area at the beginning of 2019. 2. China-Singapore around summer2019

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/mobigoin-action

NF4 - New Frontiers in Food Fast Forward

Partners: FoodValleyNL (NL), VALORIAL (FR), Wagralim (BE) and Vitagora (FR)

Objectives:

The overall objective of this project is the operational development of the joint internationalisation strategy defined by the clusters partnership, a smart strategy based on an original combination of various interconnected specializations, and lessons learned from the initial « Clusters Go International » project New Frontiers in Food. The focus of the NF4 is to shift from intermediaries to end-users, our flagship food-SMEs.

Main activities:

- Organisation of four trade missions to Canada, the USA (March 2019), China (May 2019) and Brazil

- Participation in four Tech Road Shows in Europe to stimulate interaction and collaboration
- Development of an international acceleration programme which includes a package of international support services (anchored on the clusters organisations) to high-potential SMEs, which are candidates and determined to accelerate their development internationally

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/nf4

SPACE2IDGO - Space Clusters International Industrial Diversification

Partners: Cluster Lucano di Bioeconomia (Agenzia Lucana di Sviluppo e di Innovazione in Agricoltura) (IT), Madrid Aerospace Cluster (ES), TeRN (IT), Logistics in Wallonia (BE), Aerospace Valley (FR), Skywin (BE), gi-Cluster (EL) and si-Cluster (EL)

Objectives:

To propose an innovative support towards SMEs willing to go international; diffuse the added value of space data in MELCA value chains; and develop business between European SMEs and new abroad partners/customers.

Main activities:

- Provide a complete set of services towards SMEs which will be constituted of trainings, workshops, match-making missions, support to business agreement writing and personal follow-up
- Promote the signature of cooperation agreements in target countries (Canada, Chile, China, Colombia and United Arab Emirates)
- Monitoring the target countries in order to identify opportunities
- Fostering the emergence of business opportunities between European SMEs and abroad partners

Website/ ECCP profile: www.clustercollaboration.eu/escp-profiles/space2idgo

Presentation of ESCP-S3

AI4DIAG

Partners: Eurobiomed (FR), Flanders.Bio (BE), Arahealth (ES), Tuscany Life Sciences Foundation (IT) and Tallinn Tehnopol (EE)

Objectives:

To foster the transformation of the medical diagnostics companies' business model towards a wider use of Big Data and Artificial Intelligence.

Main activities:

- Collective actions (Workshops and training sessions, matchmaking event etc.)
- Individual acceleration activities (strategic, technologic and business support with experts)
- Common roadmap for the Clusters-Regions partnership

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/ai4diag

Connsensys - Connecting smart sensor systems for the food industry

Partners: Flanders' FOOD (BE), INNOSKART ICT Cluster (HU), Campden BRI Hungary (HU), Food-Processing Initiative (DE), ASINCAR (ES), ViaMéca (FR), Galicia Food Cluster (CLUSAGA) (ES) and Technology Institute of Galicia (ES)

Objectives:

To encourage the partnering process in relation to the key drivers of industrial modernization in the food industry, such as digital transformation. The industrial thematic areas of the partnership include: advanced manufacturing, digital transformation/industry 4.0 and big data analytics.

Main activities:

- Set-up a platform, including a joint cluster partnership strategy and partnership agreement to establish a partnership, an implementation roadmap and interregional investment projects;
- Set-up a network of open access living labs, where smart sensor systems can be demonstrated, tested and where training sessions and workshops can be organised in order to facilitate the implementation of the smart sensor systems and IoT-based technologies;
- Study visits;
- Demonstrations;

- Development of a Technology Catalogue to support matchmaking and the development of investment projects.

Website/ ECCP profile: www.clustercollaboration.eu/escp-s3-profiles/connsensys

Cyber Secure Light

Partners: Rete di imprese luce in Veneto (IT), Domotys (ES), Construction cluster of Slovenia (SI), Secured Communication Solutions (FR), European Lighting Cluster Alliance (IT), SIPH Chamber of industry and commerce (PL), Staropoloska (PL), Construction Cluster INNOWATOR (PL) and Archenerg Solartech delafoldi fejleszto estermelo nonprofit KFT (HU)

Objectives:

To develop a Joint Cluster Partnership Strategy to pursue proactive and business-oriented cross-sector cooperation of SMEs and industrial clusters of the IoT smart building value chain, with a particular focus on the security aspects.

Main activities:

- Design customised open matchmaking process, to foster interregional business-to-business collaboration deals for innovation and smart investments, between SMEs members of the regional clusters concerned by the project as well as other companies, relevant R&D providers and other stakeholders representing strategic market players for companies' growth in the smart building/IT/cyber security sector;
- Design customised capacity building and sharing cyber security knowledge and skills to reinforce cluster-to-cluster cooperation amongst the consortium partners toward;
- Implement SME-oriented technology transfer opportunities necessary to guide the companies in their innovation-led development and international market exposure;
- Individuate 12 innovative and market promising pilot business cooperation initiatives and technology transfer projects and provide them highly-expertise mentoring and support to facilitate commercial alliances, access to finance and investments, and technology transfer cooperative agreements;
- Support the development of cluster bridges with other complementary ecosystem actors to enlarge the CYBER SECURE LIGHT consortium;
- Investigate new development and cooperation opportunities;
- Stabilise and regulate the CYBER SECURE LIGHT consortium in order to ensure durability of its inter-cluster cooperation and joint business support service and enlarge its membership of additional strategic partners.

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/cyber-secure-light

DIGICLUSTERS

Partners: Association of Lithuanian Printing Industries (LT), Food Products Quality Cluster (LV), LPKC – Latvian Food Competence Centre (LV), LIKTA - Latvian Information and Communications Technology Association (LV), Latvian Information Technology Cluster (LV), UNIMOS Foundation (PL), Latvian Federation of Food Companies (LV), OnGranada Tech City (ES), Lithuanian Food Exporters Association (LT), SMART food cluster (LT) and Lithuanian Innovation Center (LT)

Objectives:

To speed up industrial modernisation of agrofood & packaging sectors towards Industry 4.0 and digital transformation by Cluster-Facilitated X-Industry Hackathons.

Main activities:

- Development of a joint cluster partnership strategy;
- Implementation of joint activities to strengthen cluster cooperation amongst the partners (C2C);
- Hackathons - Implementation of joint activities of the partners to mobilize interregional business collaboration projects for innovation and investments (B2B);
- New investments & sustainability activities;
- Dissemination and learning activities.

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/digiclusters

EACN – European Automotive Cluster Network

Partners: Clúster de la Industria d'Automoció de Catalunya (ES), Automotive Cluster Bulgaria (BG), Silesia Automotive & Advanced Manufacturing - KSSE SA (PL), Véhicule du Futur (FR), Automobilski klaster Srbije (SRB) and Galician Automotive Cluster (CEAGA) (ES)

Objectives:

The European Automotive Cluster Network for joint Industrial Modernisation Investments (EACN) aims at initiating joint R&D projects and investments teaming partners from different European regions. The focus is set on virtualisation of processes, robotics and artificial intelligence, elasticity of production, and skills and competencies. Physical and virtual workshops and matchmaking events will allow building a pipeline of joint collaboration and innovation projects which are realized with the support of the EACN clusters and companies, technology centres or science parks with complementary skills.

Main activities:

- Five selected projects will benefit from a financial co-contribution for an external expert support to shape their joint project or business proposal to viable and bankable documents.
- EACN promotes interregional collaboration between the concerned Regional Authorities in the field of industrial modernisation in the automotive industry, secure the long-term cooperation of the engaged clusters through a common European EACN partnership strategy, and prepare EACN to the future with more member clusters.
- EACN contributes to EC's policies (e.g. 'For a European Industrial Renaissance', 'Investing in a smart, innovative and sustainable industry' and others) and to the S3 platform's thematic areas 'Efficient and Sustainable Manufacturing' or 'SME integration to Industry 4.0'.

Website/ ECCP profile: https://www.clustercollaboration.eu/content/eacn

EACP-EUROSME

Partners: Campania Aerospace District (IT), Hamburg Aviation (DE), TeRN (IT), Aerospace Valley (FR), Moravian Aerospace Cluster (CZ) and NorthWest Aerospace Alliance (UK)

Objectives:

To improve the global competitiveness in Europe through intense inter-cluster collaboration. This goal is pursued within three major field of action: knowledge exchange, push innovation, strengthen EU position.

Main activities:

- Presentations and discussion on best practice conducted at regular EACP meetings;
- Participation in the European Strategic Cluster Partnership (ESCP), which allows for the exchange of experience and knowledge regarding economic, political and social developments that affect aerospace and other industry sectors;
- Monitor and evaluate regional, national and EU calls;
- Develop skills and qualification among the existing and future Aerospace workforce;
- Actively supports opportunities to initiate B2B cooperation, such as AEROMART, the European Cluster Collaboration Platform (ECCP), EU missions for growth and the Enterprise Europe Network (EEN);
- Strategic assessment of future technological fields as well as collaborations with strategic actors;
- Support the efforts of other institutions such as ASD, ACARE, CleanSky, EASN, Sesare and EEN

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/eacp-eurosme

S3martMed

Partners: Lyonbiopole (FR), Biowin (BE), BioPmed (IT), MedSilesia (PL) and BioRegio Stern (DE)

Objectives:

To foster interregional and cross-sectoral cooperation between European clusters and their SME members in the field of medical technologies through the establishment of a unique cluster partnership.

Main activities:

- Organisation of B2B and C2C networking at interregional level, involving SMEs, Technological centres and key stakeholders from the partners' regions
- Business activities dedicated to Medtech SMEs
- Assessment of the business / financial readiness of the project and defining potential investment plan as pilot cases

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/s3martmed

TEX4IM

Partners: Astrico Nord-Est Association (RO), ATEVAL - Asociacion de Empresarios Textiles de la Region Valenciana (ES), CLUTEX - Klastr Technicke Textilie (CZ), OTIR2020-TFC-Next Technology Tecnotessile (Tuscana Fashion Cluster) (IT), PO.IN.TEX - Polo di Innovazione Tessile (IT), UP-tex (FR), Centro Tecnológico das Indústrias Têxtil e do Vestuário de Portugal (PT) and Smart Textiles (Hoegskolan I Boras) (SE)

Objectives:

To set up sustainable incubator and accelerator system for the generation of joint investment projects in TC and other related or cross-linkable sectors, to develop a joint strategy for industrial modernisation of TC sector of Europe; and to accelerate the uptake of innovation and increase of production by TC SMEs, thanks to a more focused and effective R&D matching and a more efficient design of new business models and value chains.

Main activities:

- Mapping of KETs and TC players
- Matchmaking events
- Project incubation
- Pilot cases implementation

Website/ ECCP profile: https://www.clustercollaboration.eu/content/tex4im

TRACK

Partners: Greenport West-Holland (NL), Clust-ER Agroalimentare (IT), Agro Transilvania Cluster (RO) and Fundacion Corporacion Tecnologica de Andalucia (ES)

Objectives:

To track opportunities to develop and strengthen data collection and big data in agri-food chain to increase competitiveness of SMEs.

Main activities:

- Management
- Strategy
- Innovation and business facilitation
- SMEs training and mentoring
- Communication and cross-fertilization toward implementation

Website/ ECCP profile: https://www.clustercollaboration.eu/escp-s3-profiles/track

Annex 2 - European Observatory for Clusters and Industrial Change in brief

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) [105]. 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;

[105] https://www.clustercollaboration.eu/

- **"Regional Eco-system Scoreboard for Clusters and Industrial Change"** that identifies and captures favourable framework conditions for industrial change, innovation, entrepreneurship and cluster development;
- **Updated European Service Innovation Scoreboard** [106] , 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 entrepreneurships 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 early 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 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: www.clustercollaboration.eu/eu-initiatives/european-cluster-observatory

[106] 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

European Commission

European Observatory for Clusters and Industrial Change

Luxembourg: Publications Office of the European Union, 2019.

Print	ISBN 978-92-9202-491-8	DOI 10.2826/461437	EA-01-19-459-EN-C
PDF	ISBN 978-92-9202-490-1	DOI 10.2826/597536	EA-01-19-459-EN-N

Print ISBN 978-92-9202-491-8 DOI 10.2826/461437 EA-01-19-459-EN-C
PDF ISBN 978-92-9202-490-1 DOI 10.2826/597536 EA-01-19-459-EN-N