

tactics

tactics

tactics

Better cluster policies and tools for implementation

Cluster internationalisation

For its covers, TACTICS series of publications gets inspiration from several works of art or uses digital pictures recalling the positivist and optimistic vision of pictorial movements flourished between the XIX and XX century. Each image can be given an interpretation according to the main message of the publication. The works were chosen because their subject and the use of the light and the colours can be easily associated with the idea of innovation, movement and progress embodied by the clusters.

Cover credits: StudioLanza.

The image of a series of small water rings expanding out recalls the idea of a cluster opening up and going through an ever-going process toward ambitious international goals.

This publication is released with no commercial purposes. The cover image, inspired by the above-mentioned work, has been freely reworked by the authors.

Cluster internationalisation

handbook

WHAT IS TACTICS?

TACTICS (*Transnational Alliance of Clusters Towards Improved Co-operation Support*) aims at supporting and further expanding the European Cluster Alliance, and contributes to the development of better cluster policies and practical tools for implementation in Europe. The project is one of the three INNO-Nets within the PRO INNO Europe initiative under the Commission's Competitiveness and Innovation Programme from DG Enterprise and Industry.

TACTICS, coordinated by **OSEO**, the French national organisation supporting SMEs and mid-caps development, brings together seven of Europe's leading national and regional innovation and cluster policy organizations – namely **VINNOVA** (SE), **TMG Upper Austria** (AT), **Manchester Metropolitan University** (UK), **IWT Flanders' Innovation Agency** (BE), **Veneto Innovazione** (IT), and **PARP** (PL). The partners, committed to improving policy cooperation and with a track record of experience with clusters, have been assisted by a Reflection Group of external cluster policy experts.

Six task forces discussed actual or proposed policy actions, coming up with concrete policy recommendations on the following topics relevant to cluster policy: fostering international cluster cooperation, channelling RDI funding through excellent clusters, fostering user-driven innovation through clusters, supporting cluster marketing and branding, evaluating impact of cluster-based policies, using excellent clusters to address emerging industries (including innovative services).

TACTICS claims that cluster initiatives can

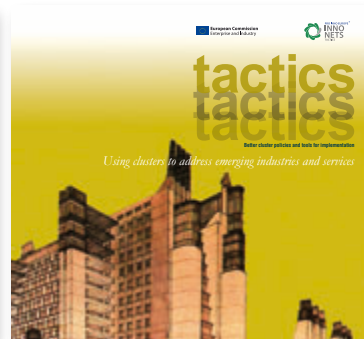
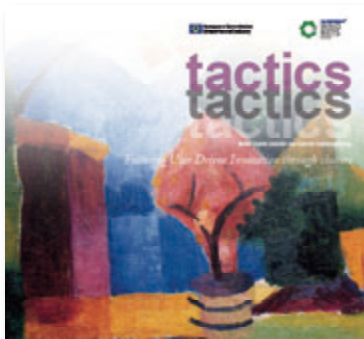
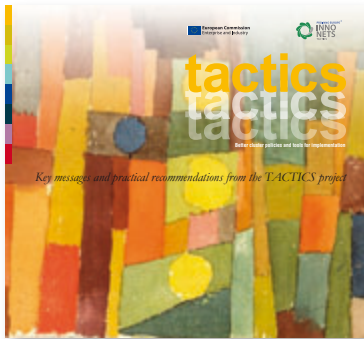
- improve the performance of the innovation support system
- leverage the renewal of European industry
- engage SMEs in research and innovation support programmes
- play an important role within smart specialization strategies
- gain competitive advantage by internationalising, boosting their visibility and attractiveness, and involving users in innovation processes.

TACTICS RESULTS

TACTICS gives a fresh outlook on trends in cluster policy and provides a toolbox to policy makers and practitioners on how to better use clusters for economic development, through a set of documents:

- **Key messages and practical recommendations from the TACTICS project** highlights three key messages for policy makers with recommendations on concrete actions and implementation. The document is based on cluster trends in Europe and conclusions from TACTICS' six task forces.
- **Cluster internationalisation**
The handbook provides a practical guide, illustrated with tools and case studies, for policy makers and cluster managers to address the "Why?" for internationalisation and to progress through the ten steps of the Internationalisation Journey.
- **Cluster marketing and branding**
The handbook examines different cases of cluster branding strategies with a view to draw useful recommendations for policy makers, bringing about concrete suggestions for the improvement of cluster policies.
- **Impact evaluation of cluster-based policies**
The guide suggests concrete steps for setting up an evaluation process of cluster-based policies. The document, targeting policy makers and other cluster stakeholders, is a practical guide supported and explained by several cases.
- **Fostering User-Driven Innovation through clusters**
The guide provides practical advices for cluster organizations to support their member companies with the implementation of User-Driven Innovation and recommendations to policy makers to develop and implement appropriate policies.
- **Channelling RDI funding through clusters**
The paper proposes a focus on the capacity of clusters/cluster organisations to attract and manage RDI funding, including new activities, actors and the role within smart specialisation strategies. It also provides TACTICS' contribution to the State Aid rules consultation for clusters.
- **Using clusters to address emerging industries and services**
The paper tackles the issue of using clusters to catalyse emergence of new industries and renewal/upgrade of well-established ones. The document summarizes case examples and discussions held with participation of TACTICS partners and external experts.
- **Where the cluster winds are blowing in Europe**
The paper includes contributions from about 30 European regional and national policy making organisations, and highlights the trends in the use of clusters as a tool for innovation and economic growth, today and in the future.

You can download TACTICS publications at: www.ECA-TACTICS.eu



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This work has been coordinated by Manchester Metropolitan University, with the contributions of TACTICS partners and Reflection Group members.

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Bill Greenhalgh

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This publication has been produced as part of the PRO INNO Europe initiative. The views expressed in this report, as well as the information included in it, do not necessarily reflect the opinion or position of the European Commission and in no way commit the institution.
This publication is financed under the Competitiveness and Innovation Framework Programme (CIP), which aims to encourage the competitiveness of European enterprises.

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Executive Summary

There are increasing opportunities for European businesses in the global markets for products and services. The internationalisation of excellent cluster organisations, supported by excellent cluster policies, can help businesses, especially SMEs, to improve their competitiveness and maximise their presence in global value chains.

The internationalisation of cluster organisations covers a range of activities that will produce benefits for the businesses in the cluster, especially SMEs, and for the region and country in which the cluster is located:

- **Access to Knowledge, to use in new products & services**
- **Access to new Markets**
- **Access to key Infrastructure**
- **Access to new Partners for collaboration**
- **To raise Profile**
- **To attract mobile Foreign Direct Investment**

The structure of the Handbook uses the ten steps in the “Internationalisation Journey” diagram plus the linking themes, eg networks, funding etc. The Journey starts with an inward looking “local” cluster and ends with an outward facing “global” cluster.

For each step of the Journey there is:

- An overview of current knowledge and the rationale for intervention
- A summary of useful tools which are available
- A list of practical examples including extracts from the case studies collected by the TACTICS Task Force on cluster internationalisation
- Checklists for cluster organisations and policy makers to determine whether they should proceed to the next step

The steps of the Journey group into three phases:

- **Get Ready** – the initial steps which should be accomplished before significant international activity occurs
- **Take Action** – the steps for setting up, carrying out and evaluating projects or collaborations
- **Use Networks** – the steps for using, sustaining and revitalising both formal and informal networks

Utilise Funding is a crosscutting theme that is relevant to all the steps in the Journey.

The full versions of the case studies will be available in the on-line version of the Handbook. This can be accessed from the new TACTICS/ European Cluster Alliance website, which will go live in Autumn 2012.

A more complex “Tube Map” extends the concept of the “Internationalisation Journey” to show some of the iterations on the journey, some of the related activities and some of the key supporting organisations.

It is important to use the terminology of cluster development consistently and the Glossary of Terms lists those used in the Handbook. The European Cluster Excellence Initiative has collaborated in producing the Glossary.

The work within the TACTICS project on Cluster Internationalisation has produced the following recommendations:

1) Leverage Cluster Organisations as a Central Tool for Internationalisation

Cluster internationalisation is not an isolated activity. It forms a key component of many other important activities, e.g. innovation, commercialisation, skills development, export promotion and attracting foreign direct investment. Cluster organisations, their members and their activities should form a base for policy development and implementation including the setting of agreed goals and deliverables.

2) Catalyse the creation of Regional Innovation Strategies for Smart Specialisation

Cluster internationalisation is crucial to linking the regional innovation smart specialisation strategies in complementary regions. Cluster organisations should be part of the mechanism to facilitate links between businesses, knowledge centres and knowledge infrastructures (pilot plants, demonstrators, etc.) plus open and user-driven innovation arenas in different regions for mutual benefit.

3) Intensify International Cluster networking and cross-fertilisation

Cluster internationalisation is crucial to making links between regions in different countries and continents that can stimulate continuous renewal and the emergence of new economic activities. Networking and partnerships, including staff exchanges and mobility schemes, between cluster organisations (especially those in complementary sectors) is crucial to the identification and growth of emerging industries.

4) Improve and target Branding & Marketing

Cluster organisations need a high level of international visibility if they are to deliver their international activities effectively. Cluster organisations need to work actively with marketing and branding to improve their visibility to the appropriate potential partners. Regions should also work more actively with branding and profiling their clusters and cluster organisations in particular via the European Cluster Collaboration Platform.

5) Further Develop Innovation Express

Cluster internationalisation requires funding at different stages in order to reach its full potential quickly. Innovation Express should be further developed (e.g. broader participation, possibilities for European-level co-financing, etc.) to build on its success to become a European mechanism to facilitate the internationalisation of cluster organisations and SMEs. It should also be linked to the European Cluster Collaboration Platform and matchmaking events. At the same time, the use of other European funds needs to become more flexible to utilise them for cluster internationalisation.

Introduction

Clusters existed for a long time before Alfred Marshall first described them in economic terms and before the concept was further developed by Prof. Michael Porter as a driver for competitiveness and innovation.

At the start of the twenty-first century, it is widely accepted by policy makers that clusters are a major driver for internationalisation and with that growth and prosperity. It is essential to build on the best of the past whilst developing new ideas and concepts for the future. There is still a market failure whereby many SMEs in Europe do not realise the opportunities for international collaborations quickly enough. Policy makers therefore have to continue to intervene by supporting cluster development programmes that promote excellence and internationalisation in coordination with other policy tools.

There is wide agreement between cluster development practitioners that there is no “one size fits all” solution to the challenges of cluster development. This Handbook is not a rigid rulebook for policy makers and cluster organisations undertaking cluster internationalisation to follow, but more a set of guidelines to show how to achieve success and to direct future activities.

Expertise in cluster internationalisation is changing fast and one of the measures of the success of this Handbook will be the speed with which a new collection of ideas, tools and concepts replace it.

WHY HAS THIS HANDBOOK BEEN PRODUCED?

Several major policies and recommendations have articulated the importance of cluster internationalisation and this Handbook is a response to these recommendations.

Europe 2020

The latest European strategy documents, ie *Europe 2020* and its key subsidiary strategy documents, in particular the *Innovation Union and An Industrial Policy for the Globalisation Era*, provide the policy context. These policies clearly set out the importance of internationalisation, especially for SMEs and the role of clusters as delivery bodies. Download the strategy documents and information on progress towards implementation:

http://ec.europa.eu/europe2020/index_en.htm

http://ec.europa.eu/research/innovation-union/index_en.cfm

http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm

10 European Cluster Policy Group Recommendations

The European Cluster Policy Group (ECPG) presented its recommendations for future cluster efforts in Europe at the European Cluster Conference (Brussels, September 2010). The ECPG Final Recommendations (*A Call for Policy Action*) highlights three principles and eight action proposals for EU institutions and Members States to adopt. A complementary report (*Consolidated Set of Policy Recommendations on Four Themes*) provides a summary of the suggested actions related to the four themes addressed during the Group's mandate, grouped under three recommendations. The second recommendation to promote international mobility of cluster actors has a specific suggested action of "the development of a toolbox for cooperation among clusters aiming for international networking and internationalisation". This Handbook is the first stage in the development of the toolbox. Download the ECPG Recommendations:

<http://www.proinno-europe.eu/ecpg/newsroom/ecpg-final-recommendations>

The Copenhagen Cluster Excellence Declaration

The Nordic-German-Polish (NGP) Cluster Excellence Benchmarking Project developed the declaration with the participation of 10 countries and partners and the Copenhagen Cluster Conference adopted the declaration on May 26-27, 2011. It includes key messages about the importance of cluster internationalisation, the different support needs of different sectors and the support that the European Commission should give. Download the full Copenhagen Cluster Excellence Declaration:

<http://www.clusterexcellence.org/download-material.html>

TACTICS REFLECTION GROUP TASK FORCE ON FOSTERING INTERNATIONAL CLUSTER COOPERATION

The TACTICS Reflection Group Task Force on Fostering International Cluster Cooperation has identified both current knowledge on cluster internationalisation and the outstanding key issues. These key issues form the basis of the content of this Handbook. Download details of TACTICS and the TACTICS Reflection Group Task Force on Fostering International Cluster Cooperation:

<http://www.ECA-TACTICS.eu>

Lessons Learned by the TACTICS Reflection Group Task Force

The lessons learned regarding international cluster cooperation are summarised:

- Cluster managers and Cluster Organisations are useful intermediaries to support the internationalisation of SMEs and clusters.

-
- Transnational cooperation among companies works better if the initiative has a very practical and well-defined objective, is demand and market-driven, and has companies belong to the same industry or “thematic area” (with complementary competencies). The pursuit of international cooperation between SMEs or cluster stakeholders should be preceded by strategic analysis and planning.
 - Strategic matchmaking of clusters and Cluster Organisations (i.e. from the perspective of regional/national agencies) is helpful to ensure relevance and legitimacy, at the same time as cooperation has to be driven by demand/commercial value.
 - Transnational cooperation must be built on trust between individuals (which generally takes time to develop).
 - Management of international cooperation between clusters/ Cluster Organisations /networks requires certain skills, tools and strategic thinking. On-going process support (e.g. training, mentoring, etc.) is helpful.
 - Creating platforms for people/companies/ Cluster Organisations to meet and providing resources for longer-term networking between cluster actors are important.
 - Once a critical mass of cluster actors/partners exists, it is easier to extend the cooperation to additional partners. (i.e. it is easier to build international cooperation in a step-wise fashion).

Outstanding Issues Identified by the TACTICS Reflection Group Task Force

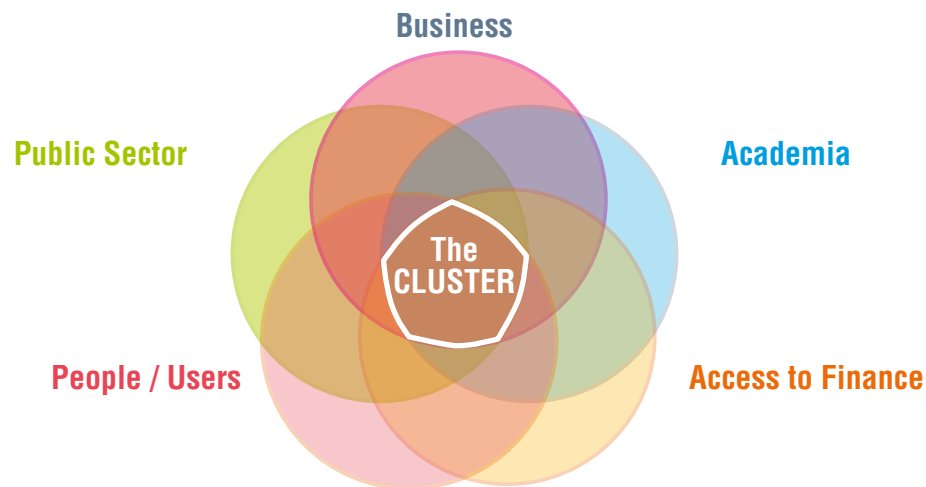
Despite the progress made from the activities described in the case examples collected by the Task Force, there are a number of issues still outstanding. These include:

- Low capabilities (among SMEs) for working strategically with international partners
- Lack of structured information on internationalisation needs and potential partners for clusters and Cluster Organisations
- Lack of structured opportunities for meeting and developing relations with potential international partners
- Lack of tailored mobility schemes between cluster stakeholders (particularly SMEs)
- Lack of virtual (and real) infrastructure for collaborative activities
- Lack of tailored financing schemes for internationalisation activities (particularly SMEs and particularly for longer-term trust-building and “business planning” activities)
- Too little coordination between existing international networks of clusters/ Cluster Organisations /innovation environments (not only on the level of clusters, but also on the level of regional/national policy levels)
- Too little coordination between internationalisation goals in different policy fields

12 BEYOND THE “TRIPLE HELIX”

One of the major advantages of using cluster development as a tool for economic development is the way that it brings together businesses, academia and the public sector. This “Triple Helix” brings together the key partners in the cluster who can drive innovation and competitiveness for the benefit of businesses, especially SMEs.

However, the “Triple Helix” is now too restrictive. Two additional groups of partners will make cluster development much more effective, especially for internationalisation. These groups are People/Users and Access to Finance. People/Users cover both skills within the cluster and user-driven agenda. Specific skills are necessary for effective internationalisation to meet the needs of users as well as businesses. Access to Finance includes all types of finance, not merely grants, eg venture capital, business angels, banks etc. At the various stages of cluster internationalisation, different levels of finance will be required that will come from a variety of sources. There is also an overlap with People (Skills) as some sources of funding will provide specialist expertise as well. The two additional groups of partners thereby create the “Pentagonal Helix”.



FUTURE POLICY DEVELOPMENTS

Major changes to EU policies and funding programmes will occur at the start of 2014. The Cosme programme from DG Enterprise will replace the earlier CIP programme, and Horizon 2020 from DG Research and Innovation will provide a continuation and upgrade to the Frameworks programme (FP7). The emphasis in all the new programmes will be on how excellent clusters and cluster organisations can be catalysts for economic growth and revitalisation. There will also be an increased emphasis on emerging industries. Cluster organisations and clusters are key to the identification and growth of emerging industries. The TACTICS paper on **Using clusters to address emerging industries and services** tackles the issue of using clusters to catalyse emergence of new industries and renewal/upgrade of well-established ones.

However, changes to Structural Funds, eg ERDF, will include a stronger role of clusters as one of the pivots of the implementation of a regional smart specialisation strategy. Regions will be encouraged to produce Regional Innovation Strategies for Smart Specialisation (RIS3). Cluster organisations will be crucial in making RIS3 effective, especially in facilitating links between regions with complimentary RIS3s, for mutual benefit.

The work started by the current EU-level cluster development initiatives, eg the European Cluster Collaboration Platform (ECCP), the European Cluster Managers' Club (ECMC), the European Cluster Alliance and the European Cluster Observatory, etc, will continue and evolve under new structures currently under development.

These policy and programme developments form the next stage in the evolution of support for cluster development at European level, which sits alongside support at member state and regional level.

Until the start of 2014, internationalisation via cluster organisations will remain key to the CIP programme, with the development of the selected *World Class Clusters* projects on internationalisation strategy, and the launch of several clusters matchmaking activities. The signature of MoUs by the ECCP, including cluster collaboration with countries such as Japan, Brazil, Tunisia, South Korea and India, will contribute to the strong focus on cluster internationalisation. The MoUs will also boost collaboration and innovation between European SMEs and their foreign partners through cluster organisations.

The TACTICS paper **Where the cluster winds are blowing in Europe** highlights the trends in the use of clusters as a tool for innovation and economic growth, today and in the future.

14 AIMS OF THE HANDBOOK

The activities of the TACTICS Taskforce on Cluster Internationalisation have confirmed the main needs of Cluster Organisations and Policy Makers.

- To be able to address the “Why?” for Internationalisation, ie to provide access to markets and to knowledge, plus to raise the profile of the cluster and the Cluster Organisation and to influence policy and funding from Policy Makers.
- To be able to address the “How?” for Internationalisation, which will enable a Cluster Organisation to progress through the ten steps in the “Internationalisation Journey” and thereby become outward facing with international recognition. This will produce benefits for the area covered by the Policy Maker that supports the Cluster Organisation.

The Key Challenges for Internationalisation identified by the TACTICS Taskforce on Cluster Internationalisation Input Paper include:

- Developing strategies and competencies for working internationally
- Identifying partners and developing cooperative (and commercially valuable) relations internationally
- Financing international activities (particularly for SMEs)
- Agreeing on functional governance/decision-making structures in transnational settings

The Cluster Internationalisation Handbook is a key deliverable for TACTICS and is aimed at providing explanations of the “Why?” for internationalisation and presenting various guides, eg tools, case examples and other descriptions, to enable the “How?”. In addition to this printed summary of the guidelines for cluster internationalisation there is an on-line version with more details and case studies.

WHO ARE THE “CUSTOMERS”?

There are three target audiences for the Handbook:

- Cluster managers and Cluster Organisations – who will use the Handbook for the benefit of cluster members, especially SMEs
- Policy makers and funders of cluster development and cluster organisations – who will use the Handbook to create favourable framework conditions for internationalisation, and to manage the deliverables from the cluster initiatives that they fund
- Leaders and members of networks related to cluster development

The ten steps of the Cluster Internationalisation Journey

OVERVIEW OF CONTENT

The structure of this Handbook uses the ten steps in the “Internationalisation Journey” diagram plus the linking themes, eg networks, funding etc. The Journey starts with an inward looking “local” cluster and ends with an outward facing “global” cluster.

For each step of the Journey there is:

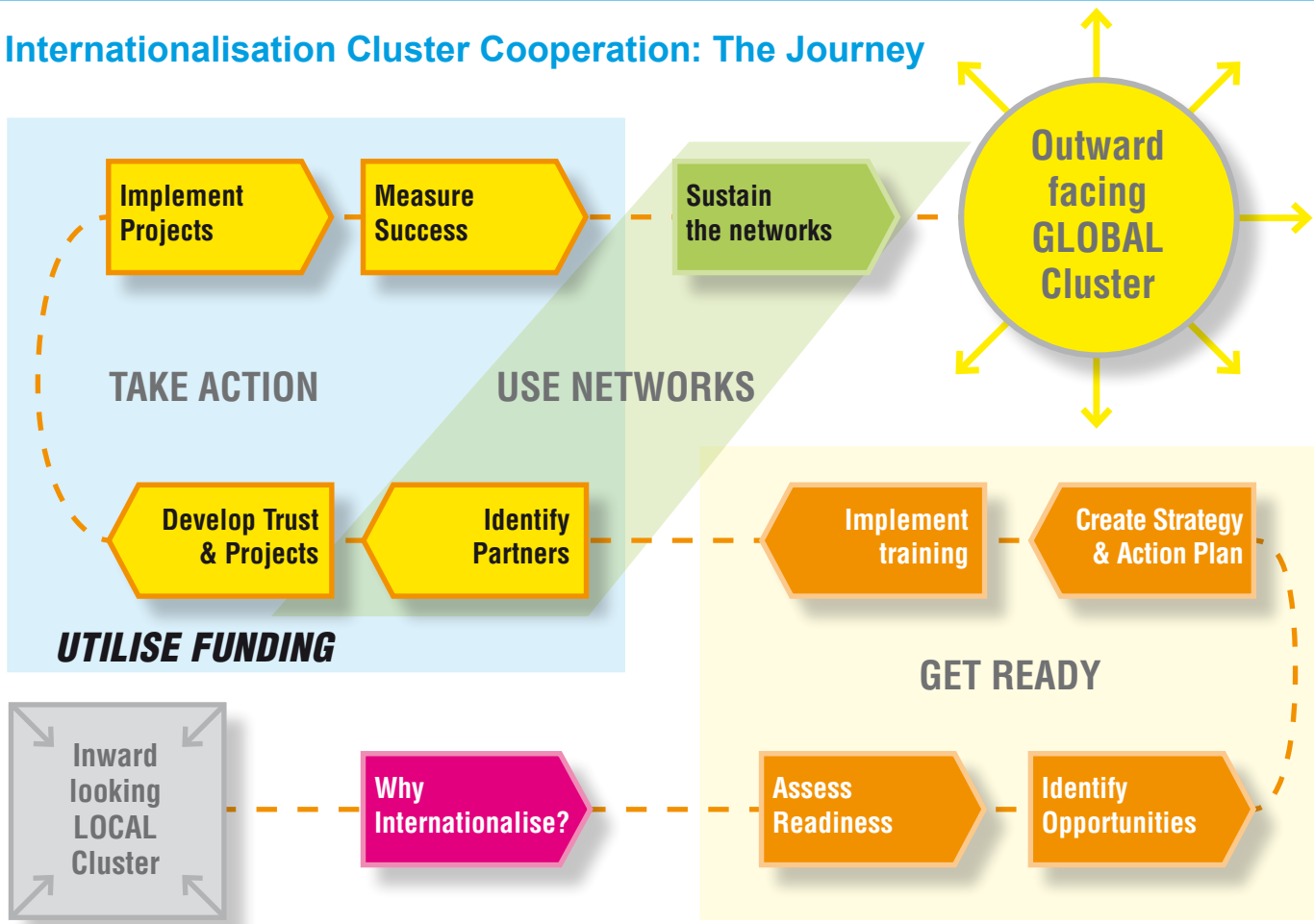
- An overview of current knowledge and the rationale for intervention
- A summary of useful tools which are available
- A list of practical examples including extracts from the case studies collected by the TACTICS Task Force on cluster internationalisation
- Checklists for cluster organisations and policy makers to determine whether they should proceed to the next step

The Journey diagram presents a clear and easy to follow view of cluster internationalisation in ten steps. In practice, cluster internationalisation is a more iterative process with a regular need to revisit and improve the activities carried out in the early steps.

The more complex “Tube Map” shows some of the iterations on the Journey, some of the activities linked to cluster internationalisation and some of the key supporting organisations. As with the Journey diagram, the starting point of the Tube Map is an inward looking “local” cluster and end is an outward facing “global” cluster. The Tube Map shows that in practice cluster internationalisation is more of a continuous process of improvement.

Overall, this edition of the Cluster Internationalisation Handbook is still “work in progress”. Much has been achieved and by disseminating these achievements, the current best practice can be spread further amongst cluster organisations and policy makers. However, the work within the TACTICS project on Cluster Internationalisation has produced several recommendations for future action by policy makers.

Internationalisation Cluster Cooperation: The Journey



STEP 1. WHY?



OVERVIEW

The rationale for intervention to support cluster internationalisation is: to provide access to markets and to knowledge, to raise the profile of the cluster and the cluster organisation, and to influence policy and funding. There has to be clear evidence of opportunity and need, plus market failure, to justify public sector funding intervention.

The generic benefits of internationalisation are:

- Benefits to the businesses in the cluster
 - Access to knowledge, to use in new products and services
 - Access to new markets
 - Access to key infrastructure, eg pilot plants, living labs etc
 - Access to new international partners for collaboration
 - Raised profile
- Benefits to other organisations in the cluster
 - Access to knowledge
 - Access to new markets
 - Access to a wider customer base
 - Access to new international partners for collaboration
 - Raised profile
- Benefits to the cluster organisation
 - Raised profile
 - Access to new international partners for collaboration
 - Access to new international partners for staff exchanges
 - Improved ability to benchmark performance
- Benefits that the cluster organisation can deliver to the region/member state
 - Increased competitiveness and export performance by key businesses

- Increased access to potential inward investors
- Increased level of external funding utilised by the region/member state
- Benefits to policy makers
 - Improved ability to benchmark performance within the cluster development programme
 - Improved return in investment in cluster development programmes
 - Better understanding of the framework conditions needed by cluster organisations to operate more effectively internationally

USEFUL TOOLS

The Institute for Innovation and Technology in Germany has published the European Clusters Go International survey. The Institute for Innovation and Technology (iit) is part of VDI/VDE Innovation + Technik GmbH (VDI/VDE-IT). Download the survey: <http://www.vdivde-it.de/publications/best-practice/european-clusters-go-international-2013-networks-and-clusters-as-instruments-for-the-initiation-of-international-business-cooperation>

The Nordic-German-Polish (NGP) Cluster Excellence Benchmarking Project covers all aspects of cluster excellence, including internationalisation. It shows how successful cluster internationalisation is an integral part of achieving cluster excellence, and shows the variations between cluster organisations in different industries.

Download the final version of the report from the General Material section of the papers from the NGP Copenhagen Conference 2011: <http://www.clusterexcellence.org/download-material.html>

18 Further details of how the Cluster Excellence project has developed the NGP Benchmarking through the guideline “European Cluster Excellence BASELINE – Minimum Requirements for cluster Organisations”, the Cluster Management Quality Label and the EFQM Excellence Model are available on the Cluster Excellence and EFQM websites:
www.cluster-excellence.eu/
www.efqm.org/en

PRACTICAL EXAMPLES

None of the TACTICS Case Studies specifically addresses the “Why?” question but most of them include consideration and analysis of a sub-set of the benefits to cluster organisations and/or policy makers. Funding such as Innovation Express can be used at the very early stages of cluster internationalisation to address the “Why?” question and provide evidence of the specific benefits that could be achieved.

In addition cluster organisations engage in dialogues with a wide variety of organisations, eg regional/national governments, trade agencies, inward investment agencies, universities, financial institutions etc, as part of their cluster development activities. The combination of such dialogues can help provide evidence and justification for internationalisation activities. SMEs also engage in a

similar range of dialogues that can provide a bottom up demand for internationalisation activities when several SMEs want to achieve benefits from activities that potentially connect together. SMEs are also encouraged to do this by the EC/DG Enterprise programmes:
<http://www.proinno-europe.eu/cluster-excellenceeu/newsroom/helping-smes-go-global-through-clusters>

STEP COMPLETION

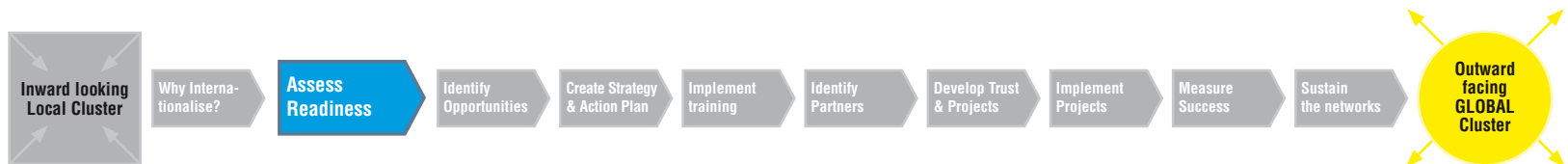
Internationalisation is not appropriate for all clusters and cluster organisations and the motivation for internationalisation needs to be clear and understood. However, all cluster organisations that aspire to excellence have to consider the options for internationalisation as a key driver for improving the quality of the services they provide, in particular to SMEs.

For both policy makers and cluster organisations:

- Do you have a clear understanding of the benefits for your organisation and the organisations you support?
- Have you collected robust evidence of need and market failure to justify international activities?
- Have your priorities for internationalisation become clear?

If the answers are positive, then move onto the next Step.

STEP 2. ASSESS READINESS



OVERVIEW

Many cluster organisations have achieved some success in encouraging collaborations amongst the cluster members before attempting to set up collaborations with another cluster organisation. However, one of the benefits of internationalisation could be obtaining knowledge and accessing best practice on encouraging collaborations at all levels.

Internationalisation is a medium term process requiring an investment of staff time and money plus the management of expectations. The cluster organisation, the cluster members and the funding bodies need to recognise this and should not expect results too quickly. However, once a cluster organisation starts to achieve international successes then further opportunities can arise quite quickly. The cluster organisation needs to manage these opportunities effectively.

USEFUL TOOLS

The TACTICS partners have developed a diagnostic tool for cluster organisations to assess readiness. It is available from the on-line version of the Handbook. The tool uses the UKTI Passport to Export assessment tool for SMEs and similar tools from other member states. The diagnostic tool enables cluster organisations to understand and identify the main drivers for them that are leading to a new focus on internationalisation. The cluster organisation should determine the level of priority and commitment that it has to delivering international collaborations and projects. The cluster organisation also has to have a high standard of professionalism in its manage-

ment and governance. The diagnostic tool will add to the evidence that the cluster initiative should present to stakeholders and partners to achieve the level of commitment needed for an internationalisation programme. The diagnostic tool will challenge the cluster organisation to provide evidence to answer a series of questions.

The TACTICS partners have developed a similar diagnostic tool for policy makers to enable them to assess their ability to support cluster organisations that are increasing their level of internationalisation. This is available from the on-line version of the Handbook.

Crucially there are no “right” or “wrong” answers to these diagnostic tools. Their purpose is to enable the cluster organisation or policy maker to critically examine what they have already in place and what has been achieved so as to determine what further development is needed before starting a cluster internationalisation programme.

A cluster organisation could use other mechanisms than internationalisation for achieving growth of the cluster that may be more appropriate.

PRACTICAL EXAMPLES

The diagnostic tools for cluster organisations and policy makers will be available in the on-line version of the Handbook.

20 STEP COMPLETION

For both policy makers and cluster organisations, this step is about making sure that they have the ability and the capacity to provide the “How?” to respond to the “Why?” identified in Step 1.

For both policy makers and cluster organisations:

- Have you used the relevant diagnostic tool to assess readiness?
- Do you now understand what you need to improve or add to your capabilities and capacity?
- Step 3 and Step 4 will provide further insight on the training necessary to produce improvements in Step 5.

If the answers are positive, then move onto the next Step.

STEP 3. IDENTIFY OPPORTUNITIES



OVERVIEW

To identify opportunities successfully, cluster organisations need information on global market opportunities and threats that are relevant to the cluster and information on the knowledge gaps within the members of the cluster that prevent access to local, national and international markets. Such information can come from a variety of sources. The cluster organisation should determine the optimum mix of sources that are appropriate to their cluster and the SMEs within it.

The cluster organisation should combine this information with its knowledge of the strengths and assets of the cluster. The cluster organisation will then be able to produce a portfolio of potential opportunities with an indication of the likelihood of success and the magnitude of the benefits of success.

Due to technology convergence and the complexity of major societal challenges there will be an increasing number of opportunities that require cross cluster linkages. Cluster organisations have to find ways of increasing their awareness of relevant cross cluster opportunities plus the mechanisms to identify such opportunities, to consider the options and to prioritise them. Cluster organisations also have to raise the awareness of the SMEs in the cluster to such opportunities.

Above all the cluster organisation has to be aware of the opportunities that offer the best chance of success. Clear market needs and demand will define the opportunities that will bring partners with complementary attributes and the capacity to take action together.

The role of policy makers is to facilitate access by cluster organisations to high quality information and to provide support to specialist networks, platforms and cluster-related infrastructure.

USEFUL TOOLS

Cluster organisations and policy makers could use a number of sources of information:

- The European Cluster Observatory website
- Member state international trade links, embassies and international offices
- University international links, international campuses, eg in China, and international academic networks
- Foresight reports
- Specialist trade associations and technical organisations
- European societal challenges and lead markets
- Specialist networks for cluster organisations, innovation agencies and policy makers (see Step 6 – Use the Networks)
- Open Innovation Platforms

Cluster organisations should use benchmarking to identify their strengths and synergies.

Analysis of the infrastructure associated with the cluster helps to identify strengths and gaps that international collaboration could fill. Such infrastructure can be sub-divided into premises where businesses can locate, eg incubators, science parks etc, and facilities for businesses to use on a short term basis, eg pilot plants,

22 demonstrators etc. The potential opportunities will be different for each type of infrastructure. For example, funding and other support could be given for high-growth SMEs to set up operations in an incubator located within another cluster in a different country. Alternatively, the opportunity to use a pilot plant could be offered to SMEs in another cluster where such a facility does not exist. This analysis of the infrastructure is also part of the development of Regional Innovation Strategies for Smart Specialisation.

A number of different types of event can provide information on potential international collaborations. More focussed events are more likely to provide specific information but a portfolio approach of participation in a range of events, including on-line events, is likely to provide a better mix of general and specialist information. Such events include:

- Conferences
- Seminars
- Workshops
- Meet the Buyer events
- Innovation Forums
- Study Tours and Visits
- Trade shows and exhibitions

The well-known Boston Strategy Matrix is a useful tool to enable cluster organisations to produce a portfolio of opportunities, as well as assessing the level of resources which should be put into realising a particular opportunity. Further details of the matrix for producing a portfolio and the matrix for assessing the level of resources will be available in the on-line Handbook.

PRACTICAL EXAMPLES

Two Case Studies from the TACTICS project illustrate the benefits of benchmarking and of the infrastructure associated with cluster development, e.g. incubators, pilot plants.

Case 1: Cluster-based R&D cooperation between Korean and German SMEs

The challenge to international cluster cooperation

German products are highly competitive, but must be adapted to the Asian market conditions. Korean clusters are considered excellent platforms for identifying innovative Korean SMEs and supporting joint adaptive R&D. Although many clusters in Korea exist, there is no pre-existing knowledge about openness and experience in international co-operation.

Description of case

The programme has two different components. The first contains a benchmarking of the readiness, willingness, openness, fields of interest and experience in international co-operations of Korean clusters. Benchmarking is done against German clusters and their respective interests. Based on this benchmarking, appropriate clusters in Korea can easily be selected and linked to German ones. The second component will provide funds for joint adaptive R&D between German and Korean SMEs but this has not yet started.

Key lessons learned

- Benchmarking provides excellent insight view on the Korean cluster landscape
- The most appropriate clusters can easily be selected and linked in

both countries

- Cluster organizations take over responsibility
- However, Korean clusters depend strongly on Korean policy actors

For more information on this Case Study see the on-line Handbook or contact:

VDI-VDE, Germany

Website: http://www.vdivde-it.de/?set_language=en&cl=en

Case 2: Cluster Support Environments

The challenge to international cluster cooperation

How to make more effective use of resources for the provision of infrastructure associated with cluster development, e.g. incubators, pilot plants.

Description of case

The project compared experiences in different regions, Northwest England, Slovenia, Tuscany, Madrid, Aragon and Lahti (Finland), on meeting the needs of clusters for dedicated infrastructure and developed a generic model for the total infrastructure needs of a cluster. The model will help regions who are preparing policies for a particular cluster to coordinate the provision of incubators and pilot plants, etc, effectively.

Key lessons learned

Evidence from the partner regions confirmed that demand for particular types of infrastructure is common to many cluster initiatives. This demand fits with the model that was developed.

The full project report is part of the “Improving cluster infrastructure through policy actions” report prepared by the CLUNET INNO Net project with some ECA partners that is available on the PRO INNO website at:

<http://www.proinno-europe.eu/clunet/publications>

STEP COMPLETION

For cluster organisations:

- Has a portfolio approach to the access of information and the access channels been developed and accepted by the cluster manager and the cluster members?
- Has this approach produced a clear list of prioritised opportunities for the cluster organisation and its members?
- Has buy-in and support for the prioritised opportunities been obtained from the cluster manager and the appropriate cluster members?

For policy makers:

- Has a prioritised approach been developed and agreed to ensure that cluster organisations have access to the necessary information, networks and events?
- Has a Regional Innovation Strategy for Smart Specialisation been produced?
- Has a prioritised approach been developed and agreed to facilitate access to innovation infrastructure by cluster organisations through collaborations on behalf of their members?

If the answers are positive, then move onto the next Step.

STEP 4. CREATE STRATEGY & ACTION PLAN



24 OVERVIEW

Cluster organisations need an Internationalisation Strategy & Action Plan that describes how international opportunities identified through Step 3 above will be realised. This Internationalisation Strategy & Action Plan needs to be a sub-set of the Cluster Strategy & Action Plan and must fit with the relevant sub-regional, regional, national and European strategies.

A key part of the Internationalisation Strategy & Action Plan is the prioritisation of markets and partners. It is vital to involve decision makers both within the cluster organisation and within the key businesses in the cluster. The main drivers of the Internationalisation Strategy & Action Plan have to be those activities that meet the needs of businesses and the demands from businesses.

In addition, policy makers also need an Internationalisation Strategy & Action Plan. There has to be a strong fit between the Internationalisation Strategy & Action Plan and the Cluster Internationalisation Strategy & Action Plan.

USEFUL TOOLS

The TACTICS partners have developed two generic Internationalisation Strategy & Action Plans, one for policy makers and the other for cluster organisations. It is important that these users should regard these as menus rather than templates. One size of Internationalisation Strategy & Action Plan does not fit all. Instead, policy makers and cluster organisations should select the items for their own strategies that are most important to them and to the businesses in the cluster.

Generic Internationalisation Strategy & Action Plan for a Region or Member State

Main objectives

- Develop the sectors of the regional economy that are internationally competitive
- Maximise the region's international potential in terms of science and innovation, research & development, and education.
- Target those countries that are strategically important for the region, in terms trade, knowledge exchange and inward investment.

Specific areas of action

- Developing internationally competitive sectors
- Maximising the international potential of science and innovation, research & development, and education in the region
- Targeting strategically important countries
- Promoting the Region's assets internationally
- Enhancing the region's international connections, eg MoUs, air-line services etc
- Influencing the European Union and the Member State government's international policies and programmes

Targets covering:

- Image
- International Collaboration Agreements
- International Trade
- Inward Investment
- University Engagement

Monitoring

Key Activities

- Key activities for each area of action with the lead organisation(s) clearly identified.

Generic Cluster Internationalisation Strategy & Action Plan for a Cluster Organisation

Main objectives

- Develop sub-clusters and SMEs to become internationally competitive
- Exploit the potential of the cluster and its related technical infrastructure for international connections
- Target regions and countries with clusters and cluster organisations with complimentary expertise and capacity for mutual benefits.
- Improve the international image of the cluster organisation and businesses in the cluster, especially SMEs.

Specific areas of action

- Assess the capability and capacity of the target sub-clusters and SMEs, plus the related technology infrastructure
- Coordinate activities to help the sub-clusters, SMEs and the cluster organisation fill the gaps in their capacity and knowledge
- Prioritise list of regions and cluster organisations with the potential for collaborations
- Develop marketing and branding of the cluster organisation to im-

prove image

- Utilise networks, eg ECMC, EEN etc, and tools, eg ECCP, ECO etc, to identify potential partners and create links
- Obtain buy-in from cluster members and those policy makers that are providing funding
- Collect baseline data on current international activities of the sub-clusters, SMEs and the cluster organisation

Targets covering:

- Number of users of marketing and branding material, eg newsletter, website etc
- International Collaboration Agreements with cluster organisations
- Number of SMEs in the cluster operating internationally
- Satisfaction rating for internationalisation activities from relevant SMEs in the cluster
- University Engagement

Monitoring

- Progress on targets

Specific actions in the action plan could include:

Internationalisation Activities

Knowledge Access

Market Access

Key Infrastructure Assets

International Trade

Partnering

Inward Investment
Trade

Inward Investment Support
Skills / People Issues
Participation in specific international networks

Specialist Activities by the Cluster Organisation

International Visits and Events
Events held in home region
Building Partnerships
Common Technology Roadmaps
Matchmaking Activities
Staff Exchanges
Mentoring
Promotional Activities
Direct Targeting
Providing funding towards overseas travel by SMEs
and ambassadors
International Conference Speaker Locator
Dissemination of successes
Securing funding to support Specialist Activities by the Cluster
Organisation

Interactions with other Organisations

International
National
Sub-regional
Sustainability of Networks

Further details of the generic Internationalisation Strategy & Action Plans will be available in the on-line Handbook.

The TACTICS handbook on **Cluster marketing and branding** examines different cases of cluster branding strategies with a view to draw useful recommendations for policy makers, bringing about concrete suggestions for the improvement of cluster policies.

PRACTICAL EXAMPLES

Two Case Studies from the TACTICS project illustrate the benefits of developing a cluster internationalisation strategy. In addition, the Case Study under Utilise Funding (Case 20 – Innovation Express) is also relevant to the development of cluster internationalisation strategies.

Case 3: A Framework Model for Internationalisation of Cluster Policies

The challenge to international cluster cooperation

How to develop an internationalisation strategy for a particular cluster?
How to make best use of EU international linkages?

Description of case

Filas, the development agency for the Lazio region in Italy led the project, which focused on developing links in creative industries with Japan, Dubai and India. The other partners were Northwest England, PACA and Brittany. There were visits to Japan and Dubai, but not by all the partners. The project also produced a useful report comparing the creative industry clusters in the partner regions and some other selected regions.

Key lessons learned

- The project helped the Lazio region produce a creative industries

cluster internationalisation strategy.

- Sharing best practice was of more benefit to those regions where the strategies were under development.
- The results and lessons from the project could be used to create a generic cluster internationalisation strategy.
- Funding for visits needs to be obtained to ensure participation by all the partners.

For more information on this Case Study see the on-line Handbook or contact: Filas, Lazio, Italy
Website: <http://www.filas.eu/>

Case 4: Swedish Global Links Programme – an instrument for internationalizing innovation activities

The challenge to international cluster cooperation

How to address challenges (e.g. lack of information, financing and other resources) that clusters and other research and innovation environments face, in order to take advantage of global opportunities

Description of case

VINNOVA, and other Swedish agencies, fund a number of Centres of Excellence (combining excellence in research and innovation) in which academia, institutes and industry cooperate in joint projects. These are both local cluster-type initiatives and centres active on a national arena. Studies have shown that few, if any, of the current milieus have a strategic approach to international cooperation or internationalisation. VINNOVA therefore initiated an initiative to strengthen their capacity to create long-term and strategic international cooperation. In the first phase (2009), 13 milieus were awarded grants of €70,000 (in total) to develop international strategies that

should become an integral part of the centre's overall activities. VINNOVA plans to follow-up with appropriate funding schemes to support implementation.

Key lessons learned

- It is very important for clusters to develop a strategy for internationalisation – they have to decide which markets and partners they are going to cooperate with.
- The staged model (i.e. short-term, small sums to finance strategy development, followed-up by larger sums for longer-term activities) for providing “globalization grants” to finance international activities of clusters/innovation environments could be further developed and used in other countries (or on EU level).

For more information on this Case Study see the on-line Handbook or contact:

VINNOVA, Sweden

Website: <http://www.vinnova.se/en/>

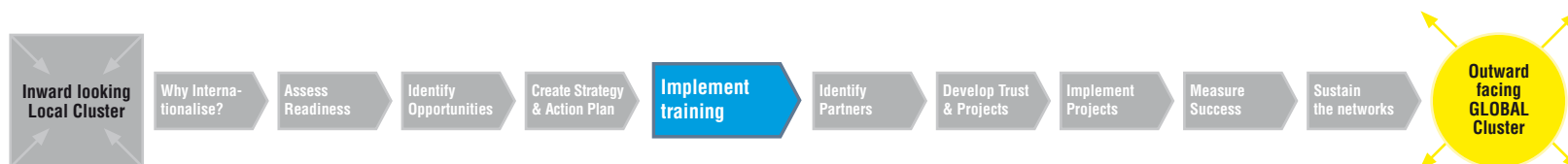
STEP COMPLETION

For both policy makers and cluster organisations:

- Have you completed your Internationalisation Strategy & Action Plan?
- Does it have:
 - Clear targets
 - Well-defined actions
 - A monitoring and evaluation plan
 - Strong buy-in and support

If the answers are positive, then move onto the next Step.

STEP 5. IMPLEMENT TRAINING



28 OVERVIEW

Training courses and training material, such as case studies, will enable cluster organisations and policy makers to address the gaps identified in the **Assess Readiness** (Step 2) above. The diagnostic tools in the **Assess Readiness** step above asked the cluster organisations and policy makers to provide evidence to answer particular questions. Analysis of this evidence for a particular organisation will show what training is required.

Existing training courses or new courses currently being developed by the Cluster Excellence project or by the Export Promotion Agencies operating at Member State and/or regional level are likely to meet most of the training needs of the cluster organisations and policy makers.

Training can also take place through staff exchanges and mentoring. Cluster organisations and policy makers should consider these alternatives as they can also help to build trust between organisations (See Step 7).

USEFUL TOOLS

Training courses developed by the Cluster Excellence project.

Training courses for SMEs offered by or through the Export Promotion Agencies operating at Member State and/or regional level could be relevant for cluster organisations. Policy makers should consider making these readily available to cluster organisations and modifying them where necessary, rather than funding the development of new

training courses.

Other commercially produced and delivered training packages, eg language courses, cultural awareness programmes, etc.

Staff exchanges are excellent for providing learning by doing. Exchanges can start within a member state and then extended to other countries. In addition, mutual hot-desk facilities for staff from other support agencies, eg export promotion agency, etc, can be beneficial for both organisations.

Mentoring is excellent for providing learning by example.

Details of how the diagnostic tools in Step 2 – Assess Readiness link to appropriate training in Step 5 will be available in the on-line version of the Handbook.

PRACTICAL EXAMPLES

One Case Study from the TACTICS project illustrates the benefits of implementing training through a mentoring programme.

Proposal for a European Cluster Mentoring Programme

The challenge to international cluster cooperation

The mentoring concept is not new, but its application in the cluster management environment would be. The cost and time for training the mentors need to be affordable by the cluster organisation.

Description of case

The CEE-Cluster Network (part of PRO INNO) developed a programme draft for the trans-regional cooperation “European Cluster Mentoring programme”. The programme aims at better information exchange and more excellence in cluster management, developed to ensure a long-term and intensive continuation of the expertise transfer initiated during the project lifetime – at the level of cluster organisations. The unique aspect of this kind of this programme is that the training does not go over months.

Key lessons learned

There are plans for the project to be developed by the Cluster Excellence project with support from the TACTICS partners.

For more information on this Case Study see the on-line Handbook or contact:

TMG, Upper Austria

Website: http://www.tmg.at/index_eng.php

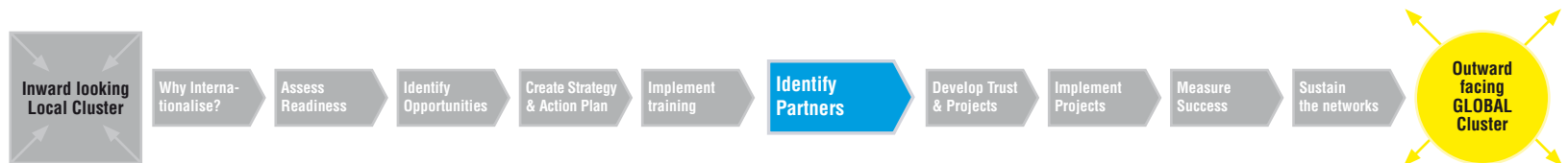
STEP COMPLETION

For both policy makers and cluster organisations:

- Has training been carried out to fill the main gaps in capacity and/or expertise identified by the diagnostic tools in Step2?
- Is a training plan for continuous improvement in place?
- Have a robust staff exchange and/or mentoring plan been put in place or are they being planned?

If the answers are positive, then move onto the next Step.

STEP 6. IDENTIFY PARTNERS



30 OVERVIEW

A key part of the Internationalisation Strategy & Action Plan (Step 4) is the prioritisation of markets and partners. The Action Plan itself may identify specific partners or it may merely identify the priorities and means to identify partners.

There are several key issues related to the selection of partners with whom successful collaborations can be achieved:

- Potential partners need to be complimentary rather than identical.
- Partnerships are more successful when the partners have similar organisational structures.
- Cluster Organisations should look for Win-Win partnerships where all the partners gain something.
- In general, it is better to work through existing structures, systems and networks rather than to create new ones.
- Effective Branding and Marketing is essential to raise awareness and build reputation. The TACTICS handbook on **Cluster marketing and branding** examines different cases of cluster branding strategies with a view to draw useful recommendations for policy makers, bringing about concrete suggestions for the improvement of cluster policies.

A key element in identifying partners is the “people” issue. Successful collaborations are built on strong interpersonal relations and shared values between organisations and individuals. Networks and personal recommendations are particularly useful in this respect. It is therefore vital for cluster organisations and policy makers to attend and actively participate in networking events, workshops, international conferences and seminars, etc.

Whilst the identification of partners from outside Europe can lead to significant benefits, it is generally easier to identify partners in neighbouring countries and develop effective links with them.

As with any successful relationship, a high level of self-awareness is needed by the cluster organisation in order to identify potential partners with the right blend of shared values and complimentary competencies. Diagnostic tools such as the Assess Awareness diagnostic in Step 2, the Cluster Excellence Benchmarking with the EFQM Excellence (see Step 1) and the Cluster Dynamics model (see Step 10) are invaluable in helping a cluster organisation understand itself.

The TACTICS guide on **Fostering User-Driven Innovation through clusters** provides practical advice for cluster organizations to support their member companies with the implementation of User-Driven Innovation and recommendations to policy makers to develop and implement appropriate policies.

The TACTICS paper on **Using clusters to address emerging industries and services** tackles the issue of using clusters to catalyse emergence of new industries and renewal/upgrade of well-established ones. This is also the focus of the third phase of the European Cluster Observatory project managed by PricewaterhouseCoopers. As part of this project the European Forum for Clusters in Emerging Industries has been set up to provide expert input with representation from the TACTICS partners.

What is still missing is a structured mapping of existing transnational

activities with indications of which international collaborations have been particularly successful and why.

USEFUL TOOLS

Two on-line tools are highly relevant for identifying partners:

European Cluster Collaboration Platform

<http://www.cluster-excellence.eu/eccp.html>

European Cluster Observatory

<http://www.clusterobservatory.eu/index.html>

In addition, the European Enterprise Network can provide partner-matching services to cluster organisations as well as to SMEs.

<http://www.enterprise-europe-network.ec.europa.eu>

There are gateways/help desks that provide information on cluster organisations in particular countries, eg

Japan - EU-Japan Centre for Industrial Cooperation

Head Office in Japan

Tel: +81 (0)3 3221 6161

Website: www.eu-japan.gr.jp

Office in Europe

Tel: +32 (0)2 282 00 40

Email: office@eu-japan.eu

There are two programmes to support cluster development in Japan; the Industrial Cluster Programme of the Ministry of Economy, Trade

and Industry (METI) and the Ministry of Education, Culture, Sports, Science & Technology (MEXT) programme for knowledge clusters.

Korea - KICOX (Korea Industrial Complex Corporation)

KICOX (Korea Industrial Complex Corporation)

Tel: +82-70-8895-7255

Website: <http://www.e-cluster.net/en/>

KICOX has operated an Industrial complex-based cluster program since 2005 including its own overseas cooperation sub-program. Industrial complexes-based cluster program supports 77 clusters formed around seven regional specialized industries onto 193 industrial complexes nationwide.

Networks

There are several different ways to classify the networks relevant to cluster internationalisation:

- Collaboration Networks for cluster organisations eg European Cluster Managers Club (<http://www.cluster-excellence.eu/club.html>), Europa InterCluster (<http://www.intercluster.eu/>), etc
- Collaboration Networks for cluster policy makers eg European Cluster Alliance (<http://www.ECA-TACTICS.eu>), The Competitiveness Institute (<http://www.tci-network.org/>), etc
- Innovation networks for policy makers, eg, ERRIN (<http://errin.eu/en/>), Eurada (<http://www.eurada.org>), Taftie (<http://www.taftie.org>), etc
- Industry specific networks mainly for cluster organisations, eg European Aerospace Cluster Partnership (<http://www.eacp-aero.eu>),

European Automotive Strategy Network (<http://www.easn.eu/>), EcoCluP, ABCEurope, etc

- Geographically specific networks within Europe, eg BSR Stars (Baltic Sea Region), Cluster group within EUSDR (European Strategy for the Danube Region) etc
- International networks outside Europe, eg EU-Japan, Euro-Med Innovation network, etc

Further details on networks of these types are available in the on-line Handbook.

Speed Dating

Speed dating sessions as part of workshops and conferences can be an effective way of meeting a number of potential partners quickly for an initial assessment. This can produce a short list of cluster organisations for more in depth meetings.

The World Café method trialled at the 2009 TCI Conference worked well in enabling participants to enter in a direct dialogue with cluster practitioners from all over the world and pave the way for future co-operation.

Social Networks & Discussion Fora

Social networks for business, eg LinkedIn etc and online discussion fora can be used to identify potential partner organisations as well as individuals.

International Offices & Embassies

International offices, embassies etc can be useful in providing specific local information and contacts. Many of them work with interna-

tional trade and inward investment programmes at member state and regional level that are likely to have a cluster, sector or market focus. Skilled ambassadors (both in diplomatic competencies and those with specialist science and technology expertise, eg as used through the Medicon Valley Life Science Ambassador Programme) can provide international links to other clusters and centres of excellence.

PRACTICAL EXAMPLES

Several Case Studies from the TACTICS project illustrate various mechanisms for identifying partners.

Case 5: Matchmaking by collaboration: Heidelberg Innovation Forum and New Brunswick Innovation Forum

The challenge to international cluster cooperation

Finding adequate partners for international cooperation for SMEs and cluster organisations requires considerable resources. This applies especially for very small and very specialized niche suppliers.

The challenges are:

- to find adequate partners (time & money for research)
- to find the time to coordinate appointments with relevant people
- to minimize the costs for travelling around

Description of case

MFG Baden-Württemberg offers different tools such as the Heidelberg Innovation Forum (HDI) that systematically brings together researchers and companies in the IT, media and creative industries sector in the Southwest of Germany through a platform for the transfer of

research close to the market. The Heidelberg Innovation Forum has been extremely successful and the format has been exported to Canada, where the “New Brunswick Innovation Forum” was launched. The Heidelberg and the New Brunswick Innovation Forum are linked to each other by the exchange of speakers and a live streaming service. Through the close collaboration between MFG and the National Research Council of Canada (NRC), the event format **Canada Open House** was brought in to form connections between the companies within the clusters on each side.

Key lessons learned

- The Innovation Forums have a focus on a specific topic that helps to find adequate international partners.
- The close collaboration of the two Innovation Forums by exchanging speakers and especially by using live streaming led to a minimization of travel costs.
- The concept of the Canada Open House minimizes travel costs, saves time and helps to find adequate partners.

For more information on this Case Study see the on-line Handbook or contact:

MFG Baden-Württemberg mbH, Germany

Website: <http://www.mfg.de/english/>

Case 6: European Aerospace Cluster Partnership (EACP)

The challenge to international cluster cooperation

Finding the mechanism to achieve better cooperation between European Aerospace regions

Description of case

The CLUNET project, part of the previous generation of PRO INNO projects (2006-2009) was the catalyst for an initiative led by Hamburg and Berlin-Brandenburg with Northwest England, PACA, Madrid and Aragon aimed to bring together the aerospace regions in Europe. This initiative successfully established the European Aerospace Cluster Partnership (EACP) on 6/5/09. The EACP currently has 39 members from 13 European Countries, who participate in working groups on improving skills, access to funding for innovation and internationalisation (increasing competitiveness at the global level).

The EACP aims at initiating an active exchange of information and knowledge between all partners and at developing and realizing 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. The EACP is a partnership based on Letters of Intent. It provides the opportunity for each member to participate in the working groups to solve common challenges and contribute to the development of each member cluster to achieve high-level performance by developing and realising various joint projects.

Key lessons learned

- The CLUNET project was the catalyst for a wider collaboration with partners from other regions.
- Groups of other cluster organisations could use the EACP model.
- The EACP model could be used in another industry to set up a global network.

For more information on this Case Study see the on-line Handbook or contact:

www.eacp-aero.eu.

34 *Case 7a: Cooperation with the Enterprise Europe Network (EEN)*

The challenge to international cluster cooperation

To raise awareness of the Enterprise Europe Network within cluster initiatives.

Description of case

“Cooperation with the Enterprise Europe Network (EEN)” was a CLUNET (part of PRO INNO) pilot project led by the Aragon (Spain) with Lazio and Tuscany (Italy) as partners. Sector/cluster specific workshops were held to raise the awareness of both the EEN within cluster initiatives and of the activities of the cluster initiatives that were relevant to the EEN.

Key lessons learned

- Internationalisation of clusters, and therefore of companies belonging to clusters, do not always need to create new systems and structures ad hoc. The project showed that existing structures and networks can be used successfully to help companies become international.

Case 7b: Cooperation with the Enterprise Europe Network (EEN)

The challenge to international cluster cooperation

To create confidence and increase trust between cluster personnel as a first step through matchmaking activities between the cluster member companies.

Description of case

Sector group meetings can be used as a first ‘start to know the region and their clusters’ around a sector, eg the automotive “Sector Group” meeting organized in Flanders. The Flemish EEN representative presents the general Flemish context, and the cluster managers from related clusters (Flanders Drive, Flanders Logistic Institute, etc.) present the regional sector activities including the focal points of the clusters and the focal points of the activities of the member companies. In upcoming partnering events, the Flemish clusters can better identify opportunities for the member companies, and the EEN representatives can better identify opportunities in their regions to collaborate with Flemish companies or research institutes.

Key lessons learned

- The added value of the EEN-network to create international partnerships is quite often underestimated.
- Working with clusters and EEN representatives in a sector group meeting is more effective for acquainting clusters with EEN activities (compared to an introductory presentation from the local EEN representative to the cluster manager).
- Trust is important in partnering events, EEN can help cluster organizations to facilitate this process.

For more information on this Case Study see the on-line Handbook or contact:

IWT, Flanders, Belgium

Website: <http://www.iwt.be/english/welcome>

Case 8: Strategic match-making for international cluster cooperation within the BSR Stars (flagship programme for fulfilling the EU Strategy for the BSR)

The challenge to international cluster cooperation

Identifying relevant partners (clusters/innovation environments) for international collaboration

Ensuring international collaboration fits within national strategic innovation policy goals

Facilitating the development of collaborative relations through appropriate policy instruments

Description of case

BSR Stars is a flagship programme for the Baltic Sea Region on strengthening innovation, clusters and SME networks. BSR Stars builds on the activities of the BSR InnoNet (part of PRO INNO) project – further developing the frameworks for transnational collaboration on innovation, and testing new methods and policy instruments to support these activities. BSR Stars has the objective of strengthening the global position of the BSR through innovation activities in the selected broad thematic fields of: cleantech and future energy, well-being and health, future transport, and digital business and services. BSR Stars will select 3-5 transnational consortia that will be included in a broader application for financing within the BSR INTERREG programme.

Key lessons learned

- Public sector bodies (e.g. ministries and agencies on regional and national level) play an important role in identifying relevant candidates for international cooperation (ensuring legitimacy/quality and setting-up initial contacts).
- It is extremely important that international consortia are formed

based on commercial/market drivers with clear strategic objectives for their joint activities.

- The identification of relevant international partners is still a relatively unstructured, ad hoc process. Projects like BSR Stars could help to create a more structured mapping of existing transnational activities and clusters/innovation environments' interests for international collaboration.

For more information on this Case Study see the on-line Handbook or contact:

VINNOVA, Sweden

Website: <http://www.vinnova.se/en/>

BSR Stars, Sweden

Website: <http://www.bsrstars.se/>

Case 9: TCI – Linking cluster managers to find relevant partners outside of Europe

The challenge to international cluster cooperation

Finding relevant partners outside of Europe and developing collaborative relationships

Issues related to efficiency/coordinating on EU-level against addressing national priorities

Description of case

The Competitiveness Institute (TCI) is a global network financed through an annual membership fee for practitioners, policy makers, researchers and business leaders working towards improving competitiveness in regions and clusters. The TCI member base currently consists of 1.700 cluster practitioners from more than 98 countries.

36 The highlight is the annual TCI conference where cluster practitioners from all over the world meet and exchange experience. During one week, cluster practitioners have the chance to build up personal relationships with cluster practitioners from other countries and other continents. As cluster management is people's business, this personal dimension of such a conference is essential to its success. The World Café method at the conference enabled participants to enter in a direct dialogue with cluster practitioners from all over the world and pave the way for future cooperation.

Key lessons learned

- Set up an annual conference that is known as THE event for linking clusters outside of Europe
- Keeping in mind that people are crucial to cluster management, attending high quality conferences to meet other cluster managers is an efficient way to increase your value added personal network.

For more information on this Case Study see the on-line Handbook or contact:

The Competitiveness Institute

Website: <http://www.tci-network.org/>

Case 10: (RIE) Euromed Innovation Network – linking Med Clusters with relevant partners/clusters within Europe

The challenge to international cluster cooperation

Finding relevant partners from the Med Basin and developing collaborative relationships Issues related to efficiency/coordinating on EU level vs. addressing national priorities

Description of case

The Euromed Innovation Network/think tank was created in 2009, with the overall objectives of debating on future policy actions to enable trans-Mediterranean cooperation, promotion of excellence, and wide deployment of innovation clusters, to meet strategic European objectives for regional development and prosperity. Since 2009, dramatic political and economic changes have taken place in several countries around the Mediterranean. With increased political interest in the Union for the Mediterranean process, the key question is how networks of clusters, especially at transnational level (e.g. Euro-Mediterranean cooperation), can develop the necessary innovation together and jointly develop solutions for emerging challenges.

Key lessons learned

- Re-launching aimed to infuse a new vitality into the Union for the Mediterranean and to raise the political level of the strategic relationship between the EU and its southern neighbours.
- While maintaining the *acquis* of its predecessor, the Barcelona Process, the Union for the Mediterranean offers more balanced governance, increased visibility to its citizens and a commitment to tangible, regional and trans-national projects.

For more information on this Case Study see the on-line Handbook or contact:

Côte d'Azur Chamber of Commerce, France

Website: www.cote-azur.cci.fr

Case 11: The Use of Open Innovation Test-beds to Stimulate International Collaboration

The challenge to international cluster cooperation

How to use open innovation platforms (test-beds) as a method for developing renewal through international cooperation

How this platform can be a tool for clusters from different countries to meet other complementary actors and clusters

How such a platform can help a cluster to find complementary skills among other cluster actors and how this can result in speeding-up the time to market

Description of case

One of the VINNVÄXT clusters (Fiber Optic Valley) has developed a test-bed for next generation mobile and broadband technologies, services and applications within their cluster initiative in order to create a common platform for cooperations. The results are: increased efficiency and user focus in product development and service innovation, faster market entry, and higher quality of new products. The test-bed has inspired: development of new education courses, new research projects, new innovations, improvements to the knowledge base and increased speed of development. This test-bed is now a platform for international collaboration.

Key lessons learned

- Clusters are the ideal environment to create open arenas and all kinds of test-beds
- A cluster that has an open technology platform and a systematic way of integrating user-driven innovation processes is more globally attractive and has a stronger competitive advantage.

For more information on this Case Study see the on-line Handbook or contact:

VINNOVA, Sweden

Website: <http://www.vinnova.se/en/>

See also the TACTICS Guide on Fostering User-Driven Innovation through clusters

STEP COMPLETION

For cluster organisations:

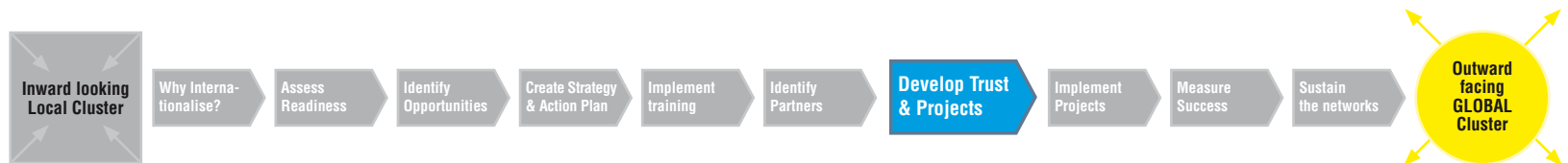
- Have you joined and actively participated in the relevant networks and networking opportunities?
- Have you formed international collaborations to deliver the priorities in your Internationalisation Strategy & Action Plan?
- Are you utilising the relevant on-line tools, eg ECCP, ECO etc?
- Are you utilising the European Enterprise Network?

For policy makers:

- Have you joined and actively participated in the relevant networks, eg ECA?
- Are you collaborating with policy makers in other regions with common interests and shared objectives?

If the answers are positive, then move onto the next Step.

STEP 7. DEVELOP TRUST & PROJECTS



38 OVERVIEW

“Projects” cover all types of collaborations between clusters. It does not just apply to applications for European and other funding. The key to successful collaboration is that all partners share and that build on strong interpersonal relationships.

Developing trust is primarily about people. The key considerations include:

- Initial contact has to be face to face. The EEN and other networks can be very useful in establishing the initial contact. Visits are therefore essential but require funding, either from internal or external sources.
- Longer visits are necessary to achieve in-depth sharing of expertise and increased knowledge on skills improvement and innovative ideas.
- Experiences from other cluster companies can facilitate the building up of trust.
- Attending networking events is vital.
- Mutual learning and peer coaching can be useful in developing contacts.
- Openness and a high level of professionalism in dealing with contacts are essential.
- After the initial contact, electronic communication methods managed by a facilitator can be used but regular contact by some means has to be maintained. Possible options include:
 - European Cluster Collaboration Platform
 - Virtual events
 - Video interviews available via the internet

- Social networking platforms such as LinkedIn, Facebook, Twitter, flickr etc
- A social network needs to have a critical mass of active members in order to be effective. It will be far better to focus on a few effective social networks than to try to use many.
- International offices, embassies etc can be useful in providing both a conduit for information exchange and expertise in the local language, culture and contacts.

Developing collaborations is primarily about shared aims. The key considerations include:

- Be very clear on project objectives and outcomes that must be practical and well defined.
- Projects need to address the real needs of businesses within the cluster as well as the cluster organisation.
- Only work with partners who share the same goals.
- Benchmarking potential partners can be useful in assessing the benefits from collaboration.
- Cluster managers need to act as “translators” between partners with complimentary attributes, eg coverage of different sectors.
- Involve the real decision makers and obtain their buy-in before making commitments.
- Identify any cultural or language barriers and agree on how these will be addressed.
- Once a critical mass of cluster actors/partners is formed, it is easier to extend the cooperation to additional partners (i.e. international cooperation can be built more easily in step-wise fashion)
- Develop project ideas before applying for funding. Funding is a

means not a goal in itself.

- Funding project officers in the EC in Brussels and national contact points can provide valuable information on the criteria for each funding initiative.
- Plan to develop project proposals in advance of the launch of funding calls. This will give more time to develop a high quality proposal and improve the likelihood of a successful proposal.

Success breeds success so that various means of disseminating information about successful projects, eg Case Studies, Partnering Events, Conferences, etc, are all potentially useful and can stimulate new ideas for collaborations.

Identify funding including Innovation Express.

The TACTICS paper on **Channelling RDI funding through clusters** proposes a focus on the capacity of clusters/cluster organisations to attract and manage RDI funding, including new activities and actors. It also provides TACTICS' contribution to the State Aid rules consultation for clusters.

However, the time needed to develop high quality and effective collaborations should not be underestimated. The process requires considerable commitments of people and finances.

USEFUL TOOLS

The Cluster Insight Report Call of Germany Federal Ministry for Education and Research, launched in February 2009, aims to facilitate follow-up measures following the first actions after identifying potential foreign cluster partners. Whilst this call is only for cluster or-

ganisations in Germany, it is a possible model for similar funding in other member states. Innovation Express is also a potential source of funding.

Social networking platforms such as LinkedIn, Facebook, Twitter, flickr etc are potentially useful but many cluster managers would benefit from training on how to use these platforms more effectively.

The cluster networks listed in Step 6 and other meta-clusters, eg INTER'MAT, can provide the means to build trust and develop new collaborations.

Projects, which bring together cluster organisations to meet societal challenges, eg BSR StarDust, and lead market opportunities, can also provide the means to build trust and develop new collaborations.

International offices and embassies can provide the personal contacts necessary to build trust and act as focal points for the exchange of ideas for collaborations, especially cross-cluster collaborations. A dedicated office for cluster development, eg the Greek Technology Cluster Liaison Office in Silicon Valley, would have the benefit of providing specialist staff.

The appointment of Ambassadors, eg through the Medicon Valley Life Science Ambassador Programme, is a particularly effective means of building trust and identifying new collaborations but is expensive and needs resources over a considerable period of time. There should be scope for the testing of much shorter Ambassador programmes that still produce benefits with much reduced inputs of time and money.

Case 12: INTER'MAT – cross-border cluster in materials and processes

The challenge to international cluster cooperation

How to develop a true transnational cluster that will enable the development of high value-added cross-border collaborations, especially among SMEs, thereby contributing to a major expansion in the number of RDI projects. This work will require a harmonization of approach with respect to innovation development.

Description of case

The INTER'MAT project envisages the creation of a META Cluster that groups three existing Clusters, all involved with materials and processes, with each coming from a different European country – France, Belgium and Luxembourg. This META Cluster will bring together two “Pôles de Compétitivité”, with an approach “top down” plus one cluster with an approach mainly “bottom up” in order to provide value-added services and identify true cross-border collaborative projects. A much increased critical mass of scientific and industrial actors in the field of materials and processes combined will contribute to a major expansion in the detection and implementation of RDI projects.

Key lessons learned

- The international cooperation between cluster organizations can facilitate collaborative cross-border RDI projects between member companies. The overall ambition of this project is to develop a simple and effective mechanism for companies (mainly SMEs) and public research organizations from the three regions con-

cerned to participate in collaborative cross-border RDI projects with the help of complimentary support mechanisms.

- This collaboration should now move on from just forming a link to actually creating benefits for SMEs

For more information on this Case Study see the on-line Handbook or contact:

Oséo, France

Website: <http://www.oseo.fr/international>

Case 13: Life Sciences Accelerator 4 Knowledge

The challenge to international cluster cooperation

Enable SMEs to enter international markets.

Enable SMEs to use an incubator in another region as a means of accessing new knowledge.

Description of case

The project involved Tuscany and the Montreal Metropolitan Community (Canada). The aim was to allow a European SMEs to use the life sciences incubator in Montreal for a year to enable them to enter the North American market. The project only reached the concept stage due to the high cost (€50,000 to €100,000 per company) and the timescale to identify a suitable company and complete the formal agreements. The opportunity would only be applicable to an SME at the appropriate stage of growth. Montreal Metropolitan Community is keen to continue the project with other regions.

Key lessons learned

- Cluster organizations in other regions, even on other continents, are quite often very open to collaboration. The openness of the

partners in the Montreal Metropolitan Community enabled the project to reach the concept stage.

- The timescale needed to identify a suitable company and complete the formal agreements should not be underestimated. At least a year should be allowed. Time is also needed to identify and secure the necessary funding

For more information on this Case Study see the on-line Handbook:

Case 14: CREATE – Fostering international cluster cooperations in the field of digital creative industries

The challenge to international cluster cooperation

The challenge lies in finding relevant partners, who set the focus on the same topics and who are willing to cooperate.

Description of case

The EU-Project CReATE (Creating a Joint Research Agenda for Promoting ICT-Innovations in Creative Industries across Europe), supported by the European Commission in the seventh Framework Programme “Regions of Knowledge”, fosters international cluster cooperation in the field of ICT-research. CReATE is led by project coordinator MFG Baden-Württemberg with partners from four European clusters: Baden-Württemberg (MFG Baden-Württemberg, Steinbeis-Europa-Zentrum), Rhône-Alpes (Imaginove Cluster), Piemonte (CSP Innovazione, Politecnico di Torino, Regione Piemonte) and West Midlands (Advantage West Midlands). CReATE aims to identify the strengths of the different partner regions and to define a joint research agenda leading to commercialisation.

Key lessons learned

- The collaborative development of concrete topics is a good basis to ensure a reasonable matchmaking (find adequate partners) with improved chances of success.
- The dialog-oriented regional activities like stakeholder workshops and consultations of experts in the first half of the CReATE project prepared the ground for a reasonable matchmaking and business delegations (bottom-up method)
- It’s important to involve the stakeholders of a cluster as early as possible to achieve good results > cluster manager has to work as a “street worker”
- Especially if you link different topics (like ICT and Creative Industries) the cluster manager has to work as a “translator” between both sectors.
- The bottom-up method is reasonable, but complex. The process of involving all stakeholders requires a large amount of resources.
- Even if the CReATE project is limited to five ICT-related trends for the creative industries, it is still very broad for a target-oriented matchmaking.
- The funding of the project ends with the implementation of the joint research agenda. To ensure the sustainability of the project the results (especially the regional analysis) have to be used by bringing adequate partners together.

For more information on this Case Study see the on-line Handbook or contact:

MFG Baden-Württemberg mbH, Germany

Website: <http://www.mfg.de/english/>

42 *Case 15: Cluster Insight Reports – CIR programme*

The challenge to international cluster cooperation

How to support cluster organisations and their members to build trust or to identify synergies with foreign clusters. Whereas many funding schemes do exist targeted at identifying potential foreign partners and getting in contact with them, there is a funding gap for the next phase (eg. trust building, evaluating possibilities for co-operations).

Description of case

The Cluster Insight Report Call of Germany Federal Ministry for Education and Research, launched in February 2009, aims to facilitate follow-up measures following the first actions after identifying potential foreign cluster partners. The call provides funding for clusters in order to:

- Deepen existing contacts with foreign clusters
- Initiate trust building activities, joint workshops, conferences, etc.
- Demonstrate German scientific excellence
- Identify common items for long-term co-operations, etc.
- Bridge the gap until dedicated business or R&D actions between clusters can start

The scope of funding is quite flexible, in order to facilitate the initiation of international co-operation. The funding volume is about EUR 30.000, and the duration of the funded projects is about 9 months. So far, 35 applications have been sent within the first call; 13 will be funded. The beneficiary cluster will also provide a Cluster Insight Report about the targeted foreign cluster in order to give other interested German clusters more information. These reports will be published and contribute to map interesting non-resident clusters.

Key lessons learned

- Strong demand enabled trust building and preparation of specific actions
- Dissemination of the reports contribute to inform other clusters about interesting partners
- However, funding period should be extended since trust building often requires more than nine months
- Small but dedicated incentive can be a leverage to support the internationalisation of cluster organisations and SMEs

For more information on this Case Study see the on-line Handbook or contact:

VDI-VDE

Website: http://www.vdivde-it.de/?set_language=en&cl=en

Case 16: Developing European Biotech Clusters

The challenge to international cluster cooperation

How to achieve the more effective transfer of knowledge and experience from one cluster to a related cluster in another region.

Description of case

The CLUNET pilot project was led by the Madrid region. The other partners were South Great Plain (Hungary) and Brittany. The project focused on reciprocal visits by cluster managers in biomedical clusters in different regions and by the exchange of information. The visits were of two days duration only, which was not long enough to achieve in-depth sharing of expertise and increased knowledge on skills improvement and innovative ideas.

Key lessons learned

- Staff visits to other cluster initiatives can be an effective means of obtaining knowledge about activities in other regions and in building working relationships between cluster managers.
- Longer visits are necessary to achieve in-depth sharing of expertise and increased knowledge on skills improvement and innovative ideas.

For more information on this Case Study see the on-line Handbook.

Case 17: Greek Cluster Liaison Office in Silicon Valley

The challenge to international cluster cooperation

The Greek ICT Nano/Microelectronics & Embedded Systems cluster experiences strong challenges in building a worldwide competitive advantage, mainly due to its relatively small size. Specifically, it is of the essence to gain immediate access, particularly for cluster SMEs, to international markets where target customers and matching industrial partners reside.

Description of case

A Greek Technology Cluster Liaison Office (CLO) is under formation in Silicon Valley (CA, USA) in order to address the internationalization need of the ICT Nano/Microelectronics & Embedded Systems cluster. The CLO initiative aims to establish a “boot camp” kind of facility that will help Greek SMEs to pursue business opportunities in the heart of their target market and will act as a hub for internationalization activities. Based on the findings of the preparation study (May – July 2009) and with respect to “bottom-up” approach, the general functions and provided services of the CLO include: Market

Intelligence, Network Development, Promotional Events, Knowledge Transfer, Incubation Acceleration, Business Development & Strategic Alliances and Specialty Services.

Key lessons learned

- A phased development approach model, with *Go-No Go* decisions and escalating investments must be adopted for the execution of the project.
- Not all SMEs are on the same level of readiness to respond and benefit from this initiative.
- The funding of the project needs to be addressed and analysed thoroughly based on sustainability so that the operation of CLO will migrate eventually from mainly state-support financing to a privately funded model.

For more information on this Case Study see the on-line Handbook or contact:

Corallia, Greece

Website: www.corallia.org

Case 18: Medicon Valley Alliance Life Science Ambassador Programme

The challenge to international cluster cooperation

The Medicon Valley Alliance (MVA) is a transnational cluster initiative in the Öresund region, working to both access and attract the best talent in the world. The MVA's Ambassador programme was initiated to address those objectives.

Description of case

The Life Science Ambassador Programme is a global life science network providing businesses and organisations working with life sciences a unique opportunity to find partners, collaborators, investors, and sponsors in development hot-spots around the world. The Ambassadors from the participating clusters are integrated into the day-to-day operations at the Medicon Valley Alliance, while the Medicon Valley's Ambassadors are integrated into the host organisations abroad for a period of 2-3 years. The life science ambassadors operate as high-level connectors, ensuring direct access to decision-makers globally. Life science ambassadors are all multi-lingual, with extensive experience in the life science industry and an in-depth knowledge from their own region.

Currently there are five ambassadors: two in Japan, two in Canada and one in South Korea. The remaining clusters are currently linked by close cooperation between the respective cluster organisations. When the programme is fully implemented, Medicon Valley Alliance will be home to representatives from 12 of the world's most innovative and prosperous life science clusters and 12 representatives from MVA will be represented in life-science hubs abroad. The programme is financed by private funds, the regional growth council of Copenhagen and Sealand (Denmark) and the region of Skaane (Sweden). It is estimated that the total costs for the 12 MVA ambassadors is 10 million Euros. Financing has currently been obtained for four ambassadors.

Key lessons learned

- Skilled ambassadors (both in life science experiences and in diplomatic competencies) open doors to other hubs globally. The results are highly appreciated by the company members of the MVA.
- It takes time to build collaborative links – embedded in innovation eco-systems elsewhere in the world. This requires quite high financial investments and human resource commitment.

For more information on this Case Study see the on-line Handbook or contact:

<http://www.ambassadorprogramme.com/>

STEP COMPLETION

For cluster organisations:

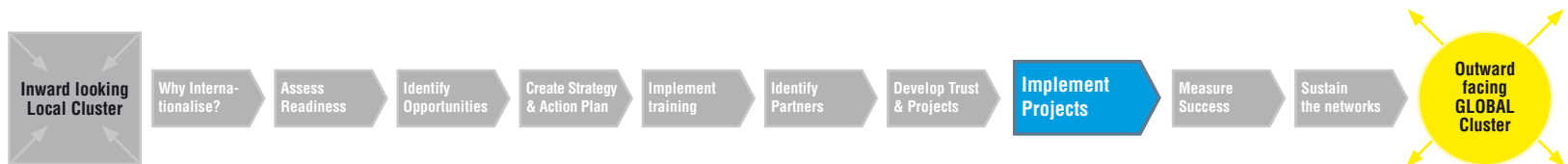
- Are you using the tools specified in the cluster internationalisation strategy & action plan effectively?
- Are contacts being converted into potential partners and then into collaborations and projects?

For policy makers:

- Are you providing support for the framework conditions that will provide benefits to your cluster organisations, eg networks, international offices, ambassador projects?

If the answers are positive, then move onto the next Step.

STEP 8. IMPLEMENT PROJECTS



OVERVIEW

Cluster international collaborations are in many ways no different to other projects but have the added complication of distance, language barriers and culture differences between the partners. Standard project management skills are essential with the addition of patience and understanding to overcome the differences and the additional delays in delivering results. Standard project management tools and accounting systems that can deal with multiple currencies are an option but it may also be necessary to use the systems specified by particular funding programmes.

Some of the key issues for cluster internationalisation collaborations are:

- Take baseline measurements at the start of the project to make evaluation easier.
- Monitor progress and check against agreed project objectives and outcomes.
- Learn from previous projects and build this learning into the project plan.
- Be flexible to changing circumstances. Contingency plans and budgets are essential.
- Ensure that sufficient human resources with the right skills are available throughout the lifetime of the project.
- Be aware of cultural differences

Unexpected events and outcomes are a common feature of many projects and collaborations. These can be positive as well as negative. Projects and collaborations therefore have to be flexible to maximise the additional benefits or to minimise the negative outcomes.

Having a Plan “B” is a good idea, even if it is never used. In addition, unexpected events can lead to new ideas for projects and collaborations, either with the same partners or with new or improved partners.

What is missing at European level is a database of cluster internationalisation projects and collaborations that cluster organisations and policy makers can access.

Many projects start as a means of obtaining funding. Unfortunately, this can sometimes lead to projects driven by the requirements of the funding bodies rather than the needs of the partners and the project beneficiaries, eg SMEs. A better approach is to define the project, determine the additional funding needs (if any) and then match the project to the available funding sources.

Forward planning is essential to maximise the chance of success of securing competitive funding. Many funding calls are for three months, which is not long enough for most groups of partners to prepare a quality bid. The partners should prepare and agree the project plan well before start of the funding call. It is usually helpful to attend the Information Days about particular funding calls and to discuss the project proposal with the funding body and the relevant EU programme national contact point to see how well the proposal matches the requirements for funding. Knowing the percentage success rate for a particular funding programme will help to manage expectations. Sometimes it may be better to apply for funding from another programme with a higher success rate, but only if it fits with the project proposal.

46 Increasingly grants are not the only means of funding cluster internationalisation projects. As grant funding becomes more difficult to obtain it is important to consider other sources of funding, eg soft loans, in-kind contributions etc.

Even well planned projects and collaborations can be unsuccessful. It is important to learn from what went wrong and to use this learning in future projects and collaborations.

USEFUL TOOLS

Standard project management tools and accounting systems that can deal with multiple currencies.

Systems specified by particular funding programmes

Sharing good practice and experience with other cluster organisations.

Discussing project proposals at an early stage with the relevant EU programme contact points.

Mentoring schemes are particularly effective in disseminating good practice in implementing projects.

PRACTICAL EXAMPLES

None of the TACTICS Case Studies specifically addresses project implementation. However, they are all concerned with successful projects and include examples of both good practice and lessons learned.

STEP COMPLETION

For cluster organisations:

- Do you have the necessary Project Management skills and capacity?
- Are you using the appropriate Project Management tools?
- Are your international projects and collaborations proceeding smoothly or is there a high level of problems?
- Do you have a “Plan B”?
- If unexpected events and outcomes have occurred, have they been dealt with and have they led to ideas for new projects and collaborations?

For policy makers:

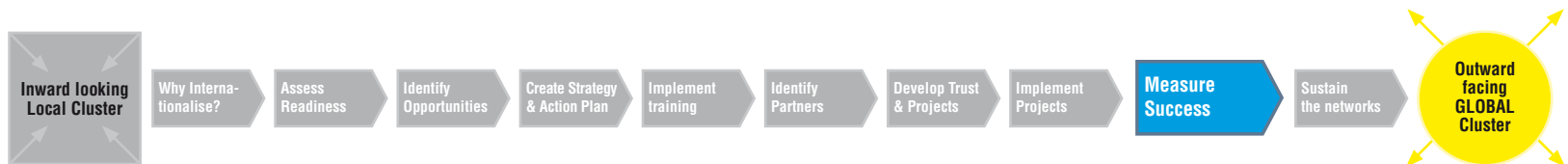
- Do you provide support to cluster organisations to build up their project management capacity?
- Do you encourage the sharing of good practice and expertise between cluster organisations?

If the answers are positive, then move onto the next Step.

If the project or collaboration is unsuccessful, go back to Step 6.

If an unexpected event or outcome has occurred, review Step 3.

STEP 9. MEASURE SUCCESS



OVERVIEW

In order to measure success effectively it is essential both to articulate “What will success look like?” as part of the Internationalisation Strategy and Action Plan and carry out the relevant baseline measurements.

Measuring success is a continuous process and covers both learning/monitoring which takes place as the collaboration project is taking place, as well as evaluating/measuring success after the project has finished. Even then, benefits will continue to occur or indeed may not occur until sometime after the end of the project. It is therefore important to ensure that evaluation takes into account the accumulative and longer-term benefits when determining the success of the project.

Some of the key issues for measuring the success of cluster internationalisation collaborations are:

- Measure success at the individual project level
- Measure success at the overall level against the Internationalisation Strategy & Action Plan
- Use qualitative indicators in addition to quantitative measures

A key aspect of measuring success is to learn from the results. These can lead to early stages in the “Journey” being revisited:

- Reassess Awareness
- Investigated further new ideas
- Revise Internationalisation Strategy & Action Plan

The TACTICS guide on **Impact evaluation of cluster-based policies** suggests the concrete steps for setting up an evaluation process of cluster-based policies. The document, targeting policy makers and other cluster stakeholders, is a practical guide supported and explained by several cases.

USEFUL TOOLS

Learning/Monitoring Tools

The European Clusters Go International survey published by the Institute for Innovation and Technology (iit), the Nordic-German-Polish (NGP) Cluster Excellence Benchmarking Project, the guideline “European Cluster Excellence BASELINE – Minimum Requirements for cluster Organisations”, the Cluster Management Quality Label and the EFQM Excellence Model discussed in Step 1 – “Why”, are all potentially useful. Download them using the links in Step 1.

Qualitative indicators can be measured using surveys. The Cluster Dynamics model is also useful and the BSR StarDust project is testing the internationalisation application of the model. Scottish Enterprise originally developed the Cluster Dynamics model that Ekos have refined further. Download further information:

http://ekstranett.innovasjon Norge.no/NCE_fs/Cluster%20Dynamics%20Final%20Report%20Sep%202008.pdf

<http://www.tci-network.org/activities/dynamics>

<http://www.bsrstars.se/stardust>

48 EVALUATION TOOLS

Many commonly used project evaluation methodologies can be applied to cluster internationalisation projects, programmes and collaborations. However, it is important to assess and report the accumulative and longer-term benefits.

PRACTICAL EXAMPLES

None of the TACTICS Case Studies specifically covers measuring success. However, they are all concerned with successful projects and include examples of both good practice and lessons learned.

STEP COMPLETION

For cluster organisations:

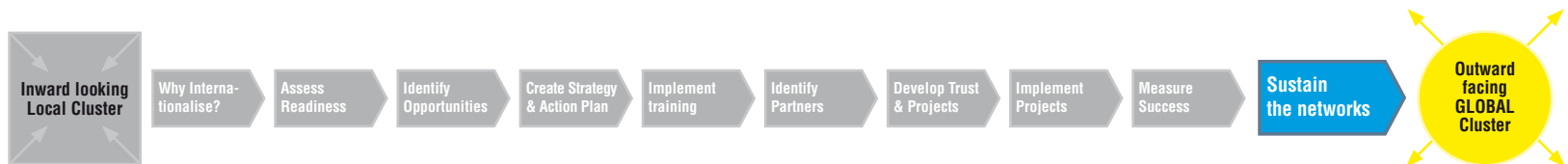
- Have benchmarking and quality management been completely implemented?
- Has the use of the Cluster Dynamics model been considered?
- For each project/collaboration:
 - Was benchmarking data collected at the start?
 - Is the monitoring process in place and working properly?
 - Is the evaluation plan in place for the end of the project/collaboration?
 - Is the mechanism for measuring the longer-term benefits from the project/collaboration in place, or at least, under consideration?
- If unexpected events and outcomes have occurred, have the benefits been measured?

For policy makers:

- Have cluster organisations been encouraged to carry out benchmarking and quality management?
- Has good practice on monitoring and evaluation been shared with other policy makers?
- Has the awareness of good practice within cluster organisations of monitoring and evaluation been raised?

If the answers are positive, then move onto the next Step.

STEP 10. SUSTAIN THE NETWORKS



OVERVIEW

Developing trust and good relationships for projects and collaborations requires the investment of time and energy. These successful relationships should not be allowed to lapse at the end of the project or collaboration. Instead, they should be used as a basis for further projects or collaborations.

Networks need to have clear deliverables and will in time need to be self-financing. However, care has to be taken to manage potential conflicts between the network and some of its member companies who provide services. Identifying appropriate partners who share the same goals will lead not only to a successful project but also to follow-on projects.

Feeding information on successes and key learning points from cluster internationalisation collaborations into the relevant networks will help and mutually support other organisations within those networks.

Case studies should be published where appropriate.

Different funding programmes, eg INTERREG, Regions of Knowledge, ERDF etc, are relevant to different stages of the Internationalisation Journey and specific cluster collaboration projects. Through careful planning and cooperation, the same group of partners can apply for staged funding from different programmes and demonstrate the progression of the project from concept to commercial benefits to SMEs associated with the partner cluster organisations.

Improve existing networks from the inside rather than setting up more networks. Recognise that networks, like clusters, have a finite life span and eventually should be closed and replaced with networks that are more appropriate to current needs and opportunities.

The effective governance of a network is a key issue and has to be

professional. Infrastructure built with public funding can migrate to a private funding model.

USEFUL TOOLS

Two on-line tools are highly relevant for sustaining networks:

European Cluster Collaboration Platform

<http://www.cluster-excellence.eu/eccp.html>

European Cluster Observatory

<http://www.clusterobservatory.eu/index.html>

In addition, the Cluster Dynamics model can be used.

http://ekstranett.innovasjon Norge.no/NCE_fs/Cluster%20Dynamics%20Final%20Report%20Sep%202008.pdf

<http://www.tci-network.org/activities/dynamics>

PRACTICAL EXAMPLES

One Case Study from the TACTICS project illustrates the benefits of sustaining networks.

Case 19: Initiation of a long-term partnership between Linux Solutions Group (LISOG) and COSS (Finnish Centre of Open Source Solutions)

The challenge to international cluster cooperation

Linking clusters across borders within Europe asks for sustainable actions. This case particularly addresses the following challenges:

- Finding relevant partners and developing collaborative relationships with them
- Opening-up national programmes

50 Description of case

LiSoG, the Linux Solutions Group is an IT network managed by MFG Baden-Württemberg and aimed at increasing the establishment of Linux and Open Source Software in companies. LiSoG is an initiative with a European dimensions as its geographic scope covers not only Baden-Württemberg in the southwest of Germany but also parts of Austria and Switzerland. LiSoG decided to follow a strategic approach towards cooperation with another cluster initiative to: exchange experiences, learn from other initiatives and find adequate partners for cooperation projects. The success of LiSoG's European cooperation approach was due to an extensive partner search at the beginning. COSS is a Finnish network promoting the development and adoption of managed and sustainable open source solutions in various industries and public sector with an organisational structure and a target group very similar to that of LiSoG. The two-day LiSoG delegation trip comprised a matchmaking event, a workshop on internationalisation and the initiation of cooperations. The networks agreed to deepen further their cooperation in the future.

Key lessons learned

- Follow a strategic approach towards cooperation with another cluster initiative and define clear objectives in advance
- Choose clusters with similar organisational structures and similar target groups
- Choose clusters pursuing the same objectives
- Choose a branch (such as Open Source) which is facing similar challenges in all European countries
- Give cluster members the chance to enter into a true dialogue
- Make sure that there is no effect of cannibalisation between the partner networks/cluster members

- MFG together with its network LiSoG is currently planning to develop virtual cooperation platforms that can be seen complementary to physical meetings and which will consequently contribute to ensure sustainable partnerships between clusters and networks across borders.
- The internationalisation of clusters can take part in the cloud today. The multitude of standard "online tools in the cloud", like Facebook, flickr, or LinkedIn, etc., can facilitate the internationalization efforts of Cluster Managers. LiSoG took the first step by reporting on the LiSoG delegation trip via twitter. Yet, these online tools in the cloud have to be used more extensively in order to enable sustainable cluster cooperation across borders.

For more information on this Case Study see the on-line Handbook or contact: MFG Baden-Württemberg mbH, Germany
Website: <http://www.mfg.de/english/>

STEP COMPLETION

For cluster organisations:

- Are your successful projects or collaborations leading to new projects or collaborations with some of the same partners?
- Are you helping to improve and revitalise networks?

For policy makers:

- Do you have a process for assessing and supporting effective networks?

If the answers are positive, then congratulations – your organisation has become truly international. Nevertheless, there is no time for complacency. Go back to Step 3 and go through the Internationalisation Journey again to improve your performance and extend the international linkages of your organisation (you may also need to revisit Step 1 and Step 2).

OVERVIEW

Cluster internationalisation activities can use a range of funding at European, member state and regional levels. The Step in the Internationalisation Journey which been reached will determine the level of funding required. The early Steps usually need less funding than do cluster collaboration projects. A common difficulty is in securing funding which the project can spend, rather than the partners having to spend it on an individual basis. Other challenges for cluster organisations are in accessing match funding for projects and in managing cash flow.

There is considerable scope for increasing the level of Channelling of Research Development & Innovation (RDI) funding through cluster organisations. This will produce benefits for SMEs, in particular small businesses, by providing better access to RDI funding and would improve the efficiency of the funding provision. In order to increase the amount of funding that could flow through cluster organisations several challenges need to be overcome; in particular making sure that the cluster organisation can continue to manage its cash flow. The agreement of the sponsors of the relevant funding programmes is also necessary, as some changes to the rules of these programmes are required.

The TACTICS paper on **Channelling RDI funding through clusters** proposes a focus on the capacity of clusters/cluster organisations to attract and manage RDI funding, including new activities and actors. It also provides TACTICS' contribution to the State Aid rules consultation for clusters.

Major changes to EU policies and funding programmes will occur at the start of 2014. The Cosme programme from DG Enterprise will replace the earlier CIP programme, and Horizon 2020 will provide a continuation and upgrade to the Frameworks programme (FP7). There will also be changes to Structural Funds, eg ERDF. Cosme will include support for cluster development activities but the emphasis in all the new programmes will be on how excellent clusters and cluster organisations can be catalysts for economic growth and revitalisation.

USEFUL TOOLS

Funding includes the calls for Innovation Express (see Case 7 below).

The pilot World Class Cluster Internationalisation programme from DG Enterprise in 2012/13 will enable the testing of internationalisation activities. Funding schemes such as the Swedish Global Links Programme may be appropriate for organisations in the relevant member state.

PRACTICAL EXAMPLES

One Case Study from the TACTICS project illustrates a programme that has specifically provided funding for cluster internationalisation.

52 *Case 20: INNET/Innovation Express Call for Proposals to initiate and prepare transnational cluster cooperations for the benefit of SMEs*

The challenge to international cluster cooperation

How to develop common mechanisms to strengthen cooperation between national, regional and European innovation authorities, in order to develop SME-targeted activities within European Clusters

Description of case

Innovation Express was developed as part of the INNET (PRO INNO) project as a common call for proposals, in order to support and fund inter-cluster RDI cooperation activities at transnational level, for the benefit of SMEs. Innovation Express was designed to support a large scope of innovation activities allowing SMEs/clusters to identify, prepare, and develop different stages of European cooperation (from the initial stage of contact and networking until the setup of a shared proposal) in the field of RDI. With the mechanism of the “virtual pot”, it was decided to maintain for each partner its own rules and procedures at national/regional level. Bilateral funding was not considered mandatory, and clusters outside the INNET area could be involved (without financial support) in the networking activities as well as in the proposals. Depending on the rules of each partner, funding or support could be given directly either to SMEs (an average of 15 k€ per SME) and/or to cluster organisations.

Expected outputs of the projects include:

- Enhancing inter-cluster cooperation strategy
- Preparation of common technology roadmaps/strategies
- Organisation of matchmaking activities
- Building partnerships

- Initiation of RDI projects for clusters members
- Dissemination and promotion of the inter-cluster cooperation
- Towards sustainability of cluster networks

The first Innovation Express call targeted 76 clusters in 18 countries, and resulted in the submission of 42 proposals by 35 clusters, with each proposal including participation of approximately 10 SMEs.

Innovation Express has continued with additional partners under the TACTICS project.

Key lessons learned

Clusters have pointed out a number of benefits of the Innovation Express initiative:

- Allows initiation of transnational cooperation, going more into more depth than is possible with the usual meetings in fairs/events
- Provides the opportunity to create synergies with other European schemes/projects (INTERREG, Regions of Knowledge, Eurostars, etc.)
- Provides better European visibility on technologies and markets
- Brings a real service to cluster members for their transnational activities, in particular SMEs
- Increases the sustainability of cluster networks: increasing the cluster’s ability to become a strong ecosystem, gathering SMEs with a high potential of RDI collaborative projects.

All of the applicants see the international cooperation between clusters of different regions as the main benefit of the Innovation Express funding scheme.

For more information on this Case Study see the on-line Handbook or contact: Oséo, France

Website: <http://www.oseo.fr/international>

STEP SUCCESS CRITERIA

For cluster organisations:

- Are you aware of the various funding programmes that can be used to support internationalisation projects or collaborations?
- Do you have access to expert help in completing applications for funding from the relevant programmes?

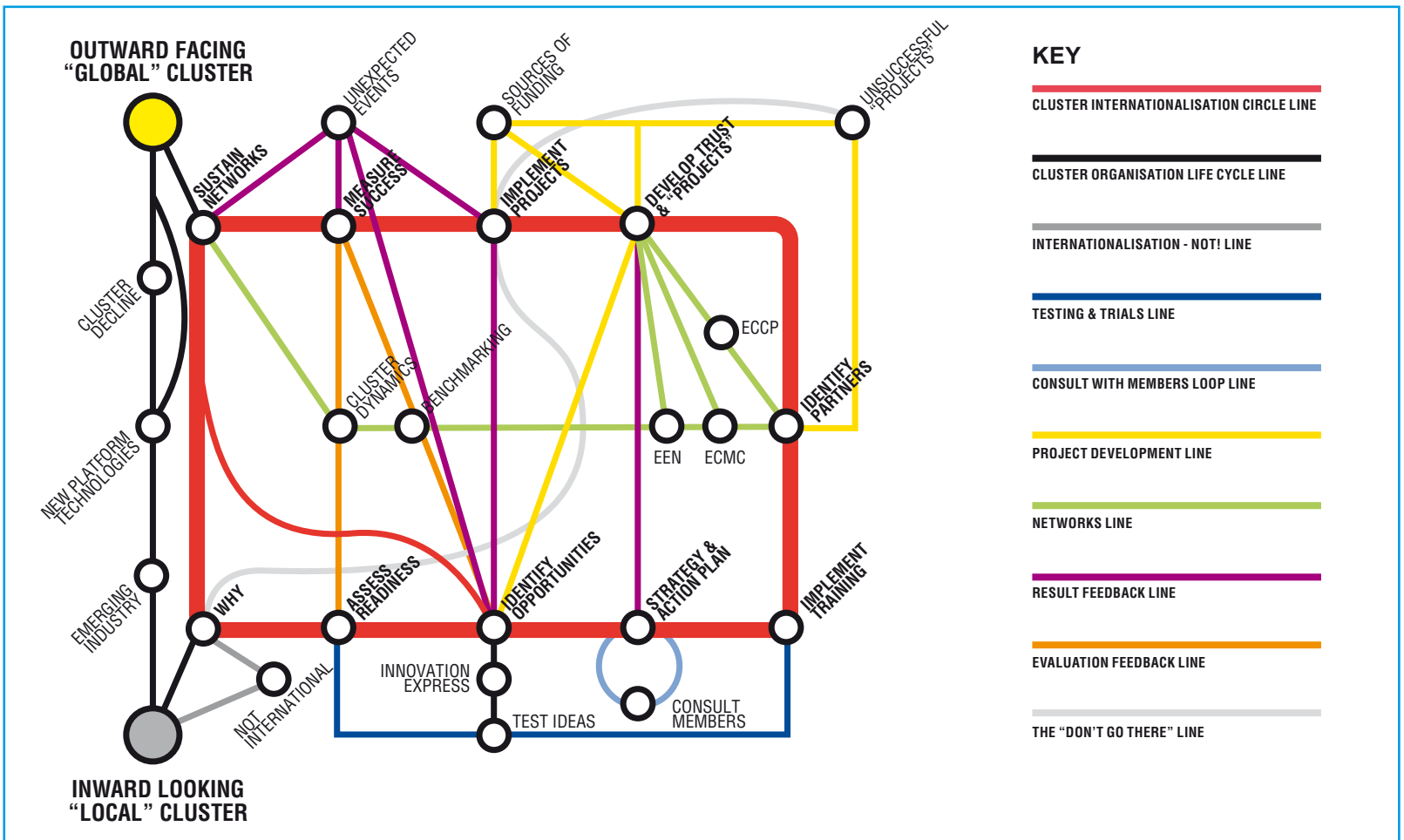
For policy makers:

- Do you participate in Innovation Express?
- Do you provide other specific funding for cluster internationalisation?

In practice, the Utilise Funding Step is never completed, as the provision of funding is constantly evolving. Both cluster organisations and policy makers have to keep up to date with what is available and make the most effective use of funding at all stages of the Journey.

Internationalisation Cluster Cooperation: The Tube Map

(Bill Greenhalgh Enterprise Fellow, MMU 26.02.2012)



The tube map

The Journey diagram presents a clear and easy to follow view of cluster internationalisation in ten steps. In practice, cluster internationalisation is a more iterative process with a regular need to revisit and improve the activities carried out in the early steps. Many cluster organisations and policy makers do not accomplish cluster internationalisation in a single journey. Instead, pilot internationalisation activities will take place in one or two countries or regions, or will focus on a sub-cluster of businesses.

The more complex “Tube Map” shows some of the iterations on the Journey, some of the activities linked to cluster internationalisation and some of the key supporting organisations. The Tube Map consists of different coloured “Lines” which join up connected activities, including the iterations.

As with the Journey diagram, the starting point of the Tube Map is an inward looking “local” cluster and end is an outward facing “global” cluster. The Tube Map shows that in practice cluster internationalisation is more of a continuous process of improvement.

The Tube Map does not replace the Journey diagram. It should help those cluster organisations and policy makers that are implementing the steps of the Journey described in this Handbook.

- The Cluster Internationalisation Circle Line (Red) follows the same ten steps as the “Journey” diagram, but also shows that Cluster Internationalisation is a continuous process of improvement. Several other lines indicate the detailed iterations.

- The Internationalisation-Not! Line (Grey) shows that if the answer to the internationalisation “Why?” question is to not go international then it leads to a dead end. The cluster organisation can only go back to address the “Why?” question again.
- Testing & Trials Line (Dark Blue) shows how the cluster organisation can test ideas and try out new thinking by utilising funding such as Innovation Express. It also shows how Implementing Training can lead to a reassessment of readiness.
- Consult with Members Loop Line (Cyan) shows the importance of engaging with companies, academics and other cluster members.
- Project Development Line (Light Orange) shows the importance of identifying and securing funding and that some “projects” might not work, but can lead to new partners and a new “project”.
- Networks Line (Green) shows the importance of using existing mechanisms such as European Cluster Collaboration Platform, European Cluster Managers’ Club and Enterprise Europe Network as a short cut to identify partners. Other networks could also be sources of partners. The line also shows the links to Benchmarking and Cluster Dynamics as ways of assessing progress and sustaining networks.
- Results Feedback Line (Magenta) shows how developing trust and implementing “projects” should lead to a review of the Strategy & Action Plan, and the identification of new opportunities. It also shows that “projects” can lead to unexpected events which are also potential sources of new opportunities and which need to be included when measuring success.

- Evaluation Feedback Line (Brown) shows that Benchmarking and Cluster Dynamics are useful tools that can identify new opportunities and help to assess readiness for further international activities.
- The Don't Go There Line (Light Grey) shows how some cluster organisations currently behave by going immediately into "projects" and then finding that many of their "projects" don't work out as expected. It is marked as "Closed Permanently" to emphasise that cluster organisations and policy makers should use the Cluster Internationalisation Circle Line to achieve successful internationalisation.
- The Cluster Organisation Life Cycle Line (Black) shows how cluster organisations that have become international will eventually decline. There can be a transformation into a new cluster organisation as some businesses in the cluster adopt new platform technologies that then can create "emerging industries". The new cluster organisation will inevitably start by being inward looking and local but will have the benefit of international knowledge and expertise from the previous cluster organisation.

Further details of the activities shown on the Tube Map will be available in the on-line version of the Handbook.

Addressing the outstanding issues

In the introduction to this Handbook a number of issues were identified that needed to be addressed. The Handbook provides at least partial solutions as follows:

- Low capabilities (among SMEs) for working strategically with international partners – **the Handbook (all Steps)**
- Lack of structured information on internationalisation needs and potential partners for clusters and Cluster Organisations – **Steps 1, 3 & 6**
- Lack of structured opportunities for meeting and developing relations with potential international partners – **Step 6**
- Lack of tailored mobility schemes between cluster stakeholders (particularly SMEs) – **Utilise Funding**
- Lack of virtual (and real) infrastructure for collaborative activities – **Step 6**
- Lack of tailored financing schemes for internationalisation activities (particularly SMEs and particularly for longer-term trust-building and “business planning” activities) – **Utilise Funding**
- Too little coordination between existing international networks of clusters/ Cluster Organisations /innovation environments (not only on the level of clusters, but also on the level of regional/ national policy levels) – **Steps 3, 6 & 10**
- Too little coordination between internationalisation goals in different policy fields – **Steps 1 & 4**

Further details and links to related activities will be available in the on-line version of the Handbook.

Conclusions and recommendations

Overall, this edition of the Cluster Internationalisation Handbook is still “work in progress”. Much has been achieved and by disseminating these achievements, the current best practice can be spread further amongst cluster organisations and policy makers. However, the work within the TACTICS project on Cluster Internationalisation has produced the following recommendations:

1) **Lever Cluster Organisations as a Central Tool for Internationalisation**

Cluster internationalisation is not an isolated activity. It forms a key component of many other important activities, e.g. innovation, commercialisation, skills development, export promotion and attracting foreign direct investment. Cluster organisations, their members and their activities should form a base for policy development and implementation including the setting of agreed goals and deliverables.

Cluster organisations should:

- Collaborate closely with other support organisations, including providing hot desk facilities, organising joint events etc
- Not attempt to deliver all types of support to their members

Policy makers should:

- Issue strong positive policy statements to encourage close collaboration of other support organisations with cluster organisations
- Ensure closer coordination with other policy organisations to set internationalisation goals
- Facilitate and fund joint activities and events for other support organisations and cluster organisations

2) **Catalyse the creation of Regional Innovation Strategies for**

Smart Specialisation

Cluster internationalisation is crucial to linking the regional innovation smart specialisation strategies in complementary regions. Cluster organisations should be part of the mechanism to facilitate links between businesses, knowledge centre and knowledge infrastructures (pilot plants, demonstrators, etc.) plus open and user-driven innovation arenas in different regions for mutual benefit.

Cluster organisations should:

- Participate actively in the creation and implementation of the regional innovation smart specialisation strategy for the region where they are located
- Explore synergies with other regions with complementary regional innovation smart specialisation strategies
- Promote the sharing of knowledge infrastructure
- Raise awareness of cluster members and policy makers of activities that are helping to deliver the regional innovation smart specialisation strategy

Policy makers should:

- Involve cluster organisations in the preparation of regional innovation smart specialisation strategies
- Facilitate links with other regions with complementary regional innovation smart specialisation strategies

3) **Intensify International Cluster networking and cross-fertilisation**

Cluster internationalisation is crucial to making links between regions in different countries and continents that can stimulate continuous renewal and the emergence of new economic activities. Networking and partnerships, including staff exchanges and mobility schemes, be-

60 tween cluster organisations (especially those in complementary sectors) is crucial to the identification and growth of emerging industries.

Cluster organisations should:

- Support existing networks and drive improvements to the services offered by these networks plus better coordination between the networks
- Explore opportunities with related cluster organisations in those regions covered by MoUs
- Participate in staff exchanges and mobility schemes

Policy makers should:

- Target MoUs and other collaboration agreements more effectively to exploit national and regional strengths and international opportunities
- Produce better quality and more focussed national and regional internationalisation strategies and action plans
- Make better coordination with other international networks a condition for funding such networks
- Make more funding available for staff exchanges and mobility schemes

4) Improve and target Branding & Marketing

Cluster organisations need a high level of international visibility if they are to deliver their international activities effectively. Cluster organisations need to work actively with marketing and branding to improve their visibility to the appropriate potential partners. Regions should also work more actively with branding and profiling their clusters and cluster organisations in particular via the European Cluster Collaboration Platform.

Cluster organisations should:

- Develop high quality and targeted branding and marketing
- Use appropriate mix of channels, eg ECCP
- Regularly assess effectiveness of branding and marketing

Policy makers should:

- Develop high quality and targeted regional branding and marketing which links to that for clusters and cluster organisations
- Provide support for cluster organisations to develop high quality branding and marketing

5) Further Develop Innovation Express

Cluster internationalisation requires funding at different stages in order to reach its full potential quickly. Innovation Express should be further developed (e.g. broader participation, possibilities for European-level co-financing, etc.) to build on its success to become a European mechanism to facilitate the internationalisation of cluster organisations and SMEs. It should also be linked to the European Cluster Collaboration Platform and matchmaking events. At the same time, the use of other European funds needs to become more flexible to utilise them for cluster internationalisation. Cluster organisations should:

- Participate in Innovation Express bids
- Exploit other sources of funding
- Share good practice in obtaining and using funding for cluster internationalisation

Policy makers should:

- Participate in Innovation Express funding
- Ensure more effective integration between Innovation Express, the European Cluster Collaboration Platform and other related initiatives

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- TACTICS Reflection Group – Task Force on Fostering International Cluster Cooperation, *Progress Report for Second Task Force Workshop. Nice 17 November 2010*, 2010.
- UK Trade & Investment – Passport to Export Programme, *Passport Trade Review*, UK, 2010.

Linkology

Austria

TMG, Upper Austria

http://www.tmg.at/index_eng.php

Clusterland Upper Austria

http://www.clusterland.at/index_ENG_HTML.php

Belgium

IWT, Flanders, Belgium

<http://www.iwt.be/english/welcome>

Service Public de Wallonie

<http://spw.wallonie.be/>

Denmark

Copenhagen Cluster Excellence Declaration

<http://www.clusterexcellence.org/download-material.html>

REG LAB

<http://www.reglab.dk/english>

France

Côte d'Azur Chamber of Commerce, France

www.cote-azur.cci.fr

Oséo, France

<http://www.oseo.fr/international>

Ministère de l'Économie et des Finances

<http://www.economie.gouv.fr/>

innoTSD

http://www.inno-group.com/index.php/kb_1/oe_113/oe.html

Germany

The Institute for Innovation and Technology in Germany & the European Clusters Go International survey

<http://www.vdivde-it.de/publications/best-practice/european-clusters-go-international-2013-networks-and-clusters-as-instruments-for-the-initiation-of-international-business-cooperation>

MFG Baden-Württemberg mbH, Germany

<http://www.mfg.de/english/>

VDI-VDE, Germany

http://www.vdivde-it.de/?set_language=en&cl=en

Greece

Corallia, Greece

www.corallia.org

Hungary

Gideon Richter

<http://www.richter.hu/EN/Pages/home.aspx>

Északalföld

<http://www.eszakalfold.hu/en>

Italy

Veneto Innovazione

<http://www.venetoinnovazione.it/?q=eng>

Filas, Lazio, Italy

<http://www.filas.eu/>

Japan

Japan - EU-Japan Centre for Industrial Cooperation

www.eu-japan.gr.jp

Korea

KICOX (Korea Industrial Complex Corporation)

<http://www.e-cluster.net/en/>

Luxembourg

Luxinnovation GIE

<http://en.luxinnovation.lu/Accueil>

Netherlands

Ministry of Economic Affairs, Agriculture & Innovation

<http://www.government.nl/ministries/eleni>

Poland

PARP

<http://en.parp.gov.pl/>

Spain

Generalitat de Catalunya

http://www.gencat.cat/index_eng.htm

Sweden

BSR Stars, Sweden

<http://www.bsrstars.se/>

Medicon Valley Alliance Life Science Ambassador Programme

<http://www.ambassadorprogramme.com/>

VINNOVA, Sweden

<http://www.vinnova.se/en/>**UK**

Manchester Metropolitan University

<http://www2.mmu.ac.uk/><http://www.mmucfe.co.uk/>

UK Trade & Investment

<http://www.ukti.gov.uk/home.html?guid=none>

Department of Business Innovation and Skills

<http://www.bis.gov.uk/>

Scottish Enterprise

<http://www.scottish-enterprise.com/>

Manchester Solutions

<http://www.economic-solutions.co.uk/about/manchester-solutions>**Europe General**

CLUNET INNO Net project on the PRO INNO

<http://www.proinno-europe.eu/clunet/publications>

DG Enterprise

<http://www.proinno-europe.eu/cluster-excellenceeu/newsroom/helping-smes-go-global-through-clusters>

ECPG Recommendations

<http://www.proinno-europe.eu/ecpg/newsroom/ecpg-final-recommendations>

EFQM

www.efqm.org/en

ERRIN

<http://errin.eu/en/>

Eurada

<http://www.eurada.org>

Europa InterCluster

<http://www.intercluster.eu>

Europe 2020

http://ec.europa.eu/europe2020/index_en.htmhttp://ec.europa.eu/research/innovation-union/index_en.cfmhttp://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm

European Aerospace Cluster Partnership

<http://www.eacp-aero.eu>

European Automotive Strategy Network

<http://www.easn.eu/>

European Cluster Alliance

<http://www.proinno-europe.eu/eca>

European Cluster Collaboration Platform

<http://www.cluster-excellence.eu/eccp.html>

European Cluster Excellence

www.cluster-excellence.eu/

European Cluster Managers Club

<http://www.cluster-excellence.eu/club.html>

European Cluster Observatory

<http://www.clusterobservatory.eu/index.html>

European Enterprise Network

<http://www.enterprise-europe-network.ec.europa.eu>

The Nordic-German-Polish (NGP) Cluster Excellence Benchmarking from the NGP Copenhagen Conference 2011

<http://www.clusterexcellence.org/download-material.html>

Scottish Enterprise Cluster Dynamics model that Ekos have refined further

http://ekstranett.innovasjon Norge.no/NCE_fs/Cluster%20Dynamics%20Final%20Report%20Sep%2008.pdf<http://www.tci-network.org/activities/dynamics><http://www.bsrstars.se/stardust>

TACTICS and the TACTICS Reflection Group

Task Force on Fostering International Cluster Cooperation

<http://www.ECA-TACTICS.eu>

Taftie

<http://www.taftie.org>

The Competitiveness Institute (TCI)

<http://www.tci-network.org/>

Glossary of key terms

Produced in collaboration with the **European Cluster Excellence Initiative**

Cluster

“A cluster is a geographical proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and externalities”. (Michael E. Porter, *On Competition*, Harvard Business Press, 1998, p.215)

Cluster members or constituents

Cluster members or better “constituents” (since to be part you do not need to sign a membership) *“include end product or service companies; suppliers of specialized inputs, components, machinery, and services; financial institutions; and firms in related industries. Clusters also often include firms in downstream industries (that is, channels or customers); producers of complementary products; specialized infrastructure providers; government and other institutions providing specialized training, education, information, research and technical support (such as universities, think tanks, vocational training providers); and standard setting agencies. Government agencies that significantly influence a cluster can be considered part of it. Finally, many clusters include trade associations and other collective private sector bodies that support cluster members.”* (Michael E. Porter, *On Competition*, Harvard Business Press, 1998, p.215-216)

Cluster Initiative

“Cluster initiative: an organised effort to increase the growth and competitiveness of a cluster within a region, involving cluster firms, government and/or the research community”. (Örjan Sölvell, Göran Lindqvist and Christian Ketels, *The Cluster Initiative Greenbook*, Vinnova/TCI, 2003, p.

Cluster Initiative Participant

“Businesses and other innovation stakeholders involved in cluster initiatives” (extracted from EC Communication: *Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy- SEC(2008) 2637*, 17 October 2008, p.7)

Cluster Organisation

*“Cluster initiatives are increasingly managed by specialised institutions, known as **cluster organisations**, which take various forms, ranging from non-profit associations, through public agencies to companies.”* (EC Communication: *Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy- SEC(2008) 2637*; 17 October 2008, p.8). A Cluster Organisation does not necessarily have members, but it provides services to the cluster initiative participants.

Note: Cluster organisations have different names in different countries, eg. *compétitivité pôles*, centres of expertise, innovation networks and competence networks etc.

Cluster Association and Cluster Association Members

A non-profit association legally formed by members *“businesses and other innovation stakeholders involved in cluster initiatives”* (concluded from definitions above).

Statistical clusters

“Regional agglomerations of co-located industries and services”. (EC Communication: *Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy- {SEC(2008) 2637}*, 17 October 2008, p.3)

Cluster Development

The cluster development process encompasses a range of organised efforts aimed at increasing *the growth and competitiveness* of the organisations in the cluster. Efforts are usually based on an evaluation of the cluster’s strengths and capabilities (a mapping exercise), from which a vision for the cluster is formulated and objectives articulated. Targets and actions plans specific to individual clusters are developed. Results are then monitored and evaluated.

Cluster Manager

The Cluster Manager is the head of a Cluster Organisation. The term can also refer to all senior members of staff in a Cluster Organisation.

Cluster Members

Cluster Members are the Businesses, universities, policy makers, other public sector organisations and other private sector organisations that actively participate in a Cluster Initiative. They may pay a membership fee to the Cluster Organisation.

Actor

An actor is a participant, either an organisation or an individual.

Demand Conditions

The nature and size of demand in the home market lead to the establishment of production facilities to meet that demand.

Factor Conditions

Factor conditions are the resource availability (inputs, labour, capital and technology) which contributes to the competitiveness of both firms and nations that compete in particular industries.

Innovation

Innovation is what drives productivity/ competitiveness and prosperity. "It is the creation, development and implementation of new products, processes or services, with the aim of improving efficiency, effectiveness or competitive advantage. Innovation may apply to products, services, manufacturing processes, managerial processes or the design of an organisation. It is most often viewed at a product or process level, where product innovation satisfies a customer's needs and process innovation improves efficiency and effectiveness. Innovation is linked to creativity and the creation of new ideas,

and involves taking those new ideas and turning them into reality through invention, research and new product development". (Source: Economist.com). One output of innovation is the creation of new firms through spinouts or start-ups. Innovation can also change the structure of an industry.

International

Activities shared between countries. Often refers to activities with countries outside Europe.

Memorandum of Understanding (MoU)

A MoU is a document that describes the general principles of an agreement between parties, but does not amount to a substantive contract.

Platform

A platform is a set of principles or plan by which activities can happen.

AND / OR

A platform is a place or forum for discussion.

The Porter Diamond

The Porter Diamond is a diagram developed by Prof Michael Porter to understand the contribution of four determinants (Demand Conditions, Factor Conditions, Related & Supporting Industries and Firm Strategy, Structure & Rivalry) to competitive advantage. In addition to the four determinants, the roles of chance and government are also critical. Usually all four determinants need to be favourable if a given national industry is going to attain global competitiveness

Related and Supporting Industries

The local presence of internationally competitive

suppliers and other related industries contributes to both the cost effectiveness and strategic competitiveness of firms.

Sector

A sector is an agglomeration of business activities into generally recognised individual industries that is used to quantify and analyse official industry data. This official data uses Industry Classification codes eg the 'Nomenclature générale des activités économiques dans les Communautés Européennes' (NACE) which is the standard for classification of economic activities in the EU and the Standard Industrial Classification (SIC) code in the UK. These do not easily relate to modern business clusters.

Tool

Something used in the performance of an operation; an instrument: "Modern democracies have the fiscal and monetary tools . . . to end chronic slumps and galloping inflations" (Paul A. Samuelson).

Trade Association

A Trade Association is a representational body of businesses in a specific industry or sub-sector. Services may fall into one or more of the following: governance, business ethics, management practices, standardization (and industry standards), commercial (i.e., statistical) research, publication, promotion, and public relations.

Transnational

Activities shared between countries with common borders.

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Special thanks to

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