Concept of Meta-Cluster in the Alpine Space

- Overcoming the Fragmentation of Cluster in the Alpine Space -

Author: Hartmut Welck

THIS PROJECT IS CO-FUNDED BY THE EUROPEAN REGIONAL DEVELOPMENT FUND
investing in your future

12.10.2012

Meta-cluster concept for the Alpine Space!

Contents

1 Theory and Definitions

A cluster can be broadly defined as geographically co-located end producers, suppliers, services providers, research laboratories, educational institutions, and other institutions in a given economic field, that are important drivers of dynamic regional economies. Clusters are powerful engines of economic development and drivers of innovation in the European Union. They provide a fertile business environment for companies, especially SMEs, to collaborate with research institutions, suppliers, customers and competitors located in the same geographical area. They should take into account the "triple helix" model: the involvement of university, industry and government institutions.

Over the last ten years a lot of cluster definitions were elaborated, but there is still no concrete overall accepted definition of the term. The first definition from **Michael Porter** is still the most accepted one:

"Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions in particular fields that compete but also cooperate" Michael E. Porter (1998)

This definition was also adapted by the **European Cluster Policy Group.** They defined cluster as:

"geographic agglomerations of companies, suppliers, service providers, and associated institutions in a particular field, linked by externalities and complementarities of various types."

These definitions are very general and also very fuzzy. For instance, they include no concrete details about the number of actors, which should be involved in a cluster. There is also no detailed description about the term "geographic concentration", so it could be a village, a city, a region or whatever. This is one reason, why it is so difficult to find a common understanding of the term cluster. Despite those weaknesses, the definitions will be the basis for the Alps4EU meta-cluster concept.

It is also very important to distinguish between clusters and cluster initiatives. The terms are strongly related to each other, but they not describe the same issue. For the Alps4EU project the following definitions of cluster initiatives are the fundamentals for the meta-cluster concept.

- The **European Cluster Policy Group** defines it as *"organised efforts taken by actors in a cluster to increase the cluster's growth and competitiveness"* – and cluster programmes – *"organised efforts taken by government to increase the growth and competitiveness of clusters in its constituency".*
- **Stockholm School of Economics (2008):** "Cluster initiatives are organised efforts to increase the growth and competitiveness of clusters within a region, involving cluster firms, government and/or the research community.

A cluster initiative normally involves:

1. *Different **member** firms and organizations (three main types of actors: private, public and academic)*
2. *Often a cluster **organization** (CO) with an office, cluster facilitator/manager, website etc.*
3. ***Governance** of the initiative (e.g., constellation of CO board)*
4. ***Financing** of the initiative (international/national/regional/local public funding, member fees, consulting, etc.)*

Source: CLUSTERS – Balancing Evolutionary and Constructive Forces, Örjan Sölvell 2009

To distinguish between clusters and cluster initiatives is also very important for the meta-cluster concept of Alps4EU. The main target groups of the meta-cluster concept are the cluster initiatives. The cluster initiatives should be connected to each other to establish new contacts and cooperation possibilities for their members. At the end also the clusters will benefit, because the new international interconnectedness will take influence on the development of the whole cluster.

2 Input from other EU Projects

The Alps4EU project has to be integrated into the context of other EU-projects. The project does not want to reinvent the wheel or tries to develop a standalone meta-cluster concept. On contrary it will analyse the existing ideas and concepts about meta-clusters to get a common definition. In the following chapters the most important EU-projects, which are related to the meta-cluster concept are briefly presented.

2.1 Clusters CORD

URL of the project: http://www.clusterscord.eu/

Objectives of the project:

"The project general objective is to strengthen the cooperation among clusters from the same thematic field but different geographical origin, through the creation of 5 Strategic Cooperation plans which will result in creation at least 3 so called "meta-clusters".

Main Activities of the project:

"In order to reach the main goal – to establish 3 meta-clusters and to support the cooperation between clusters – the project will bring together clusters managers, cluster representatives, as well as relevant decision makers exchanging about the creation of new services and methods as well as potential synergies. As a result cooperation agreements between the clusters should be signed, guaranteeing future joint activities and their institutionalisation."

Meta Cluster Definition: i.e. existence of at least 3 clusters of the same sector in 3 different partner regions.

2.2 In2Wood:

URL of the project: http://www.in2wood.eu/index.php/in2wood/general-information

Objective of the project:

- Networking /Clustering of 6 wood clusters regions in Europe.

Main Activities of the project:

- *"The partners exchange their knowledge, best practices and regional contact networks in order to shape strategic joint actions in relevant areas of forestry and wood industry."*
- Establishing of effective information &communication tools in order to reach a sustainable meta cluster

2.3 Omni Net (Opto-Micro-Nano Innovative Network Exploiting Transversality)

URL of the project:

http://archive.europe-innova.eu/index.jsp?type=page&lg=en&classificationId=5020&classificationName=OMNI-NET&cid=5106

Objectives of the project:

"To prepare a trans-regional network of clusters (meta-cluster) in order to identify and prepare strategic projects based on common needs for European cooperation on specific innovation themes".

2.4 RoK-FOR

URL of the project: http://www.rokfor.eu/in_english/project_info/activities/

Objectives of the project:

- "*RoK-FOR aims to create a 'region of knowledge' in the forestry sector in Europe. It provides a networking and cooperation platform for the five participating regional forestry clusters from six countries: Baden-Württemberg (Germany); cross-border clusters from Croatia-Serbia and Aquitaine (France)-Basque (Spain); North Karelia (Finland); and Catalonia (Spain)."*
- *"Combining regional research expertise and decision-making and policies with functioning business clusters from various regions into a European-wide "meta cluster" will strengthen the research potential and create new innovative approaches and solutions for the sustainable development of all regions."*
- *"The objective of RoK-FOR project is to initiate strong co-operation between the participating forestry-based clusters, through formulating a joint strategy and action plan for development, leading to increased innovativeness and competitiveness."*
- *"Strengthening and linking strong research driven forest clusters to provide better synergies to address the overall strategic aim. The main concept is the development of an EU level*

meta-cluster of existing regional research driven clusters (RRDC) focusing on regional dimensions of multifunctional forest management."

2.5 Inter"MAT

URL of the project: http://www.materalia.fr/rubrique.php?id_rubrique=850

Objectives of the project:

- *The INTER"MAT project envisages the creation of a META Cluster that groups 3 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.*

2.6 AT Cluster

URL of the project: http://www.atcluster.org/

Objectives of the project:

- *"The project main objective is to explore real possibilities of transnational cooperation among clusters in the Atlantic Area (existing or under creation ones), and in connecting them together in order to facilitate their development at EU and international level. Its target is to help clusters to become more dynamic and to support their development and exchange of best practices."*
- The project shall explore the possibility of building up meta-clusters (clusters of clusters) able **to bring together the most dynamic enterprises from several regions.**

Main Activities of the project:

Project intends to:

a. Improve the capacity of regional authorities in the identification and promotion of clusters.
b. Improve clusters capacity to offer efficient services to their members, and contribute thus to their development, modernisation, innovation and internationalisation.
c. To promote the cooperation among knowledge driven clusters in the Atlantic Area, to increase their competitiveness in the global market.

2.7 AlpsBioCluster

URL of the project:

- http://www.alpsbiocluster.eu/brussels_event_21_09_2011/abc_leaflet_final.pdf
- http://www.alpsbiocluster.eu/

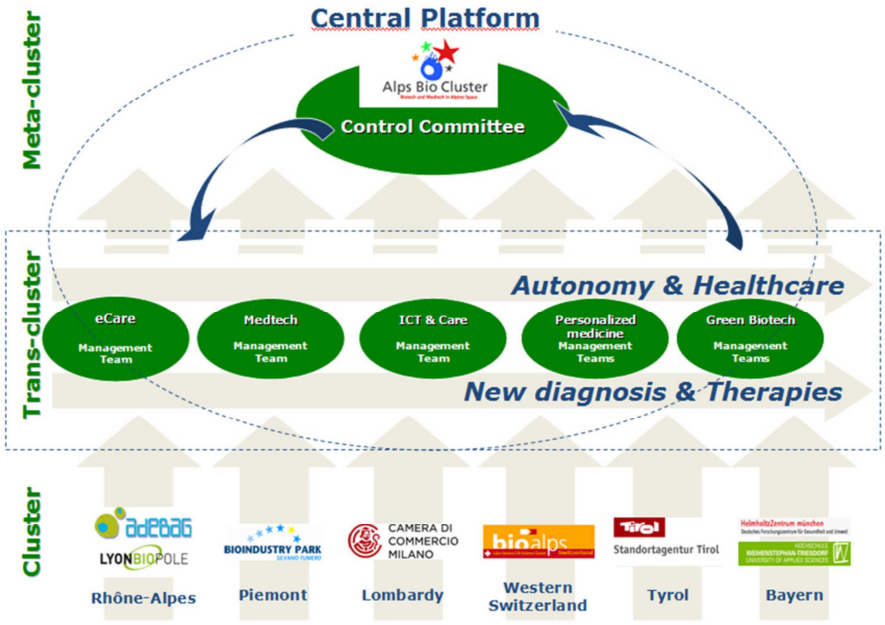
Main Results of the project:

"Without any formal organization unit, Alps Bio Cluster's partners have decided to organize the meta-cluster as a Central Platform in charge of coordinating the trans-cluster activities and trans-territorial marketing actions with a strategic responsibility. It is managed by a President, which remains in charge for 1 year, and by one representative per partner. It is represented on a national level by the different (regional) cluster platforms, depending on the topic concerned."

"Boosted by their experience gained through these three years of collaboration, Alps Bio Cluster's partners have already identified some best practices in order to ensure the success of their meta cluster:

- *Annual trans-Alpine Summer Schools interfacing Education & Enterprises (Biotech/Munich – MedTech/Grenoble)*
- *Thematic experts groups to draw attention of policy makers (national, regional, EU levels) on the fact that the Alpine Space is the right place to experiment innovative solutions on e-Health services (EU contributions) and on ecosystem services for human health (10 recommendations on environmental biotechnologies)*
- *Co-operation areas between the different stakeholders (SMEs, Big Companies, Researchers, Policy makers) to foster public/private partnerships to facilitate the emergence of innovative solutions*
- *SMEs support to foster their participation in European projects (partnership tools, recommendations, contribution to the Green Paper EU consultation, etc.)."*

"To formalize this meta-cluster, Alps Bio Cluster's partners signed in September 2011 a Memorandum of Understanding (MOU). All parties intend to encourage and promote co-operation in order to stimulate the growth and development of life sciences in the Alpine space. Every other player having an interest in developing those relationships and shares the vision can join the cluster. "



First attempts for the definition of meta-clusters (input from other sources)

A meta-cluster is a group of organizations not necessarily similar and not necessarily operating in the same sector but owning the specific technological capabilities and engineering skills needed to fulfil the requirements of collaborative / multi-disciplinary projects (usually led by large organisations).

A meta-cluster is a cluster of cluster managers.

A meta-cluster consists of at least 3 clusters of the same or complementary sector in 3 different regions.

A meta-cluster is trans-regional network of clusters

3 Definition of meta-clusters for the project "Alps4EU"

3.1 Proposition for the definition of a meta cluster

Establishing of four meta clusters within the project's four key-sectors Energy & Green Technologies, Engineering & Mechatronics, Chemistry & New Materials, ICT in the Alpine region by strengthening and linking regional clusters with the same or interdisciplinary thematic focus in order to provide synergies, improve capacities and formulate joint activities (joint programming of specific actions) with the aim to increase the global competiveness, research potential and innovation for a sustainable development.

3.2 Final adoption of a meta cluster

A meta-Cluster can be defined as a trans-regional network of cluster initiatives, which focuses on the same or complementary specific technological field or sector. A meta-cluster consists of at least three cluster initiatives in three different regions.

The results of a first interview of cluster managers in 2012 have been analysed and was integrated in this new Meta clusters concept.

3.3 Requirements for establishing meta clusters

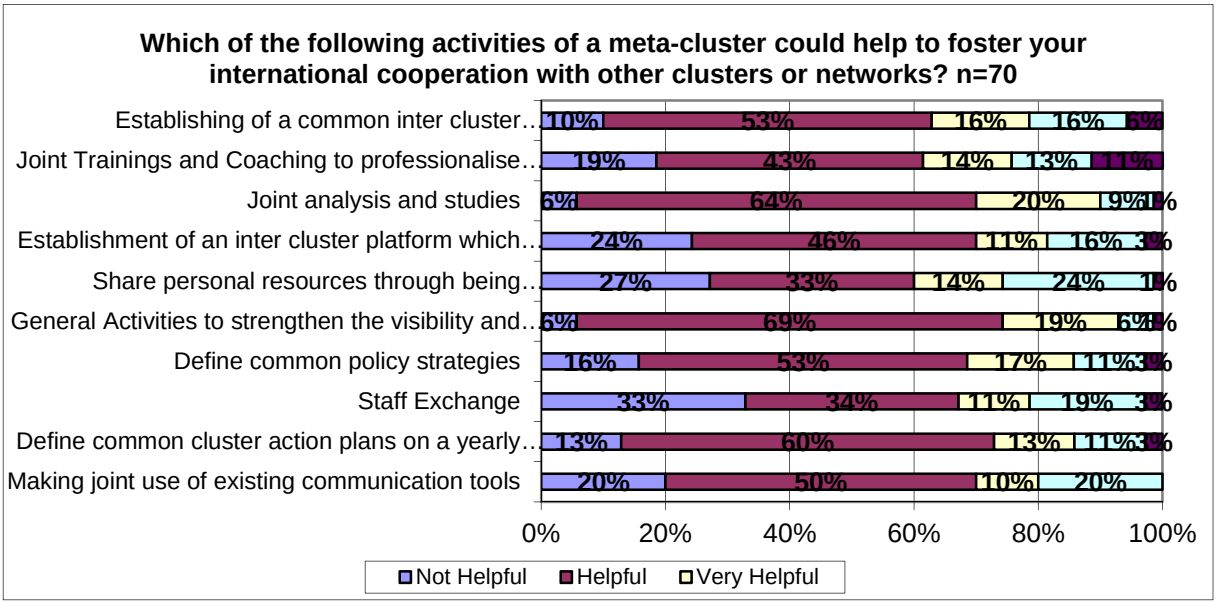
As feedback of the surveys done[1] and from the interviews with EU projects the following requirements for establishing a meta cluster were mentioned:

- Commitment of cluster managers and members
- Knowledge of potential and synergies of involved clusters
- Funding /Finances sources
- Define common policy strategies -> Policy support

[1] Survey done in Vienna, 18.-20. April 2012 and by interviews of cluster managers in summer 2012 in the frame of WP4

3.4 Activities of a meta cluster

As another feedback of the surveys done[2] and from the interviews with EU projects the two most important activities of a meta cluster should be the strengthening of the visibility on EU level and doing joint analysis and studies and defining common cluster action plans.



Activities to strengthen visibility on EU level

- Joint use of communication tools (e.g. common website, PR material etc.)

- Installing inter cluster committees

- Implementing flagship projects

- Policy support

Activities for joint analysis and studies

- Staff exchange for exchange of idea and experiences

- SWOT

- Inter-cluster communication / information tools for effective dissemination of study results

- Define policy strategies

Activities for common cluster action plans

- Implementing findings from the study results
- Coordination by e.g. inter cluster committees

[2] Survey done in Vienna, 18.-20. April 2012 and by interviews of cluster managers in summer 2012 in the frame of WP4

- Cluster action plans on a yearly basis
- Defining cluster road maps

-> Therefore the meta clusters should:

1. Define common topics of interest
2. Define synergies
3. Define common action plans
4. Establish common communication tools (Internet, Intranet, PR…)
5. Install inter cluster committees and/or data warehouses

In the final development stage of development of a meta cluster a **committee** should be established to effectively coordinate the activities and to promote the visibility of the meta cluster.

3.5 Structure of a meta cluster

Installing an inter cluster committee

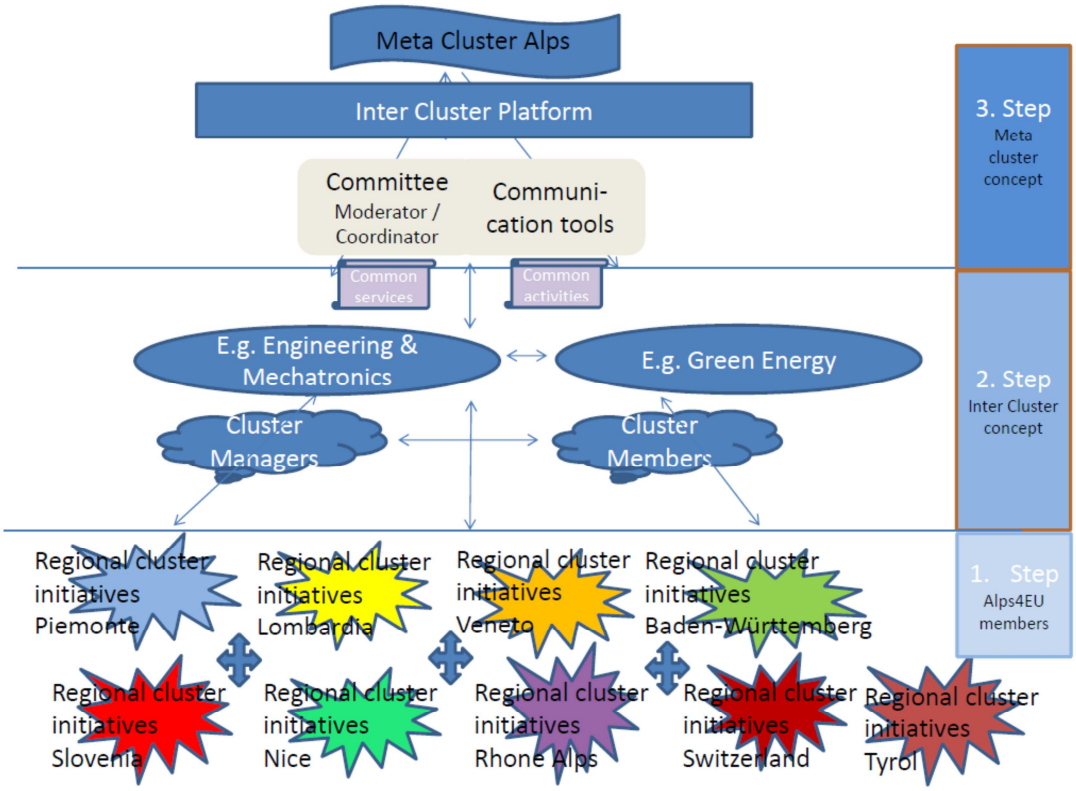
The duties of this committee would be the coordination of communication and information between the clusters, initiation of common projects, establishing information and data warehouses, communication of common strategies / policies

3.6 Conclusions to establish a meta cluster

So the process to establish meta clusters in the Alpine space will be done in three steps:

1. Step: Awareness arising among the involved regional clusters of the project partners involved
2. Step: Performing studies/analysis and establish inter cluster action plans and implement first common activities
3. Step: Establish meta cluster concepts by implementing sustainable structures between involved clusters

Graphical presentation of a meta cluster concept



4 Potential benefits/barriers for establishing meta-clusters

An important issue for the acceptance of the meta-cluster concept in the Alpine Space is to make clear, how the cluster initiatives and their members can benefit from a better relationship to other cluster with especially complementary thematic focus. So it must be identified, what the cluster managers really expect from meta-cluster concept. What are the services or tools, which can be offered by a meta-cluster?

In this respect the Smart Spezialisation Strategy[3] of the European Commission supports Meta Cluster concepts in the way that clusters should evaluate their strengths and weaknesses in order to build up strategic synergies with other clusters (cluster connectivity).

Therefore and according to the European Strategy on Key Enabling Technologies (KET)[4] the meta clusters should focus on multi-disciplinary or cross cutting technology cooperation using KET[5]. Hence KETs will catalyse the strengthening and modernising of the industrial base as well as drive the development of entirely new industries in the coming years.

[3] S3platform: http://s3platform.jrc.ec.europa.eu/home;jsessionid=qB2wQ3fDKN8MT1178jDTnBt2D4G2h3hHmv2Tf6GTwQ98fBwSrZW8!-708817784!1350033187721

[4] http://ec.europa.eu/enterprise/sectors/ict/key_technologies/index_en.htm

[5] KET: micro-/nanoelectronics, nanotechnology, photonics, advanced materials, industrial biotechnology and advanced manufacturing technologies