



Medicine Estonia

Individual Considerations and Recommendations for the Journey to Cluster Excellence

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1 Introduction

Within the context of a project of Enterprise Estonia (EAS), "Benchmarking for clusters supported by Enterprise Estonia based on the European Secretariat for Cluster Analysis (ESCA) methodology" (EAS procurement number HNR160417), 12 Estonian clusters and their management organisations (cluster organisations) were analysed according to the methodology of the European Cluster Excellence Initiative (ECEI) during May/June 2017¹. As an outcome of the above mentioned EAS procurement, ESCA was sub-contracted to carry out the project. ESCA headquarters involved two external experts for conducting the benchmarking interviews and for elaborating further individual recommendations together with ESCA headquarters. The benchmarking project of EAS is funded by structural funds of the European Regional Development Fund.

The following report describes individual development suggestions as well as an indicative action plan for the cluster Medicine Estonia complementing the standard individual benchmarking report of ESCA which was elaborated as a result of a personal cluster benchmarking interview Kersti Kraas conducted by Mateja Dermastia (Director ESCA) on May 30, 2017 in Tallinn.

The findings are elaborated by using all inputs given during the benchmarking interview, the webpage, and other publicly available information sources, valuated and been put in context by the ESCA expert conducting the benchmarking interview and complemented with experience from ESCA headquarters. During the benchmarking interview all information provided is expected to be according to the real actual situation, any proofs of evidence according to the ESCA methodology are not checked.

¹ The ESCA methodology is based on the methodologies being developed during ECEI

2 The Estonian Economy, Research, Development, Innovation, and Cluster Policy

A comprehensive overview of the Estonian Economy with a specific focus on Research, Development and Innovation is presented by the “Research and Innovation Observatory (RIO) – Horizon 2020 Policy Support Facility”². The annual RIO Country Report Estonia offers an analysis of the Research and Innovation system in Estonia, including relevant policies and funding, with particular focus on topics critical for EU policies. The report identifies the main challenges of the Estonian research and innovation system and assesses the policy response.

As challenges for research and innovation the RIO report lists:

- Intensifying prioritisation and specialisation in the research and innovation system: In this context three smart specialisation growth areas were identified:
 - ICT supporting other sectors (use of ICT in industry including automation and robotics, cyber security, software development);
 - Health technologies and services (biotechnology, e-health);
 - Resource efficiency (material science and industry, knowledge-based construction, health-promoting food industry, chemical industry).
- Enhancing collaboration between science and industry and research commercialisation: In this context specific knowledge transfer promotion programs, clusters, and technological development centres are being set up. The 2014-2020 Cluster Development Programme (new round opened in June 2015) aims to increase the value added of companies and the sales of their products/services (including exports) as well as to promote cooperation between companies and research institutions.
- STI internationalisation and addressing the scarcity of highly-skilled human resources

Cluster initiatives, representing a critical mass of the relevant stakeholders and being excellently managed, can significantly support the implementation of the policies regarding Research, Development and Innovation in the country.

² See <https://rio.jrc.ec.europa.eu/en/country-analysis/Estonia/country-report>

3 The Cluster Medicine Estonia – Selected Observations from the Cluster Benchmarking

The cluster Medicine Estonia is a promotional organisation supporting its members in increasing their export of medical services. Exports of medical services are growing strongly all over the world and cover travel for treatment, exports of service models, telemedicine solutions and other means of expanding businesses across borders.

Core activities of the cluster initiative are

- Partner finding;
- Organising visits;
- Advertising and media;
- Organising conferences and exhibitions.

Recently, the cluster initiative underwent significant reconstruction, incl. a brand new cluster management. International evidence pointed out that at least a year is required for streamlining the organisation, activities and targets of new clusters. Consequently, many of the weaknesses are caused because of this situation. However, it was important to participate in this benchmarking in order to get important information where to start first when reconstructing the entire cluster initiative.

In the following selected observations are given which are of most relevance:

Lacking critical mass

Currently, there are 20 committed participants gathered in the cluster Medicine Estonia, incl. one academic partner. Although the majority of potential Estonian actors in the medical areas are involved, the total number is comparably small.

Good governance approach in place

The cluster initiative has set up a dedicated governance structure, which steers tasks and responsibilities of the cluster management and of the Steering Committee. The regular general meeting and tasks of the general meeting are well defined and accepted.

Cluster management is well connected to the committed participants

The cluster manager pays significant attention to keep close ties to the cluster participants and tried to accommodate their needs. This results in a high number of direct personal contacts between cluster manager and participants as well as among all participants. This close connectivity between cluster management and committed cluster participants leads to a high stability of the partnership.

Limited capacity of the cluster management

The capacity of the cluster management is limited especially compared to the ambition and needs of the cluster participants. More impact could be reached, if the capacity of the cluster management team would be higher.

Stable financing of cluster management

The financial situation of the cluster initiatives is comparable good and well balanced. There is a good mix of public financing and membership fees, each about 50 %.

Strategy developed, implemented and monitored

The cluster initiative has a dedicated strategy, which is closely monitored. All relevant groups of the cluster have been involved in drafting the strategy and decision making. However, more attention shall be given to the implementation plan that was not met in all regards.

High focus on internationalisation, but not many concrete projects

Objectives and services of the cluster organisation have a strong focus on internationalisation. 75 % of all measures are intended to strengthen international cooperation and collaboration. Nevertheless, there are not many specific results or cooperations initiated yet. The comparable impact on SME is low.

Well operating working groups

There is very good interaction in the majority of the working groups with many very tangible and concrete outcomes in terms of dedicated projects, activities or innovations. The working groups can be seen as key driver for innovation and cooperation. The working groups furthermore stress a lot of cross-sectoral topics.

There is room to provide more services for the cluster participants

The services offered by cluster organisation focus on information and experience exchange among the cluster participants and internationalisation. Dedicated focus is given on supporting cluster participants in going international through trade fairs.

4 Assessment of the Cluster Medicine Estonia According to the Set of Quality Indicators Developed in ECEI

Chapter 6.1 of the standard ESCA benchmarking report gives an indication of the status of cluster excellence reached by the cluster Medicine Estonia. It must be stated here, that the particularly important aspect of the “Cluster Strategy”, meaning its development processes, its implementation and further development, and most important its content is less accentuated in ESCA benchmarking methodology and therefore only can be assessed very briefly.

Past experiences of ESCA have shown that cluster excellence is mainly linked to the following five areas:

- Participants as customers (P)
- Strategy (S)
- Activities and Services (A)
- Communication (C)
- Resources (R)

All of these areas must be well developed when claiming excellent cluster management. The areas are described in an indicator-based manner leading to the ECEI quality indicators being used for assessing a cluster organisation regarding the ECEI GOLD Label.

Table 6 of the benchmarking report lists selected cluster organisation management excellence indicators of ECEI where relevant data was collected within the benchmarking exercise (the full set of ECEI indicators is not covered here). It indicates how the cluster organisation performs according to the quality levels defined by ECEI.

The table is provided again here, however further complemented with additional information giving an indication on which of the ECEI indicators addresses which of the five above mentioned areas P, S, A, C, and/or R.

In the following corresponding recommendations for the above listed five areas are discussed in detail, particularly where certain shortcomings were identified.

	GREEN Quality Level	YELLOW Quality Level	RED Quality Level	Indicator refers to which priority area of cluster management
STRUCTURE OF THE CLUSTER				
Committed cluster participation		X		P
Composition of the cluster participants		X		
Number of committed cluster participants in total		X		
Geographical concentration of the cluster participants	X			
TYPOLGY, GOVERNANCE, COOPERATION				
Maturity of the cluster management			X	
Human resources available for cluster management	X			R
Lifelong learning aspects for the cluster management team			X	R
Stability and continuity of human resources of the cluster management team	X			R
Stability of cluster participation	X			
Clarity of roles – involvement of stakeholders in decision making processes	X			
Direct personal contacts between the cluster management team and the cluster participants	X			P, A, C
Degree of cooperation within the cluster participants	X			A
Integration of the cluster organisation in the innovation system			X	P, S
FINANCING				
Prospects of the financial resources of the cluster organisation		x		R
Share of financial resources from private sources	x			R
STRATEGY, OBJECTIVES, SERVICES				
Documentation of the cluster strategy	X			S
Review of the cluster strategy and implementation plan	X			S
Degree of fulfilment of the implementation plan			X	A
Financial controlling system	X			
Activities and services of the cluster management			X	A
Working groups	X			A
Cluster organisation's web presence		X		C
ACHIEVEMENTS, RECOGNITION				
Recognition of the cluster in publications, press, media		X		C
Success stories		No data provided		C
Cluster participants' satisfaction surveys			X	P

4.1 Customer Orientation: Understanding (committed) cluster participants as customers (P)

The cluster management team plays a crucial role to implement the new strategy and to meet the key objectives. A new cluster management just took over.

Recommendation:

Quantitative and qualitative growth

The number of committed cluster participants is limited as well as the number of potential additional members. Thus, the overall potential growth is limited. A promising way out of this dilemma is to broaden the scope of the cluster in order to enlarge the number of potential committed participants. One option could be, to include the offer in broader scope of tourism and via linkages to pharmaceutical industry.

Better integration of the cluster organisation in the innovation system

The cluster initiative is driven by industry but due to the nature is essentially linked to public regulation. Thus, good relationship to policy makers and a strong embedment in the national innovation system is recommended in order to provide sufficient influence and lobbying for the interest of the cluster participants. Good contacts have been established to the scientific institution as well.

Making more use of cluster satisfaction surveys as close feedback tool

Close feedback loop with the cluster participants are important for day-to-day cluster work. It is recommended to apply cluster participants' satisfaction analyses more often to assure smooth and efficient implementation of the strategy and close involvement of the cluster participants.

4.2 Strategy (S)

The cluster Medicine Estonia is competing with international health tourism destinations. The industry becomes highly competitive. Healthcare has been relatively closed to national entities. However, the market has steadily opened up, typically focusing only on private based health care services. Information technologies enable medical tourists to evaluate the service, quality, and cost from their home countries. Air connectivity, including low-cost providers, allow much more destinations to enter the industry. Success is guidance with high-quality medical services provided, location attraction and related services and is guided by price considerations, among other.

The cluster initiative is very well aware of the above-mentioned trends, what is also reflected in the cluster web page and vision: "by the year 2020 cluster members' services are known and attractively presented in target markets and there is a favourable image of Estonian service providers in target markets". But the link between vision and strategic actions is not very clear. The cluster initiative started only recently and not much information was provided at the strategy level. It is not clear if the cluster initiative gained a critical mass of actors and how they are interlinked. In addition, it is not clear if the cluster initiative is embedded in pure medicine aspects e.g. competing at the top notch medical

treatments (like best hospitals on US) or if it provides high-quality medicine services. Latest is much more connected to the tourism aspects than the first one.

However, the cluster strategy is underlining element of the cluster development and has to be developed by cluster participants. Only such strategy can serve as a guidance and reference point for development. Setting objectives and quantitative targets serve as a monitoring and evaluation tool. The degree of fulfilment at any time can be considered as a “pre-warning system” for updating the work plan and the cluster strategy itself.

Recommendation:

It is recommended to review the strategy and reach a consensus on which market the cluster initiative is targeting / is competing or would like to compete. The strategic actions are substantially different.

Consequent implementation of the actions plans in order to fully follow the agreed strategy. Taking the limited resources of the cluster management into account, the implementation plan shall be well balanced between the resources available and the prevailing needs of the cluster participants.

4.3 Activities and Services (A)

Although the cluster management was able to establish direct personal contacts to most of the cluster participants, the number of services offered to the participants is comparatively low. Keeping in mind the high ambition of the cluster initiative, new tools have to be developed, to better serve the needs of the cluster participants. As mentioned above services should be adapted to the main target groups. For example, in case of beauty treatment, target groups are looking also for entertainment, high-end hotels, etc. and such services have to go hand in hand with tourism. In the case of top notch, treatment, promotion has to be linked to top universities, top research facilities, scientific conferences, etc. At any case the cluster initiative must assure compliance with all regulations, health standards and best doctors and medical staff.

Recommendations:

Enlarge service portfolio

So far, the cluster focuses on services in two areas (internal information exchange and internationalization) with a limited number of specific actions. It is doubtful that this service spectrum is sufficient according to the demand of patients (target clients). Due to limited information about the strategy, we cannot provide any specific recommendations in this regard.

Realistic implementation plans

The existing strategy of the cluster initiatives has been developed and is reviewed on a regular base. However, the degree of implementation differs from the original planning. It is strongly recommended to set up realistic plans which can be fulfilled with the capacities available.

4.4 Communication: Internal and External (C)

The cluster initiative is well presented on the web page and also has good coverage in press, media, web, etc. Based on information collected however, it is hard to assess the efficiency of communication.

Recommendation:

A communication strategy well aligned with the overall cluster strategy would assure a targeted approach at least at three levels: Internal level - attracting more actors from variety of service areas to join the cluster, external level - increases national and international visibility and promote cluster products and services, and at firms' level - contributing to an increased marketing and visibility of the companies. The communication strategy has to take into account different target groups, different objectives and actions associated with the different target groups.

4.5 Resources and Experiences (R)

The best strategy and implementation plan cannot be put into practice without sufficient resources available to conduct the necessary work. For the time being, the capacity of the cluster management team is still sufficient. However, keeping in mind the upcoming tasks and the expected growth of cluster members, this has to lead to an increase in the capacity of the cluster management team, too.

Recommendation:

Increasing capacity of cluster management together with membership growth

The current capacity within the cluster management is not fully appropriate compared to the upcoming challenges and demands of the cluster participants, especially since focus is given internationalisation. Given the fact that the cluster will (slowly) growth, it shall go in parallel with, at least, an increase of 0.5 FTE in the cluster organisation.

5 Cluster Dynamics

Cluster dynamics describes the potential of cluster initiatives to further develop, to adopt their objectives to the recent industrial trends and to expand their thematic boundaries according to the regional needs.

International cooperation is a good indicator how attractive and dynamic a given cluster initiative is by an outside perspective. The number of international requests is an indicator for this aspect. Here Medicine Estonia performs quite well. There was still a sufficient growth rate of 40 % within the last 12 months, mainly caused by the reconstruction of the cluster initiative.

The cluster initiative, represented by the cluster organisation plays a significant role in cross-sectoral activities, which is of high importance for the cluster participants. The working groups are working well, which is also a good sign for good dynamics.

6 Conclusions and Recommendations

The cluster Medicine Estonia underwent a significant reconstruction, including a new cluster management. Thus, the challenge for this year is to keep the cluster business going and to further develop the cluster as such.

Consequently, there are two really important areas where the cluster management and the cluster participants have to spend more significant efforts than so far:

Summary Recommendation 1:

Qualitative and quantitative growth in terms of members in order to gain critical mass in line with the cluster strategy.

Summary Recommendation 2:

Towards a broader service portfolio. So far, activities and services are focused on a small scope of activities, which might be suitable for the moment. However, the demand and interest of the cluster participants will change over time and the cluster management has to adopt the service spectrum accordingly.