

# Strategic plan for Meta-Cluster development

Final extended version

Clusters-Cord project 2012

## Foreword

*Cluster such as organization connect the cooperation and competition which brings new networks and opportunities. Clusters can be created in the same industry – to support the cooperation, or through different fields – to construct new product, new markets.*

*Apart from the cluster phenomena, the world networking is increasing and connections got wider and distance shorter. Collaboration and teamwork are even necessary in nowadays business, because the customer wants the whole service.*

*In terms of special technologies the cooperation is essential because it helps to develop the market faster. Connection between clusters – creating so called Meta-Cluster – is desirable, because the cluster is networking organization – have many partners, can offer wider services than the only one firm.*

*How to create the Meta-Cluster organization is described in this paper. It is demonstrated on chosen clusters who participate in Cluster-Cord project. All aspects for the first step of establishing Meta-Cluster are described in detail. Environment, legal aspect, possible budget, marketing activities and action plan. Further the author feels to add the Step-by-Step Approach How to establish the Meta-Cluster chapter and Rules and Recommendation of establishing the Meta-Cluster chapter. For managers the Executive summary has been written to get well arranged and applicative information book.*

*It is not smart to do same thing twice – just in different places. Get connected! Get connected and cooperate! Create the Meta-Cluster and succeed!*

## Table of contents

1	Summarization of Scans.....	7
1.1	Overview of Existing Meta-Cluster and Networking Activities .....	7
1.1.1	Czech Republic .....	7
1.1.2	Poland.....	17
1.1.3	Germany .....	20
1.1.4	Slovenia .....	23
1.1.5	Example: ICT-META .....	27
1.2	Industrial Regional Mapping .....	28
1.2.1	Czech Republic .....	28
1.2.2	Poland.....	28
1.2.3	Germany .....	28
1.2.4	Slovenia .....	29
1.3	Scan of Clusters Potentials .....	29
1.4	Matchmaking of Cluster Needs across the CE Region .....	30
2	Meta-Cluster Strategy and Objectives .....	32
2.1	Short Industrial Analysis .....	32
2.1.1	Czech Republic .....	32
2.1.2	Poland.....	32
2.1.3	Germany .....	33
2.1.4	Slovenia .....	34
2.2	Meta-Cluster Vision .....	35
2.3	Meta-Cluster Mission.....	37
2.4	Main Objectives and Expected Impact in the Central Europe Region .....	38
2.4.1	Industry know-how deepening.....	38
2.4.2	Increase the cohesiveness .....	38
2.4.3	Creating the networks .....	39
2.4.4	Collective projects .....	39

2.4.5	Export and import support .....	39
2.5	Short SWOT Analysis of Meta-Cluster.....	40
3	Organization structure of Meta-Cluster .....	43
3.1	Legal form of Meta-Cluster .....	43
3.1.1	Limited Liability Company .....	43
3.1.2	Joint-stock company.....	44
3.1.3	Co-operative .....	45
3.1.4	Bodies of the company.....	45
3.1.5	Czech Republic .....	47
3.1.6	Poland.....	51
3.1.7	Germany .....	51
3.1.8	Slovenia .....	52
3.1.9	European co-operative company.....	52
3.1.10	Principle .....	52
3.1.11	Legal regulations.....	53
3.1.12	Recommendation to legal-form of Meta-Cluster .....	54
3.2	Organization structure (chart) of Meta-Cluster.....	54
3.2.1	Functional .....	55
3.2.2	Divisional.....	56
3.2.3	Hybrid .....	57
3.2.4	Recommendation to organization chart of Meta-Cluster .....	57
3.3	Facilitator profile .....	58
3.3.1	Six key areas.....	58
3.3.2	Facilitation Rubric.....	60
3.4	Management team of Meta-Cluster .....	63
4	List of establishing members of Meta-Cluster .....	64
4.1	Network Security Monitoring Cluster .....	64
4.2	Virtual Dimension Center.....	67
4.3	Hradecký IT klastr .....	69
4.4	ICT Technology Network Institute.....	71

4.5	Knowledge and Innovation Community for Information and communication Technologies .....	73
4.6	Softwarezentrum Böblingen/Sindelfingen .....	75
4.7	Olomouc Cluster of Innovations (OCI) .....	76
5	Common services and standards defined by Meta-Cluster .....	78
5.1	Common Quality and Services Standards defined for Meta-Cluster .....	78
5.2	Common Marketing Services Standards Defined for Meta-Cluster .....	79
5.3	List of Common Services.....	80
5.3.1	Web pages.....	80
5.3.2	Linked In .....	80
5.3.3	Press releases .....	80
5.3.4	Marketing and media partnerships .....	80
5.3.5	ICT conferences and fair trades .....	81
5.3.6	Skype calls.....	81
5.3.7	Meetings .....	81
5.3.8	Information services .....	81
5.3.9	Research and development projects .....	81
5.3.10	Business projects .....	82
5.4	Interviews with Clusters' managers .....	82
5.4.1	Network Security Monitoring Cluster .....	82
5.4.2	Virtual Dimension Center .....	84
5.4.3	Hradecký IT klastr .....	86
5.4.4	ICT Technology Network Institute.....	88
5.4.5	Olomouc Cluster of Innovations (OCI).....	91
6	Meta-Cluster Financial Plan .....	94
6.1	Possible financial resources .....	94
6.1.1	Membership fee .....	94
6.1.2	Loan.....	95
6.1.3	Project funding .....	96
6.1.4	Financial gifts .....	98
6.1.5	Income from own business activity .....	99

6.2	Capital structure of Meta-Cluster .....	99
6.2.1	Scenario 1 .....	99
6.2.2	Scenario 2 .....	100
6.2.3	Scenario 3 .....	100
6.2.4	Scenario 4 .....	100
6.2.5	Scenario ZERO .....	100
6.3	Meta-Cluster budget .....	101
7	Meta-Cluster Action Plan .....	103
7.1	Networking .....	104
7.2	Marketing .....	106
7.3	Business .....	108
7.4	Project and R&D .....	109
8	Step-by-step approach how to established Meta-Cluster .....	112
9	Rules and Recommendation of Meta-Cluster functioning .....	113
10	Conclusion .....	114
11	References .....	115
12	List of Figures .....	118
13	List of Tables .....	119

# 1 Summarization of Scans

*This chapter analyses existing clusters and cluster's initiatives - you can find here list of all existing clusters in each of partner's region. Next part of this chapter compares regions according amount of people who are working in ICT, amount of experts in ICT, amount of technical workers in ICT and average salary of ICT worker. After that is shortly described cluster's potential and the whole chapter is ended by description of supply and demand which can each region offer.*

## 1.1 Overview of Existing Meta-Cluster and Networking Activities

This chapter introduces existing clusters in partners' regions. You can find here list of existing clusters and cluster initiatives.

### 1.1.1 Czech Republic

Cluster as a form of business formation is quite new in the Czech Republic. Despite that clusters start to be a very popular way of grouping companies. In the Czech Republic clusters are mainly supported by CzechInvest and National Cluster Association.

The National Cluster Association identifies these existing clusters or clusters' initiatives in the Czech Republic:

- **ABC WOOD**

- ABC WOOD cluster connects companies which are concerned in woodworking industry.
- [www.abcwood.cz](http://www.abcwood.cz)

- **AQUARIUS**

- Association which interrelate specialized suppliers and service providers in the areas of water, waste Management, renewable energy, related and environmental disciplines.
- [www.klastraquarius.cz](http://www.klastraquarius.cz)

- **ATOMEX**

- ATOMEX GROUP is an association of Czech manufacturing, commercial and engineering companies with experience in the development, manufacture and

supply of technological equipment in the field of power engineering, nuclear power plants, heating plants and incinerators, sewage treatment plants, chemical and petrochemical industry, automobile industry, etc.

- [www.atomex.cz](http://www.atomex.cz)

- **Automotive Cluster of Moravskoslezský region**

- Automotive Cluster association was established to promote innovation and to increase competitiveness and export capabilities of interconnected companies, businesses and institutions in the Region. It seeks to build a common identity of the companies in the cluster and wants to restore confidence and positive attitudes toward the automotive industry and the whole region.
- [www.autoklastr.cz](http://www.autoklastr.cz)

- **CEITEC Cluster – bioinformatics**

- CEITEC Cluster - bioinformatics associates companies and research institutions involved in bioinformatics or related disciplines. Its purpose is to strengthen scientific cooperation and corporate sector and strengthening the competitiveness of companies.
- [www.ceitec-cluster.cz](http://www.ceitec-cluster.cz)

- **CEVTECH**

- CEVTECH intends to offer these services to both Czech and foreign customers. Cooperation with research, ability to adapt existing experience on new conditions, experience of development projects consultant firms in the cluster (for example MEPCO - a subsidiary firm of VNG) - that is what makes CEVTECH ideal association to work on large development projects abroad. From it's start, CEVTECH is aimed on countries in phase of pre-accession to EU - mainly Bulgaria, Romania, Croatia.
- <http://www.cevtech.cz/>

- **Cluster of Czech Cabinet Makers**

- The cooperative Cluster of Czech Cabinet Makers was incorporated on 22 June 2006 in Brno. It associates 35 companies, 27 of which operate in the cabinet-making and interior design fields, 5 consulting companies in the field of domestic and international exhibition and corporate development support, two professional organizations and the Mendel University of Agriculture and Forestry in Brno. The subject of the cluster's business is cabinet making, mediation of furniture trading, research and development in the field of the



cabinet-making product innovation and furniture safety, including quality of life, and the rendition of organizational and economic consultancy services.

- [www.furniturecluster.cz](http://www.furniturecluster.cz)

- **Cluster of precision engineering Vysočina region**

- The key objectives of Cluster is to achieve economic growth and competitiveness in the cluster, to support innovation and new technologies and increase the professional competence of employees of companies in the cluster, common approach of companies in negotiations with the authorities, institutions and cooperation with the tertiary sector, expansion of international cooperation with a focus on export products and cooperation with research institutes and universities of applied research.
- [www.kpsv.cz](http://www.kpsv.cz)

- **CLUTEX**

- CLUTEX cluster connects companies which are concerned in technical textiles industry.
- [www.clutex.cz](http://www.clutex.cz)

- **CREA Hydro&Energy**

- **CREA Hydro&Energy** cooperates with big Czech and international companies, uses the most modern technologies and know-how in the field and participates on its creation and sharing within international cooperation. The cluster provides expert studies, training of foreign experts and consultations in the field for Czech and foreign ministries and other institutions within development cooperation, Aid for Trade program and own commercial projects. CREA is a member of International Cluster Association, Czech Dam Commission and Businessmen Platform for foreign development cooperation participates on activities of platform for pure technologies and groups for sustainable technologies. Its members are members of international associations such as ICOLD (International Commission on Large Dams), ESHA (European Small Hydropower Association) and other.
- [www.creacz.com](http://www.creacz.com)

- **CreaClust**

- CreaClust is a cross-border cluster initiative for the development of creative industry. The primary aim of the project is to establish a cross-border (Zlín-Trenčín), creative industry-based network to facilitate long-term cooperation
- [www.creaclust-cz-sk.eu](http://www.creaclust-cz-sk.eu)

- **Czech Glass Cluster**

- Czech Glass Cluster presents products of clusters' members at world exhibitions and collaborates with educational institutions from the glazier.

- **Czech Nanotechnology Cluster**

- The Czech Nanotechnology Cluster aims to build a strong group of closely cooperating nanoproduct suppliers, businesses using nanotechnologies in their products and research and educational institutes operating in this sphere. The cluster is based in the Olomouc Region, Czech Republic.
- [www.nanoklastr.cz](http://www.nanoklastr.cz)

- **Czech Stone Cluster**

- Czech Stone Cluster is a project that aims to connect science, education and practice in order to increase competitiveness and increase innovation in the use of mineral resources of the Earth. Cooperation between individual members achieves increasing revenue and reducing costs. Cluster's philosophy is to create unique products from materials that are not found elsewhere in Europe, to maintain the value of professional honour and remember the roots that gave us our alma mater.
- [www.czechstonecluster.eu](http://www.czechstonecluster.eu)

- **CzechBio**

- CzechBio is a association of Czech biotech companies is a national platform of the Czech biotech sector. Currently the association comprises of 31 private companies and 4 R&D institutes and universities. Cluster's aim is to accelerate, strengthen and further support commercial development of this innovative sector through the country and intensify communication among the key players. Cluster supports mutual cooperation among the commercial and academic sector, lobbying towards the government on behalf of the industry interests and creating an environment where would flourish research and development in this highly innovative sector.
- [www.czechbio.org](http://www.czechbio.org)

- **EKOGEN**

- EKOGEN is a guarantor and licensor of a trademark "raw material friendly product". The trade mark labels products which respect the principles of economic handling of raw materials and natural resources. The trade mark

gives the product added value in terms of its contribution to environmental protection and prevention of wasting raw material sources.

- [www.ekogen.cz](http://www.ekogen.cz)

- **ENERGOKLASTR**

- Energoklastr's mission is to support small and medium-sized enterprises on the way for innovations and combine them with research organizations in the field. Energoklastr mission is to help to support research in the field of energy and energy savings. Energoklastr is involved in many industries and areas.
- [www.energoklastr.cz](http://www.energoklastr.cz)

- **ENVICRACK**

- The ENVICRACK cluster was established in 2006 for the purpose of supporting innovation and improving the competitiveness of its members. Since its inception, ENVICRACK has been focused primarily on activities connected with the liquidation of waste and the resulting gases and substances. Based on the needs of its members, the scope of the cluster's activities was expanded from the area of waste-processing to include the area of innovation activities in the use of renewable and alternative sources of energy. The cluster's main activities are science and research activities in the preparation of waste for further utilisation with the use of pyrolysis technology and in the area of using renewable and alternative sources of energy.
- [www.envicrack.cz](http://www.envicrack.cz)

- **ENWIWA**

- ENWIWA connects companies which are concerned in waste management.

- **Forestry-Wood Cluster of Královéhradecký region**

- Cluster connects companies which are concerned in forestry and wood industry.
- [www.kldk.cz](http://www.kldk.cz)

- **HYDROGEN CZ**

- HYDROGEN CZ supports all activities which promote development and application of hydrogen energy.
- [www.vodik.czweb.org](http://www.vodik.czweb.org)

- **Innovation in Transport**

- The association was founded in 2009 and continues in activities of the international cluster Innovation in Transport established in 2007. The aim of the association is to support the versatile development in the area of transport by the implementation of innovation.
- [www.i4f.eu/InnovationinTransport.html](http://www.i4f.eu/InnovationinTransport.html)

- **IT Cluster**

- The aim is to apply the results of research and development to ensure their transfer into commercially oriented products. Next goal is the effort to build a strong brand IT Cluster, which defines the Moravian-Silesian Region as a centre of advanced technology where IT plays a key role.
- [www.itcluster.cz](http://www.itcluster.cz)

- **IT Cluster of Hradecký region**

- The main activity of the cluster is HIT security services for its members in order to jointly improve the quality of management, enhance innovation, save costs and develop business opportunities in the following areas: human resource development, capacity sharing, marketing, development and innovation.
- [www.hitklastr.cz](http://www.hitklastr.cz)

- **KLACR**

- The aim of the Moravian-Silesian tourism cluster is able to create competitive tourist region as a result of the coordination of tourism activities, communication with the public sector, cooperation in tourism entities and encouraging innovation.
- [www.klacr.cz](http://www.klacr.cz)

- **Knowledge Management Cluster**

- The cluster is focused on the development of information and communication technologies and the transfer of knowledge in the Moravia and Zlín Region.
- [www.kmcluster.cz](http://www.kmcluster.cz)

- **MAESTROJ - Cluster of general engineering**

- Cluster's mission is to contribute to the growth of competitiveness of engineering companies in the region by promoting innovation, marketing activities and common projects.
- [www.maestroj.cz](http://www.maestroj.cz)

- **MECHATRONIKA Cluster**

- MECHATRONIKA Cluster connects companies which are concerned in mechatronics and related fields.
- [www.klastrmechatronika.cz](http://www.klastrmechatronika.cz)

- **MedChemBio Cluster**

- The main field in which the work of MedChemBio Cluster is directed is the area of biologically active substances, i.e. substances that find application in human and veterinary medicine as a medicament. Cluster MedChemBio will become a key player in cooperation between academic institutes, small and medium-sized companies (as well as large firms), suppliers, investors, professional and manufacturing enterprises in development, testing and production of medicaments. Thereby it will help to development of medicinal and biological chemistry in the Czech Republic. Cluster will enable all participants to assess the existing intellectual property.
- [www.medchembio.cz](http://www.medchembio.cz)

- **National Engineering Cluster**

- National Engineering Cluster connects companies which are concerned in engineering.
- [www.msskova.cz](http://www.msskova.cz)

- **Network Security Monitoring Cluster**

- Network Security Monitoring Cluster (NSM Cluster) is co-operative industrial cluster focusing on the network security and security in ICT. Our activities are projects in terms of technical innovative infrastructure, scientific and research projects, designing and complex solutions integration in network security monitoring field, cluster promotion, networking, know-how sharing, education and training about network security monitoring, actual network security trends and information sharing, creating and comment draft bills concerning the dilemma of network security monitoring and security in ICT and the representation towards other associations and international organizations related to the network security monitoring and security in ICT topic (e.g. ENISA, IT Security in Germany).
- [www.nsmcluster.com](http://www.nsmcluster.com)

- **NUTRIPOL**

- The cluster NUTRIPOL is an association of manufacturing and consulting firms, research and other institutions engaged in functional food and food supplements.
- [www.nutripol.eu](http://www.nutripol.eu)

- **OKI**

- The mission of the cluster is to link business approaches of its members with the rules of the cluster initiative, and to support, through active co-operation of the members of the cluster, the growth of the members, of the region and of the EU. In other words, the mission of the cluster is to establish a body, based on co-operating SMEs, which will be more competitive and will enable its members their further development
- [www.o-k-i.cz](http://www.o-k-i.cz)

- **OMNIPACK**

- OMNIPACK Cluster mission is to increase the competitiveness and economic growth entrepreneurs in the field of packaging and logistics services by supporting their innovative activities. The main principles of the mission is the transfer of knowledge, research and development and systematic training of cluster members.
- [www.klastromnipack.cz](http://www.klastromnipack.cz)

- **PLASTICOR**

- PLASTICOR Cluster connects companies which are concerned in plastics industry in Pardubický and Královehradecký region.

- **PLASTR**

- The plastics cluster was established in February 2006 as an Interest Association of Legal Entities with the aim to create a communication platform for its members – plastic product manufacturers. The main reason for cluster establishment was especially strong position of the plastics industry in the Zlín Region (together with rubber industry it represents the most productive sector of the region). Another reason is a shortage of qualified working labour force, missing research and development background for plastic product manufacturers, need of an appropriate negotiation position for services and products, and effective enforcement of the sector interests. Cluster activities focus on 4 priority sectors: education and human resources development and

innovation, cooperation, common purchase and sale of services, and promotion of the cluster.

- [www.plastr.cz](http://www.plastr.cz)

- **Security Technology Cluster**

- BTK's mission is to develop security technology research in the region through the strong industrial clusters, universities, research institutions and other entities of private and public sector, to ensure the competitiveness.
- [www.btklastr.cz](http://www.btklastr.cz)

- **Water Treatment Alliance**

- Water Treatment Alliance was formed as an association of companies engaged in cleaning and water treatment. WTA purpose is to provide comprehensive solution for customer in field of technologies for wastewater and water treatment.
- [www.wateralliance.cz/](http://www.wateralliance.cz/)

- **Wood Cluster of Jihočeský region**

- Create conditions for maximum production synergies and development potential especially in the field of wood and wood-processing industry, as well as in forestry and other related fields;
- [www.jcdk.cz](http://www.jcdk.cz)

- **Wood Cluster of Moravskoslezský region**

- The main goal is to innovate and develop cluster of activities which improves business conditions in the woodworking industry and strengthen the links between research, universities and business.
- [www.msdk.cz](http://www.msdk.cz)

- **Woodworking cluster of Vysočina region**

Clusters are focused on the key industries and industries with big future development. That is the reason why clusters are established in such industries as mechanical engineering, wood, water, information technologies and plastic.



You can find the specific region of clusters in following map:



1 Figure: Clusters organizations and cluster initiatives in the Czech Republic

In following picture you can see clusters and clusters' initiative in the Czech Republic supported by CzechInvest's calls.



2 Figure: Clusters and Clusters' initiatives



### 1.1.2 Poland

In Lower Silesia identified thirteen existing clusters, which include both enterprise R&D organizations and educational institutions advisory, information and promotion centres, industry associations, local government units. Activities include several sectors of the economy such as metal industries, the production of ceramics, renewable energy, the production of household goods, health, ICT, automotive, biotechnology, wood and wood-and-metal. In Lower Silesia cluster identified the following initiatives:

- **Lower Silesian Eco-Energy Cluster EEI**

- CEDRES Cluster EEI is a leader focused on the theoretical and practical aspects of the development of the renewable energy sources in Lower Silesia. The strategic objectives of the cluster structure and the development of networks between science and the economy, and increase the share of green energy in the energy balance of the Lower Silesia region. Eco-Energy Cluster EEI - Energy, Environment, Innovation was created by the Lower Silesian Centre for Advanced Technology. Members of the cluster cooperate with institutions and entrepreneurs from various Polish regions and different countries in Europe. Because of the potential for renewable energy in Lower Silesia, Cluster activities focused specifically on biomass technologies such as biogas or biomass heating plants local.

[www.energia.dcz.t.wroc.pl](http://www.energia.dcz.t.wroc.pl)

- **Lower Silesian Cluster of Renewable Energy**

- Lower Silesian Cluster of Renewable Energy (DKEO) was founded March 3, 2008 in Świdnica, as a voluntary agreement between companies, research and development units, municipalities, organizations and institutions that support the development of renewable energy sources and promote energy conservation idea, and at the same time operating in Lower Silesia.

- [www.dkeo.pl](http://www.dkeo.pl)

- **Lower Silesian Cluster of "e-health"**

- [www.e-zdrowie.dcz.t.wroc.pl](http://www.e-zdrowie.dcz.t.wroc.pl)

- **Lower Silesian Cluster of Commodities**

- Silesian Cluster Foundation for Commodities was established in September 2007, is the founder of The KGHM Cuprum Ltd. Research and Development Centre. The Foundation takes action to establish and expand contacts between businesses, academic institutions and local government units,

fostering a better use of the existing potential industrial, scientific, and social support in the implementation of the economic development of Lower Silesia.

- [www.cuprum.wroc.pl](http://www.cuprum.wroc.pl)
- **Entrepreneurs Cooperative Group MTD**
  - [www.powiat.zgorzelec.pl](http://www.powiat.zgorzelec.pl)
- **Cluster Appliances**
- **Mega Nano Energy Cluster**
  - The tasks of the cluster are a response to the need for energy with minimal impact on the environment and climate. At the same time the growing demand for energy and re-capitalized the existing energy production facilities necessitates the development of innovative energy technology which is the object of the cluster.
  - [www.klaster-energia.wroc.pl](http://www.klaster-energia.wroc.pl)
- **ICT Cluster - Knowledge and Innovation Community for Information and Communication**
  - The aim of cluster called Knowledge and Innovation Community for Information and Communication is to create a platform for cooperation between Polish and European innovative companies operating in the information and communication technology (ICT), an institution using information technology, universities, professional schools and regional ICT. The main aim of the Partners is effective and synergistic use of the competence of members of the cluster, the potential of R & D through joint development to apply for funds for their implementation. The project includes activities related to the training of specialists in the latest communication technologies for businesses. Cluster tasks directly related to the development of the information society Polish and Europe.
  - [www.ictcluster.wroc.pl](http://www.ictcluster.wroc.pl)
- **Automotive Cluster**
- **Cluster NUTRIBIOMED**
  - Wrocław Technology Park SA, based on the concept of prof. Tadeusz Trziszki University of Environmental and Life Sciences, has taken on the creation of a cluster 13.11.2007 nutritionally-year-biomedical biotechnology called NUTRIBIOMED. The idea is to create a cluster NUTRIBIOMED Polish strong

position in the global market of dietary supplements, nutraceuticals and biomedical preparations based on natural raw materials and the Polish know-how.

- <http://www.nutribiomed.pl>

- **Industrial Cluster (Technology Park) LG**

- [www.technologpark.pl](http://www.technologpark.pl)

- **SIDE CLUSTER**

- The basic aims of SIDE CLUSTER are stimulated by the changes going on the world, in which knowledge and technical development play the general role for both competitiveness and economic progress. We would like the cluster to enable its members to develop into modern, knowledge-based companies that can run their activity all over the world.
- [www.izba.wroc.pl](http://www.izba.wroc.pl)

- **Lower Silesian Cluster of Metal**

- Metal Lower Silesian Cluster is a group of companies in the metal industry, cooperating with each other, with scientific research units and institutions of business environment.
- [www.dkm.arleg.eu](http://www.dkm.arleg.eu)

**The above-mentioned clusters are formed in two ways:**

- 1) First clusters created from the bottom up as a result of concentration in the region and around the supporting institutions or large companies in the region (Ceramics Bolesławiecka, Lower Silesian Cluster Commodities Cluster Appliances, Automotive Cluster, LG Industrial Cluster and SIDE CLUSTER).
- 2) Second clusters created as a result of the support programs funded structural (cluster NUTRIBIOMED, Lower Silesian Cluster of "e-health", Lower Silesian Eco-Energy Cluster EEI, MTD Enterprises Cooperative Group, ICT Cluster - Knowledge and Innovation Community for Information and Communication, Energy Mega Nano Cluster).

Although clusters suited to the characteristics of point 1 are relatively large opportunities for growth, given the level and speed of their development, the future of a second cluster is difficult to predict.

Clusters of the first type have a unique regional specificities and traditions necessary for economic development (as in Boleslawiec ceramics, mining, household and automotive), or the recently formed from the merger of large manufacturing plants around (LG Industrial Cluster) or organizations (SIDE CLUSTER). The existence of such conditions allows more opportunities for development due to the production of a specific culture of entrepreneurship in the industry. However, clusters containing the characteristics of the second type are unclear future. Their young age (less than 2 years) helps to define their outlook due to the very short time of their development:

### 1.1.3 Germany

There are a lot of clusters and cluster initiatives in Germany so this analysis of existing clusters in partners' region is focused only on clusters which are interested in Information technology field.

- **IT Saar**

- The Networking for IT Innovation Saarland is an association of Software Forum Saar (SFS) and the Competence Centre of Computer Science of the Saarland University. It sees itself as a coordinating institution of all computer science related research and teaching institutions of the state including their application-oriented projects and the region's IT companies.
- [www.it-kompetenznetz-saar.de](http://www.it-kompetenznetz-saar.de)

- **BICCnet**

- BICCnet offers medium-sized companies assistance in increasing their innovation and productivity potential. BICCnet's thematic focal points are: - Embedded Systems, - Mobile Applications, - Convergence of information technology and information application areas, - Technology convergence and ICT-supported processes, - Mobility. Our work is based on networking, co-operation possibilities, impulses for increased export orientation and specifically targeted events. We support technology scouting, technological exchange with universities as well as the establishment of our R&D consortia.
- [www.bicc-net.de](http://www.bicc-net.de)

- **Cluster Visual Computing**

- The Baden-Württemberg region boasts special competence in the field of Visual Computing. Visualisation and simulation is being researched at over 20 universities, creating innovation potential across sectors - from automotive and mechanical engineering to medicine, architecture and entertainment. MFG Baden-Württemberg just initiated a Visual Computing cluster initiative in

order to intensify the networks between research institutes and service and application companies. The Cluster Visual Computing of Baden-Württemberg generates valuable momentum by intensifying the networks between universities, research institutes and development, service and application companies. As a pivotal technology trend, visual computing creates significant innovation potentials spanning many branches of industry.

- [www.visual-computing.de](http://www.visual-computing.de)
- **GEOkomm networks**
  - [www.geokomm.net](http://www.geokomm.net)
- **IT4work - Kompetenznetz virtuelle Arbeitswelten**
  - The Darmstadt Chamber of Commerce and Industry (CCI) is the supporting organisation for the IT4work IT cluster. IT4work is a consortium of high-performance IT companies and leading research institutes located in the Engineering Region Darmstadt Rhein Main Neckar.
  - [www.it4work.de](http://www.it4work.de)
- **KTMC - Competence Centre Telematics, Mobile Computing and Customer Care**
  - The Competence Center for Telematics, Mobile Computing and Customer Care seeks the wider distribution and increased acceptance of telematic and customer relationship technologies as well as accompanying services. Professional users like public transport, police and fire brigades form the initial target group. While responding to the already high mobility in the Stuttgart region, the work in the Filderstadt Center will open the door to the use of telematic technology in everyday life.
  - [www.ktmc.de](http://www.ktmc.de)
- **Koordinierungsstelle Cluster Softwareinnovationen für das digitale**
  - SAP empowers people and organizations to work together more efficiently and use business insight more effectively. From back office to boardroom, warehouse to storefront, and desktop to mobile device, SAP empowers people and organizations to work together more efficiently – and use business insight more effectively. We do this by extending the availability of software across on-premise installations, cloud and on-demand deployments, and mobile devices. We believe that the power of our people, products, and partners unleashes growth and creates significant new value for our customers, our company, entire industries, and the economy at large.
  - [www.sap.com](http://www.sap.com)

- **MFG Baden-Württemberg mbH**

- MFG Baden-Württemberg is the Centre of Excellence for Information Technology and Media in the Southwest of Germany. More than 50 employees are actively committed to successfully networking the creative and technology sectors. MFG as a cluster initiative supports the IT and media sector in the region by a variety of services: innovation support and technology transfer, cluster and network management as well as regional business development and marketing. With a certified innovation management system (ISO 9001) and over 60,000 documented technology partnerships, MFG is a pioneer for systemic location development in the public-private context.
- [www.mfg-innovation.com](http://www.mfg-innovation.com)

- **NAC - Net Application Center Region Stuttgart w.V.**

- The Regional Competence and Innovation Center NAC – Net Application Center - offers interested users initial and independent consultation regarding the topic of online-services and application service providing. It provides a market overview, conducts initial requirements analysis and offers assistance in the development and implementation of policies introducing online-services to small and medium-sized enterprises. Furthermore, NAC informs and advises small and medium-sized enterprises about appropriate measures and the capabilities of online-services.
- [www.nac-stuttgart.de](http://www.nac-stuttgart.de)

- **NEMO-VisQuaNet**

- The concept of the Initiative Networks of Competence Germany by the Federal Ministry of Economics and Technology is to be the “League of the best innovation networks” in Germany. According to this goal the Initiative Networks of Competence Germany addresses the following target groups with individualized offers: Regional innovation network, Investors and start-ups looking for locations, Decision makers in companies, administration and politics, Scientists and future scientists and Media and the interested public.
- [www.kompetenznetze.de](http://www.kompetenznetze.de)

- **REGINA e.V. - Information Technology Aachen**

- The Aachen IT Competence Network REGINA e. V. covers the whole spectrum of business, research and education in the region. REGINA e. V. provides a focus for the activities of the member institutions, and strengthens their collaborations on a commercial, scientific and educational level. REGINA

brings together companies of all sizes, from small start-ups to large international enterprises, drawing the majority of its members from the SME sector. Specialist fields include: communication, hardware, domain-specific software, technical applications/automation, controlling/optimization, infrastructure, internet, e-commerce, IT consulting, IT personnel management, technology transfer and research and training.

- [www.regina.rwth-aachen.de](http://www.regina.rwth-aachen.de)

- **Strategische Partnerschaft Sensorik e. V.**

- In the Scope of the "Bavarian Cluster Campaign", a high tech initiative of the Bavarian state, the "Strategic Partnership for Sensor Technology" (SPS) acts as the platform for the cluster focused on sensor technology. More than 40 companies and institutions from the economic and scientific world are members in the association, already.
- [www.sensorik-bayern.de](http://www.sensorik-bayern.de)

- **Zentrum für Mikrosystemtechnik Berlin (ZEMI)**

- Your partner from the idea up to the product The Center for Microsystems Technology in Berlin (ZEMI) is an association of research institutes which focuses on the regional research and development potential in microsystems technology. As a one-stop agency, ZEMI is the central contact for industry cooperation and supports small and medium-sized companies, in particular, via technology transfer.
- [www.zemi-berlin.de](http://www.zemi-berlin.de)

- **it.saarland**

- [www.it.saarland.de](http://www.it.saarland.de)

#### 1.1.4 Slovenia

Slovenia has no regional clusters it only has national clusters, although it has regional competence centres, but they also work outside the region. One of the main activities of clusters is networking on the national and international level and they all have members from different regions.

National clusters in Slovenia are these:

- **Construction Cluster of Slovenia**

- CCS vision is to remain a successful network of construction companies offering complete solutions for domestic and EU construction market. CCS will



build further its long term competitiveness on technological and organizational innovations, development and quality.

- [www.sgg.si](http://www.sgg.si)
- **Automotive Cluster of Slovenia (ACS)**
  - ACS is a reliable and intensive R&D network of automotive suppliers to global vehicle producers & system suppliers at special segments with complex products of higher added value.
  - [www.acs-giz.si](http://www.acs-giz.si)
- **District energy cluster**
  - The District Energy Cluster of Slovenia comprises a group of related companies and institutions brought together into an innovative, coordinated system with the aim of increasing our competitiveness in all activities related to district energy, and to provide knowledge transfer and the best services in the wider European and other markets.
  - [www.zavod-de.si](http://www.zavod-de.si)
- **eAliansa IT Cluster**
  - The IT eAliansa cluster brings together Slovenia IT enterprises and institutions. Most of the enterprises are micro or small companies with excellent references in industrial, business and public services sectors in Slovenia. The companies comprising the cluster are oriented towards the global market and the development of new products and services, and are open to all forms of cooperation.
  - [www.ealiansa.net](http://www.ealiansa.net)
- **Economic Interest Association of Geodetic Service Providers**
  - International office for project organisation, partner linking in the field of space management, preparation of spatial data and environmental management. Economic Interest Association of Geodetic Service providers includes significant part of Slovenian geodetic and geomantic enterprises in area of spatial data management, designing and executing effective spatial information systems on national, regional, municipal and sector levels are ensuring highest quality of our services.
  - [www.giz-gi.si](http://www.giz-gi.si)



- **High Technology Products Manufacturers' Cluster**

- High Technology Products Manufacturers' Cluster links companies, research units and governmental institutions. The goal of this linkage is to achieve synergic effects at marketing, development and production of high tech (HT) products and technologies.
- [www.vtg-qiz.si](http://www.vtg-qiz.si)

- **The Slovenian Environmental Cluster**

- The Slovenian Environmental Cluster mission is: "Establishing friendly environment", and its strategic goal: "Internationalisation of technologies and knowledge transfer from institutes to the practice".
- [www.qiz-eg.si](http://www.qiz-eg.si)

- **Slovenian Plasttechnics Cluster**

- The Plastics Cluster unites the most important companies and accompanying institutions from the plastics industry. The cluster's members use the latest technology and are the optimal partner for new products and components, from planning through tool-making to production.
- [www.qiz-grozd-plasttehnika.si](http://www.qiz-grozd-plasttehnika.si)

- **TECOS, Slovenian Tool and Die Development Centre**

- TECOS brings together experts from industry and science to promote technical and economic advancement of the Slovenian tool and die industry. It is state-of-the-art platform for R&D projects, training and industrial applications. TECOS is a modern technology centre at the European level that provides R & D support for small and big companies in the metal forming, plastic materials and fibreglass, wood and non-metal composites industries.
- [www.tecos.si](http://www.tecos.si)

- **Toolmakers Cluster of Slovenia**

- TCS is one of the pilot Slovene clusters. TCS vision is regional network of high qualified companies and organizations-development partner of the most demanding industries in the EU. Target markets of TCS are automotive, aerospace, IT and domestic appliances industries. TCS is organized as network of virtual dynamic organizations with C-TCS Institute as centre, which is included in numerous Slovene and international R&D networks. TCS enables its partners connections with its members companies, which has great potential for tools and machines development and productions, as well

as with its members-institutions, with diversified offer of development, education and training, research, consulting, IT and financial services.

- [www.toolscluster.net](http://www.toolscluster.net)
- **Wood Industry Cluster**
  - The Wood Industry Cluster (WIC) connected one-third of the Slovenian wood processing and forestry sector as well as the most important research and educational institutions in the industry.
  - [www.grozd.sloles.com](http://www.grozd.sloles.com)
- **HVAC - Heating, Ventilation and Air-Conditioning Cluster**
  - The Cluster's mission is to set up a creative and innovative environment that motivates the members to co-operate and organise joint projects. The HVAC Cluster is a central point where the members can find answers to their questions and stimulation for faster, profitability-oriented development.
  - [www.hvac-cluster.com](http://www.hvac-cluster.com)
- **Technology Networks of Slovenia (TNS)**
  - Members of the Technology Networks of Slovenia cover research and development (R&D) on various research areas from Information Communication Technologies through Process Control Technology up to Intelligent Polymer Materials and Pertaining Technologies.
  - [www.fe.uni-lj.si](http://www.fe.uni-lj.si)
- **Technology network of information and communication technologies (TM ICT)**
  - Since 2005 Technology Network has been operating as a consortium of companies, universities and its members, public and other research institutions and other legal entities, together 44 members, which have expressed interest in co-operating in the realisation of common development strategy and achievement of consortium goals. The aim of consortium was to ensure efficient mechanisms for the support of joint technology development projects and establishment of an integrated innovation environment in the field of information and communication technologies.
  - [www.ict-slovenia.net](http://www.ict-slovenia.net)
- **Technology network - Intelligent polymeric materials and pertaining technologies (IPMT)**
  - National technology network IPMT aims to establish the surrounding for the synergy of techno-socio-economic knowledge required for the establishment

of 'high-tech' 'spin-off' companies and to fill the gap between the universities and technology parks and incubators. IPMT's activities are oriented towards the integration of advanced knowledge in the field of the new generation of thermoplastic polymer materials and pertaining technologies into those existing production programmes where the material behaviour significantly affects the functionality and technological level of the product. A priority of the network also concerns the development and commercialisation of new 'high-tech' products based on next generation polymers and technologies.

- [www.fs.uni-lj.si/cem/IPMT/IPMT.htm](http://www.fs.uni-lj.si/cem/IPMT/IPMT.htm)
- **Technology network Process control technology (PCT)**
  - The PCT technology network consists of 11 enterprises representing the majority of the most important companies in the Slovenian industrial processes automatic and information services market, and additionally three institutions performing the majority of this kind of research. With introduction of the process control technology in different areas, we are contributing to an increase in economic competitiveness. Process control technology results in increasing the scope and adaptability of production, improving the quality of products, reducing the consumption of energy and raw materials, decreasing the environmental pollution, and increasing the occupational safety, etc.
  - [www.tvp.si](http://www.tvp.si)
- **National Center of Clusters and Technology Networks (NCCN)**
  - National Center of Clusters and Technology Networks (NCCN) connects its members to enable implementation of relevant projects, surpassing individual activities of members thus creating their maximum added value. Aim of the National center is to link together relevant carriers of growth, companies, research and educational institutions, representatives of capital and state to form and implement national innovation and development policies.
  - [www.qzs.si/izqtm](http://www.qzs.si/izqtm)

### 1.1.5 Example: ICT-META

The Meta-Cluster as a entity is brand new but in 2007 in Austria was established ICT-META Consulting which is international platform for consulting, research and development. It is platform which is a mix between the dynamics of a founder and the experience and proven reliability of a well established enterprise. ICT-META is not cluster or association, it is an enterprise. The ICT-META declares to its customers these values:

- One-stop-shop for a wealth of services

- Depth and breadth of services offered
- Geographic coverage of an international enterprise
- Founded under European law
- Stability and continuity in the face of customers
- Cost effectiveness as a result of internal efficiency

Customers experience the reliability of a large enterprise, but at the same time the flexibility and the dedication of a small entrepreneur.

ICT-META could give Meta-Cluster good example of how Meta-Cluster could work. It is not a cluster in the original way but it has its own legal form which is very hard to find and choose.

## **1.2 Industrial Regional Mapping**

This chapter is comparing regions according their ICT development level. You will find here statistic and macroeconomic information about each region from the year 2007.

### **1.2.1 Czech Republic**

Amount of people working in ICT: 1.9%

Amount of experts in ICT: 0.9%

Amount of technical workers in ICT: 1%

Average salary of ICT worker (per month): 43 702 CZK (1 748 €)<sup>1</sup>

### **1.2.2 Poland**

Amount of people working in ICT: 1.25%

Amount of experts in ICT: 0.95%

Amount of technical workers in ICT: 0.3%

Average salary of ICT worker (per month): 12 000 PLN (2 850 €)<sup>2</sup>

### **1.2.3 Germany**

Amount of people working in ICT: 1.75%

Amount of experts in ICT: 2.1%

Amount of technical workers in ICT: 0.75%

Average salary of ICT worker (per month): 2 432 €

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<sup>1</sup> Exchange rate: 1€ = 25 CZK

<sup>2</sup> Exchange rate: 1€ = 4,2 PLN

#### 1.2.4 Slovenia

Amount of people working in ICT: 1.8%

Amount of experts in ICT: 2%

Amount of technical workers in ICT: 0.8%

Average salary of ICT worker (per month): 1 898 €

According to this data the amount of people working in ICT field is highest in the Czech Republic and lowest in Poland. Germany has biggest share of experts which are working in ICT industry. Average salary per month of ICT worker is surprisingly highest in Poland and lowest in the Czech Republic.

### 1.3 Scan of Clusters Potentials

According to Michael Porter clusters have the potential to affect competition in three ways by:

- increasing the productivity of the companies in the cluster,
- driving innovation in the field,
- stimulating new businesses in the field.

The cluster effect is similar to the network effect (but it is not the same). It is similar in the way of the price-independent preferences of both - the market and its participants are based on each ones perception. It means that cluster is a connecting of companies in one entity which happens spontaneously. Because of that cluster as a huge entity in the market has bigger effect on the market. Governments and companies often try to use the cluster effect to promote a particular place as good for a certain type of business.

It is important to understand that the cluster effect does not continue forever. To sustain cluster performance in the long term, clusters need to manage network openness to business outside the cluster while facilitating strong inter-organisational relationships within the cluster. Its relative influence is also dictated by other market factors such as expected revenue, strength of demand, taxes, competition and politics.

But despite that sometimes cluster strategies still do not produce enough of a positive impact to be justified in certain industries. Of course all of this depends on a cluster, but for all of them the vision and the plan is to survive, develop, grow, improve the existing status, strengthen their position on a national and international level, get more funds for execution of the strategic plans and increase added value in every activity that they do.

## 1.4 Matchmaking of Cluster Needs across the CE Region

To identify needs and expectations of clusters is given by report of ICT Meta-Cluster session, which was held in October in Milan, Italy. The clusters partners presented main activities, goals and offers. After the presentation of each cluster, managers had a brainstorming about supply and demand of Meta-Cluster cooperation. The conclusion of this brainstorming is this:

Czech republic	
Demand	Supply
Internship for SMEs and students and academic people Networking business meetings Finding partners for international R&D projects Share expertise, on-line training	Business intelligence competence centre Students for start up programmes Microsoft oriented business MIC network Know-how in network security monitoring

Germany	
Demand	Supply
Topic-related information exchange Experience exchange in cluster management in SimVis area Exchange of foreign market information (country benchmark), competition, research, networks	Cooperation in applying for public funded projects, tenders, proposals, consortia creation Market access, regional business contacts SimVis library, studies, analysis, reports, position papers, white papers

Italy	
Demand	Supply
Expand activity in ICT with European clusters Facilitate cooperation among EU companies on silicon base devices/systems development Telephony skills and cooperation for alarm messages notification	Tele-health projects using our software for remote data management Medical devices integration Good know-how on Italian/Lombardian funding programmes Good network in Milan area semicom comp. design

<b>Slovenia</b>	
<b>Demand</b>	<b>Supply</b>
Involvement in FP7 horizon 2020 projects Funding for cluster development List of all ICT clusters in EU and world wide	Competence center in internet of things Projects in smart cities smart factories, smart buildings Membership in EU network of living labs

<b>Poland</b>	
<b>Demand</b>	<b>Supply</b>
Providing contacts and documents flow Finding supporting funds Finding partners for common projects with ICT competence	RaD resources Advanced new solution Experts

The next goal of the Conference and Workshop in Milan was to establish the supply and demand for all partners together.

<b>Collaboration Demand</b>	<b>Collaboration Supply</b>
Funding opportunities for clusters Funding opportunities for SMEs Exchange of information and contacts List of all ICT clusters RTD expertise sharing	Funding opportunities New contacts and opportunities sources, exchange of information RTD expertise sharing, competence centres available



## 2 Meta-Cluster Strategy and Objectives

*The Meta-Cluster strategy and objectives are the main steps which have to be established at the beginning of creating Meta-Cluster project. In this chapter you can find Meta-Cluster vision and mission, which are extremely important for future facilitator of Meta-Cluster, main objectives and expected impact in the Central Europe Region, SWOT Analysis and Strategies based on SWOT Analysis. This part of this strategy is about base information necessary to know for understanding the idea of Meta-Cluster.*

### 2.1 Short Industrial Analysis

This chapter is about analysis of ICT industry. You can find here information about recent development of IT market in region, information about current situation and future anticipations.

#### 2.1.1 Czech Republic

The ICT sector is generally highly innovative. In 2002 the expenses on research and development in ICT were for more than 25% of all these expenditures in industry. In Finland, South Korea, Ireland, Canada and the U.S., they were even 40% and spending of the most developed countries are growing very rapidly as well.

Czech Republic, however, in that context has a very weak position. In 2002 the share of ICT on GDP was only 0.050% in comparison with already mentioned Finland (1.4), Sweden (0.898), the Netherlands (0.326) or Belgium (0.283). In this area is apparently not expect any significant reversal, considering structure of ICT companies and research and development facilities in this area.

However the Czech Republic has big potential in human resources. There is a lot of experts in this field and big potential.

#### 2.1.2 Poland

Lower Silesia is one of the most economically developed regions in Poland. Can boast not only the highest level of urbanization in the country, but also ranks second in terms of GDP and the size of foreign direct investment per capita among all provinces.



The location of the region in the south-western part of the country can cooperate cross the border with Germany and the Czech Republic, and Wrocław - one of the most dynamic universities in Poland - is a guarantee of highly qualified staff.

Innovative policy guidelines contained in the region of Lower Silesia Innovation Strategy. The main objective is to build an innovation strategy in Lower Silesia, knowledge-based economy, and thus increase the adaptive potential of the region. Other strategic objectives indicate the areas of concentration of activities supporting innovation. These are:

- Activation of the research;
- Building innovation infrastructure;
- Financing innovation;
- Lowering the barriers to action innovators;
- Education for innovation;
- Supporting regional clusters of entrepreneurship;
- Promotion of innovation-oriented attitude;
- Accumulation of social capital.

Regional Innovation Strategy is implemented through a variety of actions taken by businesses, universities, research and development institutes, local governments, supporting institutions, the media as well as by individuals.

In terms of innovation, Lower Silesia ranks third in the country. According to the index level calculated innovative method of Human Development Index (HDI) takes into account, inter alia: expenditure on innovation activities in industry for one company operating in the industry in 2007, patents granted in 2007 for 10 thousand populations, expenditure on R & D (the ratio of tax to GDP ratio in 2007.) Lower Silesia voivodeship is second only to Silesian and Mazovia.

### **2.1.3 Germany**

ICT in Germany is an important driver for innovation, creating unique market opportunities for cutting-edge technologies. Four main ICT industry segments are software, IT services, IT equipment and telecommunications which are driven by positive growth rates in outsourcing services, infrastructure services and mobile data services.

The market in Germany represents Europe's largest ICT market in terms of revenue volume (20 per cent of total EU market volume) and is the fourth largest ICT market worldwide (5.3 per cent of global market share), after USA (27.8 per cent), Japan (8.8 per cent) and

China (7.1 per cent). In Germany there are 75.000 ICT companies which employing almost 820,000 people (second biggest employer following advanced manufacturing). Germany has also an excellent R&D landscape and is home to Europe's largest ICT research organisation, the Fraunhofer Institute; all major ICT manufacturers operate R&D laboratories in Germany. Approximately 24 per cent of all German patent applications at the European Patent Office were ICT-related in 2009, ranking Germany first in Europe and third in the world (only behind USA and Japan). In addition in Germany's Federal Government runs R&D initiatives and incentive programs.

**There are a lot of Key ICT events in Germany:**

- CeBIT Hannover: leading business event and trade fair showcasing digital IT and telecommunications solutions – [www.cebit.de](http://www.cebit.de)
- LERNTEC: International Trade Fair and Convention for Vocational Educational, Learning & IT – [www.learntec.de](http://www.learntec.de)
- conhIT: Health IT Conference – [www.conhit.de](http://www.conhit.de)
- Smart Technologies Forum: Energy meets ICT – [www.smarttech-forum.com](http://www.smarttech-forum.com)
- Various additional ICT conferences with sub-sector and niche-market focus

ICT industry of Germany is also known for its BITKOM organization. BITKOM is the voice of the information technology, telecommunications and new media industry in Germany. BITKOM represents more than 1,700 companies, of which 1,100 are direct members. They include nearly all global players as well as more than 1,000 powerful small and medium-sized enterprises and a lot of founder-managed creative companies. BITKOM's members generate an annual sales volume of 135 billion Euros in total, exporting high-tech goods and services worth 50 billion Euros per year. BITKOM provides a wide-range powerful network that brings together the best minds and top companies of the digital world. BITKOM organizes a permanent exchange between experts and executives, offering its members platforms for co-operation and for interaction with key clients. Creating a fertile environment for innovation is BITKOM's highest priority. Core topics of BITKOM's political agenda are education and the training of tomorrow's IT and telecommunications specialists, Green IT, e-government, e-health, economic policy, copyright and patent law, security and privacy issues, software technologies, consumer electronics, climate protection, and sustainability as well as a new legal framework for telecommunications and the media. With digital convergence in mind, BITKOM seeks to promote the collaboration of all ICT-related enterprises

#### **2.1.4 Slovenia**

The trends in ICT market in Slovenia are:

- The Slovenian ICT market is propitious to small, niche players.
- SMB companies are still at an early stage of ERP and CRM software integration; they locally-developed software is used on a large scale.
- In 2009 Slovenia's IT spending reached nearly EUR 734 million.
- In 2008-2009 Slovenia implemented a number of IT projects, making use of both local and EU funds.
- Around half of the spending on enterprise application solutions (EAS) in Slovenia is constituted by large enterprises.

The software market in Slovenia is projected at EUR 165 million in 2010, with a return to low single growth following a sharp deceleration in 2009. Slovenia is a relatively mature software market for the CEE region, and the relative saturation (79%) of the large-enterprise market in terms of basic enterprise resource planning (ERP) applications should encourage vendors to look to other products to maintain growth, or else to focus more on vertical specialization. In 2009, despite the economic downturn, IT services companies continued to benefit from IT projects tendered across various sectors ranging from the public sector to banks, education, retail and financial institutions. In the long term, the IT services market is set to expand as Slovenian organizations upgrade IT systems to gain or maintain competitive advantage following EU accession.

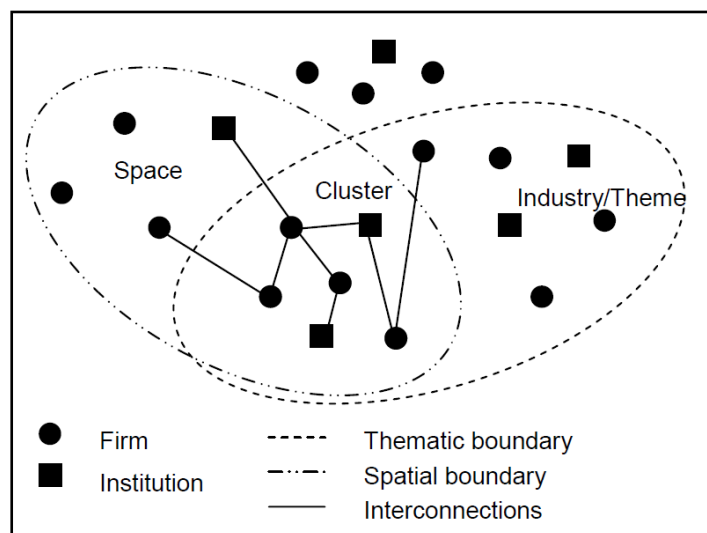
## 2.2 Meta-Cluster Vision

The vision of Meta-Cluster is hidden in the thought of networking cooperation and its effectiveness. The clusters were established to gain an advantage. Such an advantage could mean the cooperation in terms of:

- Research and Development – cooperative R&D projects
- Sharing
  - Industry information
  - Human resources
  - Industry marketing
  - Industry lobbying
  - Law and regulations strength

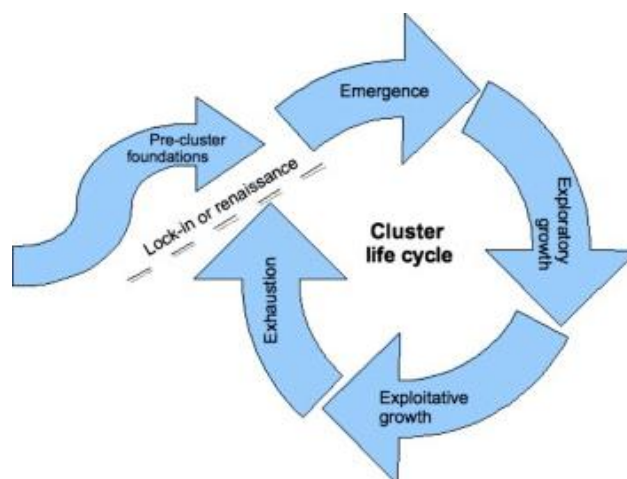
From any point of view the cooperation has to have some kind of benefits (which have to be bigger than costs) to be effective and sustainable. Mostly, concerning the clusters collaboration, it is somehow economies of scale. It is necessary to understand the clusters cooperation benefits from managerial point of view; otherwise it can be really difficult to realize direct benefits which can be estimated into money value.

Meta-Cluster brings higher level of cooperation than clusters; even it has very similar basics for its establishment and functionality. According to the cluster constitutes itself from a critical mass of formal and informal exchange processes between firms and institutions, which are thematically focused and take place in a spatially restricted area.



3 Figure: Elements of cluster

The life-cycle of the Meta-Cluster can be described by using the Cluster Life Cycle's theory.



4 Figure: Life cycle of cluster

According to life-cycle of cluster (CLC) mentioned above, which is similarly used in case of Meta-Cluster, are different financial sources divided into different phases:

- Pre-cluster foundations (PCF)
- Emergence (E)
- Exploratory Growth (EG)

- Exploitative Growth (G)
- Exhaustion (Ex)

For developing each phase of the CLC the definition of Meta-Cluster mission and vision is milestone and also for the establishing of the Meta-Cluster.

### **Vision**

The main vision of Meta-Cluster is to establish such an environment of cluster connection and its activities, which will bring the cooperation and involvement into such environment. The cooperation will have rules and principles which will allow higher effectiveness and long term sustainability of the cooperation. The environment of Meta-Cluster will be easily adaptable for any kind of cooperation – will have free entry and will work according to the established rules.

## **2.3 Meta-Cluster Mission**

The Meta-Cluster mission is to start and develop the inter cluster effective communication, which will bring the mutual cooperation projects. The first step is to find the same language, later on to communicate well and a lot, further to establish cooperation with higher benefits than costs. The financial stability of cooperation is key factor also.

Key factors of the mission fulfilment:

### **1. Communication**

- a. Same language
- b. Rules of communication
- c. Important and interesting topics
- d. Amount of the communication

### **2. Cooperation**

- a. All the partners
- b. In between the partners
- c. Moving planning

### **3. Financial stability**

- a. Financial stability of the Meta-Cluster's functioning
- b. Financial stability of the project

## 2.4 Main Objectives and Expected Impact in the Central Europe Region

The main objectives of the Meta-Cluster establishment and functioning are:

- Industry know-how deepening
- Increase the cohesiveness
- Creating the networks
- Collective projects
- Export and import support

### 2.4.1 Industry know-how deepening

In the Central European Region are similarities and differences in between the ICT industry. Even the specifics of the ICT industry (easily transferable and not necessarily connected to the place of production) the specifics of the market are different:

- market trends,
- customers behaviour,
- law and regulations,
- technical research (strong parts of research and development),
- technical infrastructure
- industrial infrastructure (entrepreneurial conditions, educational level of human resources etc.)

All these information are very important, while trying to search project partner or thinking about market entry. Meta-Cluster should bring the cooperation between the partners from the Central European Region and inform the partners about all above mentioned aspects. The information is key cornerstone for success and is its first step. After having the information man can decide about future steps.

### 2.4.2 Increase the cohesiveness

Meta-Cluster, understand the cooperation and network of clusters, should bring the cohesiveness. It is necessary to know about the country, industry, know the people. Even though we are in ICT industry it is highly recommended to know important partners face to face.

### **2.4.3 Creating the networks**

The connection of strong and capable people or entities can bring network which is able to work effectively. One man can do big things but several similar people can do big project and do, what individual can be able to do – use the synergy. For synergy effect the knowing the partner and function with the partner in the network is elementary.

### **2.4.4 Collective projects**

Connection of several clusters is highly calling for mutual cross-border projects. Collective project should bring better results because each partner will fit the project to its market conditions, which means the results from the project, will be spread widely through the European Central Region market. Such results of the collective project bring higher potential of employment and competitiveness.

### **2.4.5 Export and import support**

All above mentioned – knowing the partners, knowing the environment of the partners and creating projects and networks should support the export and import – the economics of the Meta-Cluster. The financial stability is one of key pillars of effective and sustainable Meta-Cluster functioning. The expected impacts are:

- know better the partners environment,
- new projects,
- creating the European opinion and promote it.

#### **Know better the partners environment**

In the group of knowing better the partners environment we can find wide range of positive impacts:

- knowing the economics and law rules can help to enter the market or establish the subsidiary
- having the relevant contact can bring cross-border cooperation with students – exchange praxis and studies
- connecting with foreign clusters in between can get people close from different spheres, which can be without Meta-Cluster difficult. All the clusters are closely linked to universities, schools, regional entities and innovation parks and incubators. Those people can play very important role in innovating product processes etc.



### **New projects**

Based on new connection and networks (mentioned above) the probability of new project establishment increase rapidly. Not only the awareness about possible partners but also the environment awareness is very important while talking about new project launching. Existing and functioning network between clusters can bring such projects, which will solve important and key problems in the industry.

### **Creating the European opinion and promote it**

Meta-Cluster should have its opinion and should be the key player in the European politics and law and regulations dilemma. According to its network the Meta-Cluster know about the problems in the industry, the procedures, methods and processes and praxis and should be the right entities to give the opinions and recommendations.

## **2.5 Short SWOT Analysis of Meta-Cluster**

### **Strengths**

- very good industry chosen
- good geographical concentration of partners
- strong partnership with other entities (bring bigger network)
- voluntariness of engaged partners (no barriers - free entry and free leaving of Meta-Cluster)

### **Weaknesses**

- key people already works in two or more entities
- different cultures, different languages
- low awareness about Meta-Cluster
- very low financial stability
- too many entities, very difficult communication
- voluntariness of engaged partners
- difficult control of member's productivity
- difficulties with assigning tasks
- fragmentation of partners within the industry

### **Opportunities**

- use of synergy effects
- increase the market
- lobbying influence
- growing importance of this industry



- government contracts and opening special national offices for IT security
- possibility of realisation of common projects
- common marketing for certain purpose
- coverage of selected part of IT industry
- costs savings of R&D projects

### Threats

- possibility of establishing competitive platforms with stronger motivation and more stable budget
- cluster's members would have a lack of interest in the project
- low trust in Meta-Cluster project of the public
- newness of Meta-Cluster as an entity

### SWOT STRATEGIES

In the following paragraphs you can find strategies which were established based on SWOT analysis.

#### Strategy SO Strategies (Strengths and Opportunities Strategy)

Partnership co-operations inside and outside the Meta-Cluster structure will bring the synergy effects in case of:

- projects,
- business,
- marketing,
- networking,
- research and development.

Also the relatively close distance between partners will increase the market and the range of individual partners all together.

#### Strategy ST Strategies (Strengths and Threats Strategy)

Motivation of involvement members can be supported by the voluntary approach of cooperation between partners will bring the highest effects since the partners will find their own goals, and will cooperate on voluntary basis.

#### Strategy WO Strategies (Weaknesses and Opportunities Strategy)

Above mentioned weaknesses lead ideally to use some of **EC projects** where cultural differences and involvement of key people in the entities can bring positive effects. Once the partners of Meta-Cluster will work together in projects, the possibility of **future mutual business contract** can be realized.

### **Strategy WT Strategies (Weaknesses and Threats Strategy)**

Involvement of partners in Meta-Cluster can be weak so the Meta-Cluster as an entity can hardly work on the market. The communication here is essential, because this is the first and key step of getting know each other and develop cooperation. The possibility of competitive network should not be seen as so crucial because the IT industry is wide and even with the competitive subject the cooperation can be found.

The marketing and awareness about the Meta-Cluster and its activities (and mission) needs to be promoted in appropriate way with the highest possible efficiency. Each partner should be the contact centre for public in its country. The communication in the beginning is totally needed.

## 3 Organization structure of Meta-Cluster

*The organization structure of Meta-Cluster has to be settled at the beginning of Meta-Cluster during the first meeting of Meta-Clusters' partners. This chapter informs about possibilities of legal forms which are common used in Europe and organizational structure inside of the companies. It also includes how should be the most important person of Meta-Cluster like (facilitator profile). At the end of this part is described management team of Meta-Cluster and its meaning for successful Meta-Cluster development.*

### 3.1 Legal form of Meta-Cluster

In this chapter you can find the legal forms which are in the Czech Republic, Poland, Slovenia, Italy and Germany. First there is given general information about the legal forms, bodies of the company, number of the people, who can set up the company and specific amount of money which are necessary for founding. In the next part there is introduced each state with its specific legal forms. At the end of this chapter you will find table with comparison of legal forms in each state.

#### 3.1.1 Limited Liability Company

The limited liability company is something between the capital and the personal business company. To capital business company bears witness the obligatory formation of the basic capital, the principle of majority decision and the fact that the partner needs not be member of the company's statutory body.

#### Advantages

- Limited liability, meaning that the owners of the LLC, called "members", are protected from some or all liability for acts and debts of the LLC depending on state shield laws.
- Much less administrative paperwork and record keeping than a corporation.
- Pass-through taxation (i.e., no double taxation), unless the LLC elects to be taxed as a C corporation.
- Using default tax classification, profits are taxed personally at the member level, not at the LLC level.
- LLCs in most states are treated as entities separate from their members, whereas in other jurisdictions case law has developed deciding LLCs are not considered to have separate legal standing from their members (see recent D.C. decisions).
- LLCs in some states can be set up with just one natural person involved.

- Less risk to be "stolen" by fire-sale acquisitions (more protection against "hungry" investors).
- For real estate companies, each separate property can be owned by its own, individual LLC, thereby shielding not only the owners, but their other properties from cross-liability.

## **Disadvantages**

- Although there is no statutory requirement for an operating agreement in most states, members of a multiple member LLC who operate without one may run into problems. Unlike state laws regarding stock corporations, which are very well developed and provide for a variety of governance and protective provisions for the corporation and its shareholders, most states do not dictate detailed governance and protective provisions for the members of a limited liability company. Thus, in the absence of such statutory provisions, the members of an LLC must establish governance and protective provisions pursuant to an operating agreement or similar governing document.
- It may be more difficult to raise financial capital for an LLC as investors may be more comfortable investing funds in the better-understood corporate form with a view toward an eventual IPO. One possible solution may be to form a new corporation and merge into it, dissolving the LLC and converting into a corporation.
- The management structure of an LLC may be unfamiliar to many. Unlike corporations, they are not required to have a board of directors or officers. (This could also be seen as an advantage to some.)
- The principals of LLCs use many different titles—e.g., member, manager, managing member, managing director, chief executive officer, president, and partner. As such, it can be difficult to determine who actually has the authority to enter into a contract on the LLC's behalf.

### **3.1.2 Joint-stock company**

The joint-stock company is led by the Board of Directors; its top body is the general meeting of the shareholders (European joint-stock company – at the level of the European Union).

The joint-stock company is a juristic person, the statutory representative of which is the elected Board of Directors. The capital stock is divided among a certain number of shares of certain nominal or issue value; shares are traded and their market value is changing. According to the demand and offer on the stock exchange, the value of shares changes, as well as the value of the whole company, sometimes very rapidly and substantially. The company is liable with its entire property for its obligations. For the case of loss, the

Company has to make a reserve fund. The shareholder does not bear liability for the obligations of the company and is not bound to pay the loss of the Company.

### **Advantages**

Ownership of stock confers a large number of privileges. The company is managed on behalf of the shareholders by a Board of Directors, elected at an Annual General Meeting. The shareholders also voted to accept or reject an Annual Report and audited set of accounts. Individual shareholders can sometimes stand for directorships within the company, should a vacancy occur, but this is uncommon. The shareholders are usually liable for any of the company debts that exceed the company's ability to pay. However, the limit of their liability only extends to the face value of their shareholding. This concept of limited liability largely accounts for the success of this form of business organization. Ordinary shares entitle the owner to a share in the company's net profit. This is calculated in the following way: the net profit is divided by the total number of owned shares, producing a notional value per share, known as a dividend. The individual's share of the profit is thus the dividend multiplied by the number of shares that they own.

### **3.1.3 Co-operative**

Association of natural and juristic persons which is liable for its obligations with the members' investments and which performs mostly as a juristic person. It is led by the Presidium, the highest body being the Members' Meeting.

The Co-operative, formerly Association, is a kind of juristic person (entity) which does not much differ from a business company. The difference consists in the possibility to acquire the membership without changing the foundation document, in the equality of votes in making decisions, e.g. on the change of statutes and on the variable basic capital.

### **3.1.4 Bodies of the company**

#### **Limited Liability Company**

- General meeting - the company's top body. It is held at least once a year and it approves of e.g., the profit distribution, the financial statement, the statutes of association, etc. As to the approval of the financial statement or of the profit distribution, in case that the company has only one partner, the 'Decision of the only one partner' is sufficient and the general meeting needs not to be convened.

- Statutory body - one or several executives selected by the general meeting from among the partners or physical persons, or appointed at the company's foundation. The executive (executives) shall be stated in the Companies Register.
- Supervisory board – this body is not mandatory. It supervises the activities of the executives, examines the financial statement and submits its reports to the General meeting.

### **Joint-stock company**

- General meeting - the meeting of all shareholders – is the joint-stock company's highest body. The Constituent General Meeting makes decision on the company's foundation, the subsequent general meetings make decisions e.g. on the modification of the Articles of association, elect the bodies of the company, approve of the distribution of profit and the financial statements. Each shareholder has a number of votes corresponding to the number of owned shares.
- The Board of Directors is a statutory body of the company. They have to manage the Company in the time between the general meetings, to make operative decisions and to conduct the accounting procedures. It is usually elected and removed by the General meeting. The Board of Directors of a joint stock company has to consist of at least 3 members. In case that the joint-stock company has, exceptionally, only one shareholder, the Board of directors can consist of one or two members and is elected for a period of at most 5 years.
- The Supervisory Board supervises the performance of the Board of Directors. It is entitled to check the company's accounting and other documents. The members of the Supervisory Board are elected by the General meeting. If the company has more than 50 employees, 1/3 of the Supervisory Board are elected by the employees, the rest by the General Meeting. The Supervisory Board shall consist of no fewer than 3 members. The number of members of the Supervisory Board shall be divisible by 3. The members of the Supervisory Board shall be elected for a period not exceeding 5 years.

### **Co-operative Bodies**

- The Members' Meeting – takes decisions on the co-operative's most important matters, elects other bodies of the co-operative, which are accountable for their activities.

- The Board – the executive body of a co-operative with a general authority. It manages and takes decisions on those matters that are not in the competence of other co-operative bodies. It is the statutory representative of the co-operative.
- The Auditing Commission - inspects and checks the activity of the co-operative, of all its members and bodies.

### **3.1.5 Czech Republic**

In the Czech language sometimes abbreviated as Spol.s.r.o. It is a juristic person (entity) bearing liability with a certain subscribed amount of capital.

#### **Foundation of a Limited Liability Company**

The company of this type may be founded by one person, the maximum number of partners being 50. The business name of a business company must include the designation 'limited liability company' (or the abbreviation). The minimum subscribed capital is 200,000 CZK (8000 €)<sup>3</sup>. In case of non-monetary investment (i.e. immovable assets, shares, cars, etc.) the investment shall be evaluated by an expert. The company is founded in the moment when all partners come to an agreement on the partnership contract and sign it at notary office.

Before putting in the petition asking for the company's incorporation into the Companies Register, all non-monetary investments, issue agio and at least 30 % of each financial investment shall be paid off. The total value of the paid off financial investments and the value of the non-monetary investments shall amount to at least 100.000 CZK (4000 €). The investment shall be cared for by the investment manager appointed in the Partnership contract.

Irrespective of the date of its foundation, the company starts only after its incorporation into the Companies Register. However, the petition asking for the company's incorporation into the Companies Register shall be submitted 3 month after its foundation, at the latest.

#### **Foundation of the Joint-stock company**

The company can be founded by a natural person or a juristic person. After convening the first general meeting and electing the bodies of the company, after payment of the issue agio and deposition of the non-monetary investments by all shareholders, the Register Court can allow the company's incorporation into the Companies Register. Thus the joint-stock company comes into existence. The company's basic capital shall be at least 2 000 000 CZK

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<sup>3</sup> Exchange rate: 1€ = 25 CZK



(80 000 €). If the company makes a public offer of shares, its basic capital shall amount to 20 000 000 CZK (800 000 €). The nominal value of shares (issue value) is not fixed, however in most cases it amounts to 1000 CZK (40 €). In the Articles of Association, the company indicates the object of business, the amount of the basic capital, dividend payout, etc.

The advantage of the joint-stock company consists in the possible anonymity of the owners, since the owners are not incorporated into the companies register. Another advantage lies in the big initial capital that can be achieved by the sale of shares.

## **Co-operative**

In the Czech legal system, the Co-operative is an association of an unspecified number of persons, founded to undertake business activities or to satisfy economic, social, housing or other needs of its members. This means that a Co-operative cannot be founded for charity purposes to the benefit of non-members. The business name of the co-operative shall include the designation “Družstvo”.<sup>4</sup> A co-operative shall have not fewer than 5 persons (this shall not apply if two members are legal entities). The co-operative shall be liable for the breach of its obligations with all its property. The members of the co-operative shall not bear liability for the obligation of the co-operative. The co-operative’s highest body is the Members’ Meeting. The statutory body of a co-operative is the Board, represented mostly by its chairman or vice-chairman. The date of foundation or liquidation of a co-operative is identical with the date of incorporation into or deletion from the Companies register.

The membership of the co-operative terminates by means of a written agreement, by withdrawal, by expulsion, by liquidation of the co-operative or upon the death of the member.

## **Foundation**

A foundation is a non-profit organization, a specific type of business subject, usually defined by specific laws and fulfilling social and humanitarian purposes.

According to valid Czech legislation, a Foundation is a goal-directed property association established by one or several founders in order to achieve generally beneficial aims.

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<sup>4</sup> The word “co-operative” may be found in the business names of companies of other legal form. For example “Co-operative of tenants of house No. 499, V.Hugo street 8, Prague 5, Limited liability company /1/ or “Agricultural co-operative Bohuňovice, Limited liability company “ /2/ , or “Uniform Agricultural Company Slušovice, Limited Liability Company /3/, /4/ , which are owned by several natural persons.

In this respect a Foundation differs from the trust (not explicitly defined in the Czech legislation) which can be established for arbitrary purpose, typically to the benefit of a concrete person (e.g. heir or heirs).

A Foundation is a natural person (entity) with a property basis and own statutory bodies. These can handle the Foundation's property, however only in accordance with the

Rules defined in the Foundation Deed or in the testament by which the Foundation has been established. The purpose of the Foundation cannot be subsequently changed, neither by its founder. This partly breaks – in public interest – the legal principle that only people and not things may have rights. In a Foundation, the will of the founder is petrified forever.

A well-known Foundation is the Alfred Nobel Foundation awarding every year Nobel Prizes in various fields. In the Czech lands, the historical Foundation of Josef, Marie and Zdenka Hlávka (Hlávka Foundation), is well-known.

### **Semi-budgetary organization**

Semi-budgetary organization is one of the forms of a public institution, a juristic person charged with tasks of public interest.

In the Czech Republic, the legal status of semi-budgetary organizations is defined by the State budgetary rules and the Regional budgetary rules. According to these rules, the state organs and self-governing local authorities establish semi-budgetary organizations for ensuring such activities in their competence that are usually non-profitable and the extent, structure and complexity of which usually require legal subjectivity. The founder of a semi-budgetary organization shall issue a deed of foundation. He appoints and removes the director of the organization, decides on the director's remuneration, can examine the complaints against the director and check the household of the whole semi-budgetary organization.

A semi-budgetary organization administers the financial means acquired by its own (main) activity and the means received from other persons, primarily from the budget of its founder. The founder grants to the semi-budgetary organization a contribution for its operation, depending on the performance or other criteria. The amount of the contribution to the operation or of other payments received according to other laws, by which the semi-budgetary organization ensures the remuneration of its employees, has influence on whether the organisation remunerates its employees with a salary or a wage.

In the Czech Republic, the form of the semi-budgetary organization is a very frequent one, since these organizations often ensure the activities of schools, school facilities, museums or hospitals.

Historically, semi-budgetary organizations represent the socialist modification of the traditional public institutions. In the Czech legal order, semi-budgetary organizations were mentioned in the Ordinance of the Ministry of Finance No. 84/1958 U.I. (Úřední list) on the budgetary rules of National Committees, later in the Government Decree No. 78/1960 Col. of L. on the budgetary rules of national committees (Article 15, para 2: “ The National committee can, under conditions stipulated by specific prescription, grant a contribution from its budget to an organization that fulfils tasks of public interest (semi-budgetary organization), then in the Government Decree No. 90/1965 Col. of L. on Planned management of national economy, in the Government Decree No. 100/1966 Col. of L. on Planned management of the national economy, in the Government Decree No. 14/1971 Col. of L. on Financial management of state and other business organization, in the Ordinance of the Federal Ministry of Finance No. 14/1971 Col. of L. on Management of the national property, in Act No. 129/1989 Col. of L. on Budgetary system of the Czechoslovak socialist republic. (State budgetary rules), in the act No. 425/1990 Col. of L. on District Committees, their competences and other related measures, in the Act No. 563/1990 Col. of L. on the Budgetary rules of the federation, and in the Act No. 576/1990 Col. of L. on the Rules of management of the budgetary means of the Czech Republic and of the communities of the Czech Republic. (Budgetary rules of the Czech Republic).

### **Situation in Czech**

Philanthropic foundations established during the First Republic (1918 -1939) had been liquidated under the Communist rule, with the exception of the above Hlávka Foundation.

At the beginning of the nineties of the 20<sup>th</sup> century, a boom in establishing new foundations has set in. In 1997, there were more than 5000 foundations in the Czech Republic. At that time, however, the reputation of foundations was not a flattering one, due to the appearance of some fictive or fraudulent foundations. In 1998, a new Foundations and Funds Act (227/1997 Coll.) was passed, which brought a radical improvement. The strict stipulations of this Act had for consequence a radical reduction of the number of foundations to about 150 in 1998. Up to 2007, the number of foundations exceeded 400. The factor limiting the establishment of foundations is the minimum Foundation property of 500.000 CZK required for the Foundation's registration. In the time of the foundation's duration, its property must not be alienated; it is destined to permanent investment. The capitalisation of Czech foundations was made possible, in a manner unique in the world, by the establishment by the Government of the Foundation Investment Fund (NIF) from which 73 selected foundations

got about 2,5 billion CZK destined to permanently support the Czech non-government non-profit sector.

### 3.1.6 Poland

- Limited liability company – the minimum basic capital is 50 000 PLN (11 900 €)<sup>5</sup>, the minimum partner's investment is 500 PLN (119 €). The number of founders is not defined. If the basic capital exceeds 500 000 PLN and the number of founders exceeds 25, a supervisory body consisting of 3 members shall be appointed.
- Joint stock company – the minimum basic capital is 500 000 PLN (119 000 €), the minimum value of one share being 1 PLN (0,24 €). The minimum number of founders is 1. 25 % of the basic capital shall be paid up before the registration. The joint-stock company shall appoint a supervisory board consisting of 3 members and its term shall be at least 5 years.
- Limited partnership (Spółka komandytowo- akcyjna) – a form of company with elements of limited partnership and of joint-stock company.
- Association (Spółka cywilna) corresponds to the Czech “association” (sdružení) used for smaller companies – associations of persons according to the Civil Code. This Association lacks legal subjectivity and the “associates” are liable with their whole property. If within two subsequent years the association's net income exceeds 400 000 €, the association shall transform into a business company and be incorporated into the companies register.
- Oddział - corresponds to the subsidiary of a foreign company.

### 3.1.7 Germany

In Germany and other German speaking countries the legal forms of business companies are similar as in the Czech Republic. As a rule, the following types of business companies are encountered:

- Limited liability company - the minimum basic capital shall be 25 000 €, the minimum member's investment 100 €, the liability being limited to the amount of member's investment. The company shall be incorporated into the companies register. The terms of incorporation and other rights and duties are the same as in the Czech Republic.

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<sup>5</sup> Exchange rate: 1€ = 4,2 PLN

- Joint stock company – the minimum basic capital shall be 50 000 €, the value of one share shall be at least 50 €. The company's liability is limited and the company's incorporation into the companies register is obligatory.
- Limited liability Company and Limited Partnership (Gesellschaft mit beschränkter Haftung und Komplementär Komanditgesellschaft) – this type of company shows some elements of Limited Liability Company and Limited partnership and has no equivalent in the Czech Republic. Minimum basic capital is not required, liability is limited, the incorporation into companies register is obligatory.

### **3.1.8 Slovenia**

- Limited liability company - minimum basic capital shall be 25 000 €, minimum partner's investment shall be 100 €, liability being limited to the amount of partner's investment. Company's incorporation into the Companies register is obligatory.
- Joint-stock company - minimum basic capital shall be 50 000 €, the value of one share shall be at least 50 €. Liability is limited, incorporation into Companies register is obligatory.
- Limited partnership - limited partnership "per shares"- minimum basic capital shall be 21 560 €.
- Tuja podružnica – subsidiary of foreign company – analogue of the subsidiary of foreign company in the Czech Republic.

### **3.1.9 European co-operative company**

The European co-operative company or European Co-operative or Euro-co-operative (abbreviated SCE) is a juristic person (legal entity) founded according to community law by physical persons with residence in various member states of EU , or by juristic persons (entities) established according to the law of the individual member states of EU , or possibly formed by fusion of two existing co-operatives, or by transformation of an intrastate co-operative into another legal form without its previous dissolution, if the co-operative's seat and main office is in one member state of the EU, and its business premises or subsidiary are in another member state of the EU.

### **3.1.10 Principle**

The main objective of a European co-operative company shall be to satisfy the needs of its members or to develop their economic or social activities in accordance with the following principles:

- A European co-operative company shall perform its activities to the common benefit of its members, so that each member benefits from its activity in proportion to his participation.
- Members of a European co-operative company shall also be its customers, employees or suppliers, or be otherwise involved in the company's activities.
- Members of a European co-operative company shall make inspections and audits on equal terms, though weighted voting according to each member's investment into the company is also possible.
- Interest rate on credits and members' investments into a European co-operative company shall be limited.
- Profits shall be distributed in proportion to deals made with the European co-operative company or used for coverage of members' needs.
- No artificial hindrances shall be put to the membership in a European co-operative company.
- In case of liquidation of a European co-operative company, its net property and reserves shall be transferred, on the principle of non-profit transfer, on another co-operative subject pursuing similar objectives or objectives of public interest.

European co-operative companies are granted privileges in the trade across the borders of the individual member countries of the EU. In the future, they are supposed to play an important role in the development of the so called Euro regions.

### **3.1.11 Legal regulations**

At the EU level, the legal regulation of the European co-operative company is defined primarily in the following documents:

- Order of the Council of the EC No. 1435/2003 of 22.07.2003 on the status of the European co-operative company.
- Guideline of the Council of the EC No.2003/72/ of 22.07.2003 which completes the status of the European co-operative company with view to the involvement of employees.

The legal regulation of the European co-operative company, at the level of the Czech intrastate law, is defined in Act No. 307/2006 Col. of L. on the European co-operative company.

	Czech republic	Poland	Germany	Italy	Slovenia
<b>Limited Liability Company</b>					
<b>minimum capital</b>	200 000 CZK (8000 €)	50 000 PLN (11 900 €)	25 000 €	10 000 €	25 000 €
<b>minimum partners</b>	1	not defined	not defined	not defined	not defined
<b>maximum partners</b>	50	not defined	not defined	not defined	not defined
<b>Joint-stock Company</b>					
<b>basic capital</b>	2 000 000 CZK (80 000 €)	500 000 PLN (119 000 €)	50 000 €	120 000 €	50 000 €
<b>basic capital (public offer)</b>	20 000 000 CZK (800 000 €)				

1 Table: Comparison of legal forms

### 3.1.12 Recommendation to legal-form of Meta-Cluster

According to interview with the clusters managers and according to Stuttgart workshop, where the dilemma of possible legal form of Meta-Cluster were presented, the some kind of free, easy and open legal form were recommended. The classic legal form brings the question of:

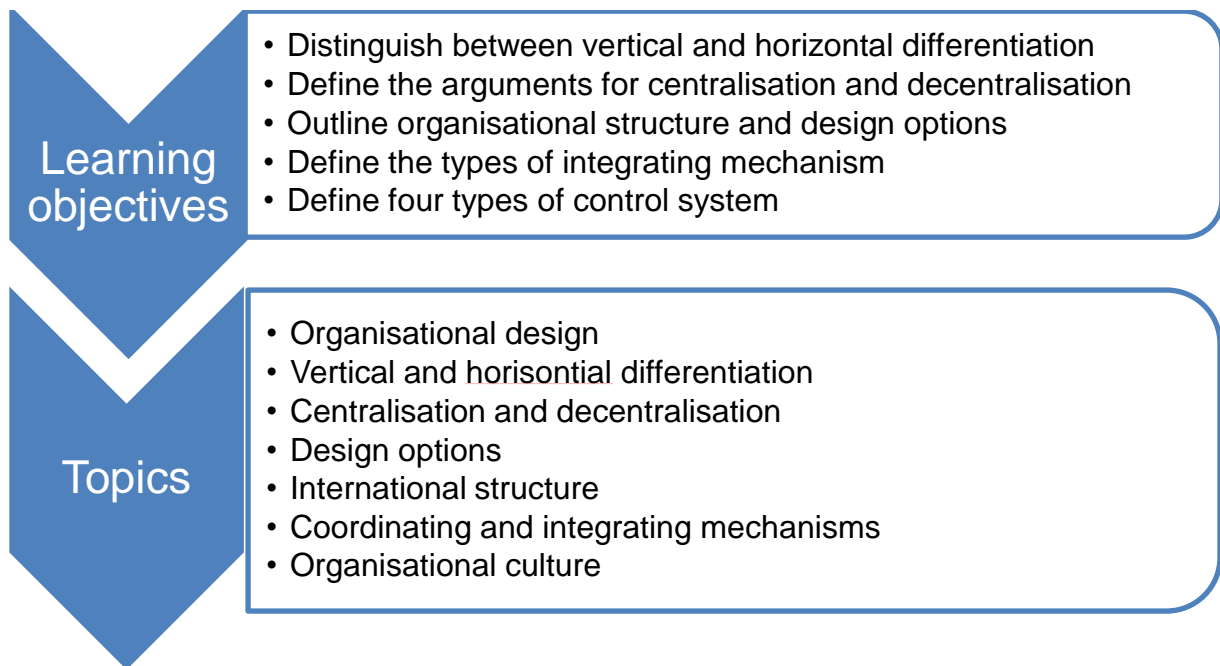
- Minimum capital needed
- Number of partners
- Voting power
- Etc.

The free and open consortium, similar to consortium regarding the 7 framework programme, seems to be the easiest, cooperative and open legal form, indeed it is not typical legal form. This is why, especially in the beginning of Meta-Cluster, the cooperative consortium is highly recommended. However the rights and rules have to be written, published and agreed. Cooperation Memorandum will be needed for well-functioning of the Meta-Cluster.

## 3.2 Organization structure (chart) of Meta-Cluster

For choosing optimal organisation structure for Meta-Cluster project is necessary to set up several objectives and main topics. You can find the most important factors of this problematic bellow.





5 Figure: Important factors for choosing optimal organization structure

There basic organisational structures are:

- functional
- divisional
- hybrid

### 3.2.1 Functional

A functional structure is one in which type of work is performed in a different department. For instance, all the company's accountants work in Accounting, Accounts Receivable or Accounts payable, whereas all the marketers work in Marketing. Each product line or geographic region then makes use of these centralized resources as if the other department were a different company. This allows the company to benefit from having very standardized processes for each of its functions, and from having economies of scale such as being able to place a single, centralized order for a commonly used widget that it can then distribute worldwide. However, it can be challenging and inefficient to shepherd a single product through all the steps and departments it needs to go through. These firms focus on specialization of job skills, and are more centralized.

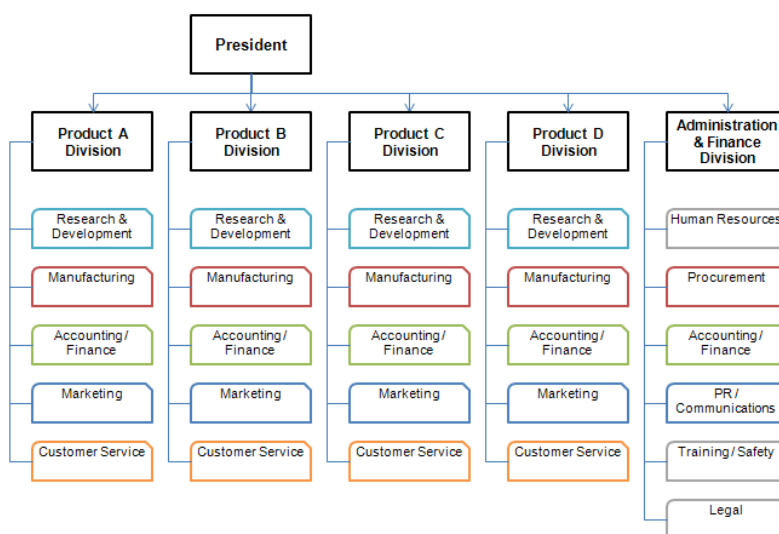


6 Figure: Functional structure

### 3.2.2 Divisional

Companies with divisional structures assign small groups of each type of function to a single division, making each self-sufficient. They may be divided by product line, such as the Shoe division, the Shirt division, and the Hat division. Or they might be divided geographically, such as the European or Asian divisions, or even further into France or Thailand divisions. Alternatively, they may be divided by customer group, such as Consumers, Small Business, and Government. In most cases, every division will have its own accounting, marketing, product development, manufacturing and executive staffs. This structure allows each specialty to become intimately familiar with the product or market the division serves, and reduces inter-departmental delays. The down side is that each division may be duplicating the efforts of several other divisions, or may be unknowingly working at cross purposes. These companies are concerned with specialization of products or markets, and are more decentralized.

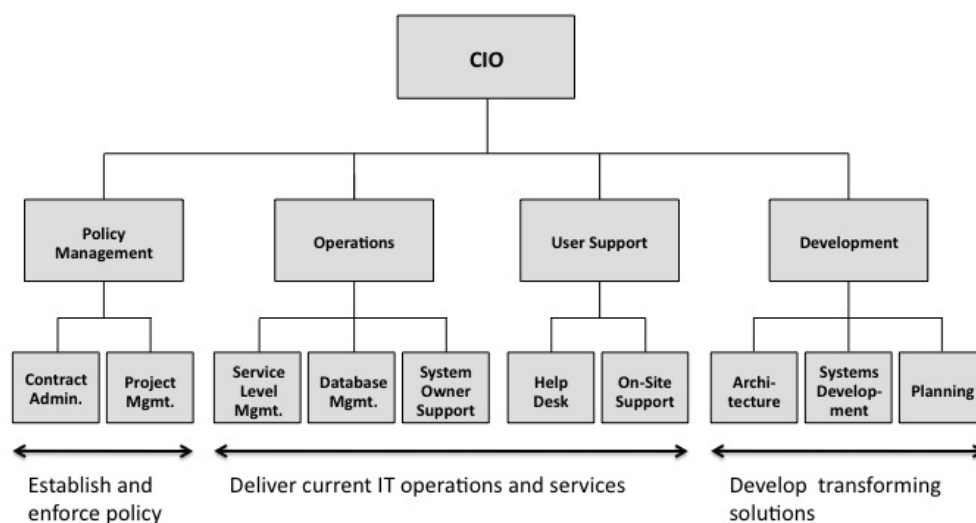
Sample Divisional Organizational Structure



7 Figure: Divisional structure

### 3.2.3 Hybrid

Due to the difficulty of working globally with a centralized functional structure, and the communication gaps that come from working in divisional silos, most modern companies employ a hybrid structure that combines elements of each. There is no single "hybrid" structure, but rather a range from mostly-functional to mostly-divisional, which varies between companies. They often have central headquarters that set strategy and high-level policy, combined with product or geographic divisions that determine their operational methods, and may even have internal functional departments within the division. These companies are attempting to balance economies of scale with local efficiency.



8 Figure: Hybrid structure

### 3.2.4 Recommendation to organization chart of Meta-Cluster

None of current potential partners sees the Meta-Cluster as an individual subject. It should be such an entity, which will be network-connected, understand that participating employees will be working on their existing positions in partners' clusters, plus their work will also concern the work for Meta-Cluster.

Establishing some completely new entity with new offices etc. is not economically reasonable and affordable. It may happen in the future, that if Meta-Cluster will realize many business projects, then the establishing of Meta-Cluster offices and entity (together with legally recommended legal form) will be up to date, but in up-to-date situation it is not probable.

### 3.3 Facilitator profile

Quality facilitators improve their performance through behaviours that can be classified and quantified. By encoding these behaviours into a profile, by integrating them into a facilitation rubric, and by regularly assessing facilitation using these tools, participants and facilitators can develop a shared vision of facilitator performance criteria for many different contexts.

Many facilitators have little or no training for this important work. Often the facilitation they have experienced during both their educational and professional careers has been mediocre. Lacking good models, it is difficult for them to become quality facilitators. Research and experience have shown that in order to improve performance, it is essential to have clear criteria against which to measure it. Without these criteria, facilitators have no way to assess their progress

#### 3.3.1 Six key areas

Six key facilitation areas were used to construct a profile for a quality facilitator. These areas are preparation, needs assessment, setup, facilitating experience, closure, follow-through.



9 Figure: Six keys areas for quality facilitator

The profile was developed by isolating a few behaviours possessed by a quality facilitator in each area (Table XX1). To determine the most important behaviours in each area, it was necessary to review the essential elements of facilitation the research on process educators

over the last ten years, and the experience of observing quality facilitators in action. The profile provides a goal for facilitators to strive to attain, and a snapshot of performance at the highest level, but the rubric described in the next section (Table XX2) should be of greater help during their gradual improvement process.

<b>Preparing</b>	<ul style="list-style-type: none"> <li>• <b>Develops resources for multiple scripts/tasks</b></li> <li>• <b>Designs strong structures through a facilitation plan, a road map</b></li> <li>• <b>Predicts the major issues that must be addressed including what “done” looks like</b></li> <li>• <b>Prepares background conceptual knowledge</b></li> <li>• <b>Defines metrics for project success, such as cost, schedule, performance, or quality</b></li> </ul>
<b>Assessing audience needs</b>	<ul style="list-style-type: none"> <li>• Affirms what each brings to the table</li> <li>• Discovers major issues people are confronting</li> <li>• Seeks out the outcomes for each person</li> <li>• Identifies collective outcomes</li> <li>• Clearly predicts and verifies everyone’s role in moving along the road map</li> </ul>
<b>Setup</b>	<ul style="list-style-type: none"> <li>• Clarifies expectations</li> <li>• Creates a framework for the process; describes the road map and major milestones</li> <li>• Establishes teams</li> <li>• Motivates individuals for the experience</li> <li>• Performs risk assessment and predefines risk management</li> </ul>
<b>Facilitating experience</b>	<ul style="list-style-type: none"> <li>• Constantly transfers ownership to participants</li> <li>• Actively assesses progress of individuals and teams</li> <li>• Constructively intervenes on process issues, not content</li> <li>• Continuously raises the bar to challenge participants</li> <li>• Monitors objective metrics and actively acts on data to ensure success</li> </ul>
<b>Closure</b>	<ul style="list-style-type: none"> <li>• Stops activity at the top of the production curve</li> <li>• Requests each team representative to summarize issues, good and bad</li> <li>• Does a perception check for consensus within each team</li> <li>• Makes sure that each issue has an owner and due date to ensure resolution</li> <li>• Insists on assessment of learning processes</li> </ul>

### Follow-up

- Makes sure team members achieve individual/collective outcomes
- Accepts constructive criticism and promises action toward improvement
- Ensures that all data is collected for participant reflection
- Reinforces negative and positive issues as equally important
- Clarifies the next step in the process

2 Table: Profile of a Quality Facilitator

### 3.3.2 Facilitation Rubric

Once the performance criteria have been encapsulated in the profile, it is important to prepare a tool to measure where a facilitator is currently positioned along the continuum leading to the goal identified by the profile. The rubric outlined provides a basis for rating a facilitation performance based on its quality. A rubric classifies different levels of performance, giving the participant behaviours commonly found at each level. The five levels of facilitator performance are ranger, manager, director, coach, and change agent. A ranger does little preparation when pursuing the goal and attempts to meet crises as they arise. A manager prepares carefully to present information needed to attain the goal to the participants, but does little to assess whether or not the information is being well utilized. A director engages others to achieve the goal by setting up a sequence of milestones and making sure the participants meet these milestones. The focus is not on individual or team growth, but bringing the project to a successful conclusion through active participation. A coach focuses on the growth of each participant as the goal is attained, while a change agent (quality facilitator) melds the individuals into effective teams, changing the system on the way to the goal, and making sure that team members become interdependent (Johnson, Johnson, & Smith, 1991) and individually accountable for team success.

**Change Agent:** promotes team growth and mentors other facilitators

Researches the audience, prepares a varied set of resources, scouts the environment, identifies issues and challenges, and prepares personally to give all of self during the event. Quickly assesses the collective and individual needs of the participants in the form of outcomes and creates the learning or growth environment that has characteristics such as risk-taking, mutual respect, challenge, and support. Agent provides constructive interventions on group process. Constantly challenges performance. Monitors the project in real time and knows its day-to-day pulse by comparing each individual's performance to established metrics. Has the ability to embed assessment in a variety of activities, both formal and informal. Always assesses his or her facilitation plan after each event to improve performance.

**Coach:** empowers participants and promotes individual growth

Designs activities that promote growth. Is adept at adapting the facilitation plan to meet individual needs. Establishes a learning situation in which participants succeed, rather than fail. Communicates clear performance criteria. Is aware of individual strengths and areas for improvement. Encourages participants with positive messages, verbal and written. Delegates issues and ensures that team members commit and deliver. Allows participants freedom to make decisions and knows the project's pulse through MBWA (management by walking around) concepts and practices (Peters & Waterman, 1982). Provides direct support to those who need assistance. Helps participants question ideas and concepts. Can assess individual performance in real time. Helps team members identify and mitigate risks. Cares for and respects the learner. Has the ability to grow the assessment skills of participants. Encourages documentation of learning at the close of each event. Interacts with participants between events.

**Director:** engenders success, organizing sequences of activities to meet an objective

Uses multiple facilitation techniques in varied situations. Works to obtain participant commitment and buy-in to the project. Makes sure people understand the goals. Keeps teams conscious of time and on task. Allocates time for new learning when there is clear and immediate payback. Has strong affective skills and is able to handle frustration. Follows continuous quality improvement principles. Guides projects to successful conclusion. Works with participants between events to produce documentation to illustrate product quality.

**Manager:** effectively manages time, following own agenda over participant needs

Has mastery of the supporting tools of the content. Has strong self-confidence. Is organized and prepared content-wise for the facilitation. Provides a clear outline. Uses models effectively. Resists wasting time using assessment processes, and relies on evaluation to provide motivation. Maintains focus during the activity. Sticks to the facilitation plan without regard for affective issues. Reviews content at the end of the activity. Holds participants accountable for the content covered. Believes the statement, "If I said it clearly and they answer correctly, then they must have understood it" (Wiggins & McTighe, 2005).

**Ranger:** avoids planning for goals of any type, reacting to problems when they occur

Always remains at the centre and in control of the learning process. Does not share the performance criteria (if any) with the participants. Allows teams to be non-productive and remain at task beyond the peak of their performance. Intervenes only to avert disaster and blames participants for poor performance. Seldom brings closure to an activity, leaving participants frustrated. Has no time for follow-up with participants between events.



To use the rubric, a facilitator looks at the paragraph attached to each level and tries to find the set of behaviours that best define his or her approach. Even though facilitators will possess some of the qualities from higher levels, they should place themselves at the level whose description best describes their strengths. With the help of a mentor, facilitators should identify the specific steps needed to achieve the next level, modifying their behaviour so that it conforms to the higher levels of the rubric as quickly as possible. Each level has behaviours pertaining to the six areas from the profile of a quality facilitator. A professional growth plan provides a step-by-step model for improvement. There are several tools developed to help faculty members identify their goals when constructing professional growth plans. One of the most helpful is the “Teaching Goals Inventory and Self-Score able Worksheet” (Angelo & Cross, 1993). It is also important to engage in regular self-assessment to ensure continued performance at each level; no backtracking. For example, many facilitators possess all the director qualities, but will allow teams to “remain at task beyond peak performance.”

The personality of Meta-Cluster manager should be open, communicative and visionary. More than be detail-oriented, the future outlook is needed. Also he/she should be known person in ICT field, know partners and business environment.

**The potential partners mention these characteristics:**

- High organizational skills
- Communicative
- Very initiative
- Linked more to management than ICT
- Motivating for others
- Managerial and business experience
- Visionary
- Inventing
- Devoted
- Open
- Language skills
- Willing to travel

### 3.4 Management team of Meta-Cluster

The Meta-Cluster will need its leader/manager, ideally the leader from some partners cluster. It may need the 1-2 other people working on position close to these areas:

- Marketing
- Office assistant
- Vendor


This prompts that the functional organizational structure would be desirable. The Meta-Cluster team can be based in the same region, or can be divided in between partners' clusters. Also the Meta-Cluster manager can be changed based on established and agreed principles. The Meta-Cluster manager should submit reports regarding his/her last and future actions. Based on plans and outputs the Meta-Cluster manager should be chosen for some period of time, ideally 2-3 years. These rules need to be written and agreed in Cooperation Memorandum or similar document.

Above the Meta-Cluster team the steering committee is desired. In terms of steering committee the 4-5 years strategy of Meta-Cluster (max. 5 pages) is needed.

## 4 List of establishing members of Meta-Cluster

*This chapter introduces the establishing members (partners) of Meta-Cluster project. You can find here the basic information about partner like his name, address, contact person or web page. Below that there are mentioned main activities of member and his offer and demand to Meta-Cluster project and its partners. There is also given record of the first Skype call with the partners.*

### 4.1 Network Security Monitoring Cluster

Location:	Brno, South Moravia Region, Czech Republic	
Web:	<a href="http://www.nsmcluster.com/en">www.nsmcluster.com/en</a>	
Contact person:	Jitka Studeníková	
Address:	Jundrovská 618/31, 624 00 Brno	
Phone:	+420 733 713 702	
E-mail:	<a href="mailto:jitka.studenikova@nsmcluster.com">jitka.studenikova@nsmcluster.com</a>	

#### Activities:

- Projects in terms of technical innovative infrastructure
- Scientific and research projects
- Designing and complex solutions integration in network security monitoring field
- Cluster promotion
- Networking, know-how sharing
- Education and training about network security monitoring
- Actual network security trends and information sharing
- Creating and comment draft bills concerning the dilemma of network security monitoring and security in ICT
- Representation towards other associations and international organizations related to the network security monitoring and security in ICT topic

#### Cluster mission and composition

The strategic aim of the cluster is: Providing of system solution of security and resilience of IT systems against future threats Network Security Monitoring Cluster (NSM Cluster) is co-operative industrial cluster focusing on the network security and security in ICT.

Offer	Demand
IT Security Net flow Data Analysis Business intelligence competence centre Students for start up programmes Microsoft oriented business MIC network Know-how in network security monitoring	Internship for SMEs and students and academic people Networking business meetings Finding partners for international R&D projects Share expertise, on-line training

### Basic information about cluster by leader

<b>Number of members</b>	16
<b>Date of establishment</b>	2010
<b>Legal form</b>	Co-operative
<b>Activities</b>	<ul style="list-style-type: none"> <li>• projects in terms of technical innovative infrastructure;</li> <li>• scientific and research projects;</li> <li>• designing and complex solutions integration in network security monitoring field;</li> <li>• cluster promotion;</li> <li>• networking, know-how sharing;</li> <li>• education and training about network security monitoring;</li> <li>• actual network security trends and information sharing;</li> <li>• creating and comment draft bills concerning the dilemma of network security monitoring and security in ICT;</li> <li>• the representation towards other associations and international organizations related to the network security monitoring and security in ICT topic (e.g. ENISA, IT Security in Germany).</li> </ul>
<b>The greatest success</b>	7 <sup>th</sup> Frame Programme
<b>Financial stability (current situation)</b>	The financial situation is stable, member's fee is 15 000 CZK (600 €) <sup>6</sup> per year
<b>Offer</b>	<ul style="list-style-type: none"> <li>• network traffic Audit – get to know what is happening in your network;</li> </ul>

<sup>6</sup> Exchange rate: 1€ = 25 CZK

	<ul style="list-style-type: none"> <li>• fibre network audit;</li> <li>• consulting in network security monitoring field: <ul style="list-style-type: none"> <li>○ secured network concept</li> <li>○ network security fundamentals</li> <li>○ network security (monitoring) trends</li> <li>○ laws, bills and rules in network security sphere</li> <li>○ network security papers</li> <li>○ join us in our research about network securing in Czech companies, fill in our questionnaire</li> <li>○ network Security Spring School on-line (in progress)</li> <li>○ web-seminar: Do you think that you know what is happening in your network? (in progress).</li> </ul> </li> </ul>
<b>Demand</b>	Business, Projects, Networking activities
<b>Marketing of the cluster</b>	www pages, LinkedIn, GoogleDoc
<b>Website</b>	www.ncmsluster.com
<b>Newsletter</b>	yes

### About the Meta-Cluster project

What do you think about the project?

*“The project would be successful if the partners will be able to communicate and participate in common projects. The IT field has a great potential and organisation which will join IT companies together will be needed.”*

## 4.2 Virtual Dimension Center

Location:	Stuttgart-Fellbach, Germany
Web:	www.vdc-fellbach.de
Contact person:	Christoph Runde
Address:	Auberlenstraße 13, 70736 Fellbach
Phone:	+49 711 585 309
E-mail:	christoph.runde@vdc-fellbach.de

VIRTUAL DIMENSION CENTER



### Activities:

- Information processing: current information on methodology and technology, exchange of information between members, identification of funds, technology assessment
- Marketing & dissemination: Technology marketing, working at the management board, biggest update area for Virtual Reality in Germany, dissemination of project results, product and enterprise news
- Match making: competence map, internationalization
- Technology transfer: SME support, information events, Demo-Center
- Funding management: application, consortia, project management

### Cluster mission and composition

The strategic aim of the cluster is: Digital product development and digital production planning. Core topics: virtual engineering, virtual reality, 3d visualization, animation & content creation.

Offer	Demand
Information processing Marketing & dissemination Match making Technology transfer Funding management Cooperation in applying for public funded projects, tenders, proposals, consortia creation Market access, regional business contacts	Topic-related information exchange Experience exchange in cluster management in SimVis area Exchange of foreign market information (country benchmark), competition, research, networks

## Basic information about cluster by leader

<b>Number of members</b>	100
<b>Date of establishment</b>	2002
<b>Legal form</b>	w.V. (wirtschaftlicher Verein / economic association)
<b>Activities</b>	Virtual Engineering
<b>The greatest success</b>	winner of the Regional Cluster Competition 2010 Baden Wuerttemberg, the award "Cluster Management Excellence" through the European Cluster Excellence Initiative (ECEI) 2011
<b>Financial stability (current situation)</b>	Stable: long-term financed, numerous sources
<b>Offer</b>	<ul style="list-style-type: none"> <li>• Information gathering virtual engineering</li> <li>• match making</li> <li>• technology transfer</li> <li>• marketing and communication</li> <li>• funding management</li> </ul>
<b>Demand</b>	new members, new industrial users
<b>Marketing of the cluster</b>	<ul style="list-style-type: none"> <li>• print flyers</li> <li>• printed annual reports</li> <li>• e-mail newsletter</li> <li>• website</li> <li>• social media (twitter, linked-in, xing, Facebook, slideshare, issue, Google+)</li> <li>• expert articles</li> <li>• public presentations</li> </ul>
<b>Website</b>	<a href="http://www.vdc-fellbach.de/">http://www.vdc-fellbach.de/</a>
<b>Newsletter</b>	yes: <a href="http://www.vdc-fellbach.de/newsletter">http://www.vdc-fellbach.de/newsletter</a>



## About the Meta-Cluster project

What do you think about the project?

*“Not well known to us yes; should have clear distinction and cooperation with cluster-collaboration.eu, cluster-excellence.eu, the Stockholm School of Economics’ cluster activities.”*

### 4.3 Hradecký IT klastr

Location:	Hradec Králové, Královéhradecký Region, Czech Republic	
Web:	www.hitklastr.cz	
Contact person:	Martin Dittrich	
Address:	<b>nám. Svobody 331</b> <b>500 02 Hradec Králové</b>	
Phone:	+420 495 077 111	
E-mail:	martin.dittrich@tchk.cz	

#### Activities:

- Human Resource Development
- Capacity Sharing
- Marketing
- Development and Innovation

#### Cluster mission and composition

The Hradecký IT cluster participates in the project financed by EU, whose aim is to increase education and competitiveness of the region and help students with career start. Within the framework of these projects, HIT cooperates with universities, organizes workshops, marketing events etc. HIT also creates common PR for his members.

Offer	Demand
Marketing for companies Organization of workshops, trainings etc. Examination of technologies	Cooperation with universities Sharing capacity for new members Project

## Basic information about cluster by leader

<b>Number of members</b>	18
<b>Date of establishment</b>	2007/2008
<b>Legal form</b>	
<b>Activities</b>	RaD- cooperation with Czechinvest's projects; Training – seminars – meetings of cluster's employees, meetings of cluster's members twice a year
<b>The greatest success</b>	Participation on educational plans
<b>Financial stability (current situation)</b>	The financial situation is stable, member's fee is 20 000 CZK (800 €) <sup>7</sup> per year
<b>Offer</b>	Access to companies from FIM region – they are helping to create future structure
<b>Demand</b>	Partners for cooperation in RaD, Council for cooperation with universities (practice for students, etc.)
<b>Marketing of the cluster</b>	www pages
<b>Website</b>	<a href="http://www.hitklastr.cz/">http://www.hitklastr.cz/</a>

## About the Meta-Cluster project


What do you think about the project?

*“Formal cooperation (memorandum), the meaning of this project is in future business between the partners.”*

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<sup>7</sup> Exchange rate: 1€ = 25 CZK

#### 4.4 ICT Technology Network Institute

Location:	Ljubljana Slovenia	
Web:	<a href="http://www.ict-slovenia.net">www.ict-slovenia.net</a>	
Contact person:	Tomaž Vidonja	
Address:	Tehnološki park 24 – Building E, 1000 Ljubljana	
Phone:	+38 640 272 118	
E-mail:	tomaz.vidonja@inoverzum.eu	

##### Activities:

- International project management
- Web site with information
- Promotion of cluster members on the cluster website
- Annual meetings with heads of member companies
- IPR management and technology transfer
- Innovation consulting
- Networking of academia and industry
- Workshop and joint project implementation
- Representing members at national and international fairs and events
- Social networking on FB and LinkedIn
- International events and workshop organization
- Support to members entering the international market

##### Cluster mission and composition

The strategic aim of the cluster is: To connect its partners with government and international players in order to enable them to be competitive on the global market.

Offer	Demand
Electronic communication Networks, services, applications Security, controlling, testing Demo centres, centres of knowledge, research and engineering Competence centre in internet of things Projects in smart cities smart factories, smart buildings Membership in EU network of living labs	Involvement in FP7 horizon 2020 projects Funding for cluster development List of all ICT clusters in EU and world wide

## Basic information about cluster by leader

<b>Number of members</b>	45
<b>Date of establishment</b>	2010 formally (2003 consortium)
<b>Legal form</b>	Non-profit private institute
<b>Activities</b>	Virtual Engineering
<b>The greatest success</b>	<p>CT Technology Network has developed its activities in the wide field of the ICT sector. In line with the needs of its members it is focused on the following key segments:</p> <ul style="list-style-type: none"> <li>• telecommunication,</li> <li>• broadband access and other communication equipment,</li> <li>• communication services providers,</li> <li>• the Internet of Things and the Future Internet,</li> <li>• integrated steering and control systems,</li> <li>• information solutions for business users, and</li> <li>• cloud computing.</li> </ul>
<b>Financial stability (current situation)</b>	<p>Financially stable</p> <p>Members pay yearly fee according to their size, approx 500e-thousands of euros</p> <p>Cluster have their own projects - funds</p>
<b>Offer</b>	The vision of ICT Technology Network is to become the promoter of co-operation for its members in the field of information and communication technologies in Slovenia and internationally.
<b>Demand</b>	<p>Internally demanding good CRM system to increase internal organization capabilities – better possibility to manage partners</p> <p>Demand for:</p> <ul style="list-style-type: none"> <li>• go more internationally – new markets, not only Europe</li> <li>• work mostly with clusters that use ICT, not are ICT oriented (business oriented approach)</li> <li>• focused on project of future internet – open internet platform – searching for foreign partners and universities etc.</li> </ul>
<b>Marketing of the cluster</b>	<p>Using:</p> <ul style="list-style-type: none"> <li>• Linked in</li> <li>• Facebook</li> <li>• Having regular conference once a year – Internet of things</li> </ul>
<b>Website</b>	<a href="http://www.ict-slovenia.net/eng/index.php">http://www.ict-slovenia.net/eng/index.php</a>

## About the Meta-Cluster project

What do you think about the project?

*“Good idea*

*Positives:*

*Can create potential cooperation*

*Can get more easily new partners*

*Negatives*

*Need to be focused – not only regionally*

*Have certain goal, certain strategy – can be problem of cooperation because of finding the common topic, common projects*

*It can be chance to establish new market segment.”*

## 4.5 Knowledge and Innovation Community for Information and communication Technologies

Location:	Wroclaw, Lower Silesia Region, Poland
Web:	<a href="http://www.iiair.pwr.wroc.pl">www.iiair.pwr.wroc.pl</a>
Contact person:	Czesław Smutnicki
Address:	Wybrzeże Wyspiańskiego 27, 50-370, Wrocław
Phone:	+48 713 203 281
E-mail:	czeslaw.smutnicki@pwr.wroc.pl

Cluster has 64 members and was established in 2007.

### Activities:

- Series of conferences and workshops for Cluster partners with open subjects
- Patronage on advanced technology conferences, e.g. Intelligent Buildings, ...
- Cluster as catalyst of projects created by cluster partners
- Cooperation and experience exchange with other clusters
- Continuous stream of data about announced competitions and financing sources, partner
- Search, info about professional training, required expertise area

### Cluster mission and composition

The strategic aim of the cluster is: to establish a common cooperation platform for innovative Polish and European IT & ICT Companies, institutions using IT as well as local governmental bodies and Colleges & Universities and specialized higher education institutions. Cooperation of Cluster Partners concentrates mainly on improving competitiveness of IT companies and European economy, as well as development and synergy within the “knowledge triangle” – i.e. scientific research, implementations for innovative industry and education.

Offer	Demand
Organization of the EIT Knowledge and Innovation Community for ICT Cooperation between science and industry Development and implementation of innovative IT and ICT technology Education for specialists in the area of modern information technology Integration of the educational, industrial and governmental bodies Acceleration of the social and economical development of Europe RaD resources Advanced new solution Experts	Providing contacts and documents flow Finding supporting funds Finding partners for common projects with ICT competence

### Basic information about cluster by leader

<b>Number of members</b>	70+
<b>Date of establishment</b>	2007
<b>Legal form</b>	Non-profit
<b>Activities</b>	ICT
<b>The greatest success</b>	Cooperation with large companies + technology park and incubator
<b>Financial stability (current situation)</b>	TBE
<b>Offer</b>	Low support, students' start-ups, spin-offs
<b>Demand</b>	Found for internships
<b>Marketing of the cluster</b>	www pages

<b>Website</b>	<a href="http://www.ict-cluster.wroc.pl/">http://www.ict-cluster.wroc.pl/</a>
<b>Newsletter</b>	

### About the Meta-Cluster project

What do you think about the project?

*"I hope such a structure should be able to apply for funds (on EU-level) for students, Ph.Ds. internships. "*

### 4.6 Softwarezentrum Böblingen/Sindelfingen

Location: Land Baden-Württemberg, Germany  
 Web: [www.softwarezentrum.de](http://www.softwarezentrum.de)  
 Contact person: Hans-Ulrich Schmid  
 Address: Otto-Lilienthal-Straße 36,  
 71034 Böblingen  
 Phone: +49 7031 714 701  
 E-mail: [schmid@softwarezentrum.de](mailto:schmid@softwarezentrum.de)



Cluster has 90 members and was established in 1996.

#### Activities:

- publicity work and marketing
- cooperation
- professional technical infrastructure support

#### Cluster mission and composition

The Software Centre Böblingen/Sindelfingen offers newly established and existing medium-sized IT companies favourable rental conditions, the necessary infrastructure, fast networking and support in a range of decisions as to the future course of their business. The aim is to achieve economic efficiency, flexibility and accessibility for IT companies.



Offer	Demand
software solutions for the manufacturing industry financial services for companies, business and commerce solutions for mobile applications	Topic-related information exchange Experience exchange in cluster management in SimVis area Exchange of foreign market information (country benchmark), competitor, research, networks

#### 4.7 Olomouc Cluster of Innovations (OCI)

Location:	Olomouc, Olomoucký region, Czech republic	
Web:	<a href="http://www.o-k-i.eu">www.o-k-i.eu</a>	
Contact person:	Petr Zeman	
Address:	Jeremenkova 1142/42, 772 00 Olomouc	
Phone:	+420 587 333 666	
E-mail:	petr.zeman@tescosw.cz	

##### Activities:

- Communication
- Cooperation
- Information
- Competitiveness
- Innovation
- Advice
- Education
- Benchmarking

##### Cluster mission and composition

The mission of the cluster is to link business approaches of its members with the rules of the cluster initiative, and to support, through active co-operation of the members of the cluster, the growth of the members, of the region and of the EU. In other words, the mission of the cluster is to establish a body, based on co-operating SMEs, which will be more competitive and will enable its members their further development.

Offer	Demand
Services related to asset management, maintenance and facility management GIS applications Concept of an intelligent building Digital operation	Internship for SMEs and students and academic people Networking business meetings Finding partners for international R&D projects Share expertise, on-line training

### Basic information about cluster by leader

<b>Number of members</b>	3
<b>Date of establishment</b>	2005/2006
<b>Legal form</b>	Co-operative
<b>Activities</b>	Services for members, project's services, grants, administrative, management
<b>The greatest success</b>	Participation on project Czech EKO system
<b>Financial stability (current situation)</b>	stable
<b>Offer</b>	Contacts in 7th Frame programme, organisation of common projects, own projects (Czech - Swiss fund of partnership – Platinn, coaching for SME in Olomoucky region, transfer of know-how, cooperation with University of Economics, Prague on CzechInvest project.
<b>Demand</b>	Same as offer
<b>Marketing of the cluster</b>	Web pages
<b>Website</b>	<a href="http://www.o-k-i.cz/">http://www.o-k-i.cz/</a>
<b>Newsletter</b>	No, news via LinkedIn

### About the Meta-Cluster project

What do you think about the project?

*“Project should be used for networking within EU but the experience and networking with foreign partners is missing.”*

## 5 Common services and standards defined by Meta-Cluster

*The standards for common services which Meta-Cluster will do its necessary for settle the actual services. The list of common services contains creating web pages, create LinkedIn group – including regular updating, publishing press releases, building marketing and media partnerships, joining ICT conferences and fair trades, organizing regular Skype calls between the partners to improve their relationships, organize meetings of partners, common projects (R&D, business) and doing the information service for partners. At the end of this chapter there are records from the second Skype call with partners.*

The common quality and services were defined based on Skype calls with clusters' managers.

Common services and standards are implied from possible Meta-Cluster activities, such as:

- Projects
- R&D
- Marketing Activities
- Information service
- Business

Important are the areas, where should the services and standards be applied. Based on interview with potential partners of eta-cluster, few (not only ICT) fields had been identified:

- Security
- eHealth
- Internet of Things
- Competence centre
- Smart cities, factories, buildings

Other areas can be added based on demand or offer of the partners, the changes in Meta-Cluster strategy of mission etc.

### 5.1 Common Quality and Services Standards defined for Meta-Cluster

Meta-Cluster should become according to its vision and mission, the centre-of-excellence of ICT. It should be known and well recognized. The quality, which it should bring is seen in two different activities:

- Research and Development Projects
- Business activities

R&D projects will bring the quality service, upon which the business activities can be realized, later on. These two activities are core for smooth long-term and sustainable functioning of entity such as Meta-Cluster.

### **Projects RD**

Meta-Cluster should use the common quality which is based on qualities of the partners in common projects. The offers of projects should find facilitator of Meta-Cluster project. Each common project should have a person who will be responsible for the whole scope of the projects' activities. Also it can be the responsible subject will be partner who will have the "presidency" for certain time. Other possibility is that the projects can be also divided into several areas and each partner could have one particular area which he will create and for which will be in charge.

The decision about who and how will be responsible in project is up to partners agreement which should be signed on first Meta-Cluster meeting.

### **Business**

Business leads to financial independence which is crucial in Meta-Cluster development. There are two main steps which lead to financial independence: Mutual tenders and other tenders. Mutual tender is a business between the partners in Meta-Cluster. Tender is business in classical way – with other entities. The probability of making big business by Meta-Cluster is low because it is very hard to achieve business with new entity on the market. But if this would happen, Meta-Cluster will be financial independent, will become recognized entity and will be able to exist for tens of years.

## **5.2 Common Marketing Services Standards Defined for Meta-Cluster**

Meta-Cluster facilitator will have to start the marketing activities by creating the Marketing strategy. The strategy must contain:

- Logo
- Web Pages
- Linked In
- Press Releases
- Marketing and Media partnerships
- ICT conferences and fair trades

Marketing should be in charge of every region because the partner knows the ambience, the regional agencies and the important institutions so the communication between partner and public will be easier.

For updating the information from the partners, the cooperation between the Meta-Cluster manager and partners is essential. There should be rules and pro-active attitude in this case. The marketing activities should be compulsory for each partner of Meta-Cluster.

## **5.3 List of Common Services**

### **5.3.1 Web pages**

- Web pages – the web pages are communication channel between Meta-Cluster and public. There has to be described the reason for establishing Meta-Cluster, its mission and vision, the main goal of Meta-Cluster, presentations of partners and other information. Web pages have to be constantly updated. Also there must be chosen an administrator of the web pages who will take care of it and who will guarantee the web pages functionality.
- Web pages are expected in English version

### **5.3.2 Linked In**

- LinkedIn – there is *ICT Meta-Cluster working group* on LinkedIn which collect partners and other people who are concerned in Meta-Cluster project. Via LinkedIn partners are informed about news in Meta-Cluster, projects and also will be able to see connection of partners which can use for future cooperation or business. LinkedIn is also highly recommended by clusters' managers.

### **5.3.3 Press releases**

- The Meta-Cluster facilitator on marketing manager has to regularly publish press releases as a useful tool for communication with the public and partners. The Meta-Cluster has to create a database of Medias who will be willing to publish the press release.

### **5.3.4 Marketing and media partnerships**

- The Meta-Cluster has to make partnerships with other organizations and Medias. One way how to do it is help with promotion of some event – to put the ad for the event on

Meta-Cluster web pages and at the same time put the logo of Meta-Cluster on the web page of the event as a Medial partner.

### **5.3.5 ICT conferences and fair trades**

- Meta-Cluster should participate on IT conferences and also on fairs. The facilitator should choose which events are significant to participate and which are not.

### **5.3.6 Skype calls**

- Regulars Skype calls are desirable to deepen the relationship between the partners and to build the mutual trust. It keeps people informed and up to date. This is very important for effective development of Meta-Cluster's life. The communication on any level is crucial and essential.

### **5.3.7 Meetings**

- One meeting per year is necessary. Not only for building the Meta-Cluster but also for connection with public. Meetings or workshops can be used to present the Meta-Cluster's mission, activities, offer etc.

### **5.3.8 Information services**

- Meta-Cluster should provide the information services in these topics:
  - About itself
  - About the ICT field in genera
  - Trends in ICT
  - ICT industry in regions, where are partners settled
  - Offer and demand
- This kind of information has to be updated regularly. It has to be presented clearly in English version.

### **5.3.9 Research and development projects**

- Research and Development projects are possible start of Meta-Cluster effective functioning. It can bring not only the results from the project, but new connection, new projects and business potential outputs.
- Concrete possibilities of Research and Development projects can be found in chapter 7.4.

### 5.3.10 Business projects

- Business projects are the most important. For realizing the effective business projects needs offer meet the demand. Business projects bring important value to Meta-Cluster and financial stability.

## 5.4 Interviews with Clusters' managers

### 5.4.1 Network Security Monitoring Cluster

#### About the Meta-Cluster project

<b>Opinion of the legal form</b>	Some kind of free legal form would be appropriate. Unfortunately, we do not know about any such type of legal form. However the just consortium as in 7FP is OK.
<b>Recommendations on the organizational structure</b>	Easy and linear. One manager. Important is the effective communication with other partners.
<b>What should be the facilitator like? (his/her characteristics, or. who should it be?)</b>	Communicative, visionary, well-oriented in business.

#### Which activities should Meta-Cluster perform

#### From a marketing perspective

<b>Common web</b>	Yes (updated regularly!)
<b>Linked in</b>	yes
<b>Facebook</b>	no
<b>Newsletter</b>	maybe
<b>Meetings (once in a year, twice in a year)</b>	Once a year, twice using some other form of meeting – meeting at already established conference. Make it turn, every year at different partner.



<b>Meta-Cluster's own conference (once in a year) with fellow entities of the cluster</b>	If there will be similar topic for cluster partners and other subject, so the conference will bring new contacts etc. Not in the beginning for sure.
<b>Meet at the other conference (not cluster's)</b>	Can be.

### Meta-Cluster's activities

<b>Information how to enter the local market</b>	Yes – or just contact to some kind of entity who can help (chamber of commerce – with help to get in touch with the entity)
<b>Consulting services</b>	yes
<b>Exchange of students, workers</b>	Yes – establish the university-praxis exchange programme. Good university knowledge and personal contact is needed. Will probably take lot of time to start this work.
<b>Information service about the market (news, trends, legal)</b>	Yes, definitely
<b>Ensure a business side of things - arrange tenders</b>	Yes, depends who and how will inform about the tenders
<b>Networking</b>	Yes, definitely

### Cluster's own contribution

<b>How much resources are able to devote per year</b>	Depends on actual situation of the cluster.
<b>Which activities are willing to support - in terms of time, organizational</b>	Yes, the contribution of time and people is possible.

### 5.4.2 Virtual Dimension Center

#### About the Meta-Cluster project

<b>Recommendations of the legal form</b>	They are in association and have the legal form under the Brussels law, so it is possible, it is also lot of work, but is it needed?
<b>Recommendations on the organizational structure</b>	Simple Minimum of 2-3 people is needed: <ul style="list-style-type: none"> <li>• Manager</li> <li>• Assistant</li> <li>• Marketing manager</li> </ul>
<b>What should be the facilitator like? (his/her characteristics, or. who should it be?)</b>	Communicative person, with high organization skills, very initiative (not only wait what will come Be able to match make the needs and wants Person, who is more linked to the management than IT

## Which activities should Meta-Cluster perform

### From a marketing perspective

<b>Common web</b>	Web page of Meta-Cluster is needed, for marketing, representation, public awareness
<b>Linked in</b>	Yes, use already existing networks where are people signed in, use. Clusterscollaboration.org – made for mate-clusters activities
<b>Facebook</b>	No
<b>Newsletter</b>	Yes
<b>Meetings (once in a year, twice in a year)</b>	
<b>Meta-Cluster's own conference (once in a year) with fellow entities of the cluster</b>	
<b>Meet at the other conference (not cluster's)</b>	Already having experience with this approach, meeting once, twice per year using different conferences – meeting for example one day in advance to get to know each other and see what people are able to do

### Meta-Cluster's activities

<b><i>Information how to enter the local market</i></b>	Yes, helping internationalization Can assist
<b><i>Consulting services</i></b>	Yes, in means of experience exchanges
<b><i>Exchange of students, workers</i></b>	Yes, searching for people
<b><i>Information service about the market (news, trends, legal)</i></b>	They would like establish: Qualification programme for managers – choose one topic, e.g. How we can support the clusters, how to proceed technology transfer, how to promote member acquisition etc.

<b><i>Ensure a business side of things - arrange tenders</i></b>	<ul style="list-style-type: none"> <li>• Go to exhibitions</li> <li>• Find partner who would bring the companies to other markets (e.g. USA)</li> <li>• Common R and D project in European area (European Commission)</li> </ul>
<b><i>Networking</i></b>	Yes, matchmaking

#### Cluster's own contribution

<b><i>How much resources are able to devote per year</i></b>	No direct financial support
<b><i>Which activities are willing to support - in terms of time, organizational</i></b>	Can give contribution of time - 2 weeks per year Open for event organization support Possible web making support (in principal yes)

#### 5.4.3 Hradecký IT klastr

##### About the Meta-Cluster project

<b>Opinion of the legal form</b>	<i>Form without legal subjectivity – association</i>
<b>Recommendations on the organizational structure</b>	<i>Copying of cluster's structure – as representative person should be administrative worker or manager</i>
<b>What should be the facilitator like? (his/her characteristics, or. who should it be?)</b>	<i>Facilitator should be manager inside of the entity, should have language and communication skills, should be willing to travel</i>

## Which activities should Meta-Cluster perform

### From a marketing perspective

<b>Common web</b>	Yes, easy and simple menu for each cluster + contact information
<b>Linked in</b>	Yes (more or less)
<b>Facebook</b>	Definitely not
<b>Newsletter</b>	Could be – should contain usefull information
<b>Meetings (once in a year, twice in a year)</b>	Yes, once or twice a year Networking once a yare
<b>Meta-Cluster's own conference (once in a year) with fellow entities of the cluster</b>	Do not have opinion
<b>Meet at the other conference (not cluster's)</b>	Do not have opinion

### Meta-Cluster's activities

<b><i>Information how to enter the local market</i></b>	<i>Yes, but it is sensitive topic – companies maybe will not be willing to release these kind of information</i>
<b><i>Consulting services</i></b>	Yes
<b><i>Exchange of students, workers</i></b>	<i>Do not have opinion</i>
<b><i>Information service about the market (news, trends, legal)</i></b>	<i>Do not have opinion</i>

<b>Ensure a business side of things - arrange tenders</b>	<i>Interesting – members could use tenders together but act like one company - cluster</i>
<b>Networking</b>	<i>Do not have opinion</i>

#### Cluster's own contribution

<b>How much resources are able to devote per year</b>	It is not easy to answer these question it depends on costs and lifetime of cluster (it is up to manager of cluster to think it through)
<b>Which activities are willing to support - in terms of time, organizational</b>	Companies are not occupied with this, but usually support that kind of activities which the certain company is concerned with.

#### 5.4.4 ICT Technology Network Institute

##### About the Meta-Cluster project

<b>Opinion of the legal form</b>	Do not establish any formal form – it will kill it –to establish the entity will need at least 6 months to proceed it Use open form like consortiums of project partners in 7FRP
<b>Recommendations on the organizational structure</b>	Formal structure would be appropriate. To have Steering committee, communication with partners and members, using Skype or other communication platforms. For effective work the Steering committee has to have 4-5years strategy (max. length of 5 pages).
<b>What should be the facilitator like? (his/her characteristics, or. who should it be?)</b>	To be more entrepreneurial than manager – be visionary inventing <ol style="list-style-type: none"> <li>1. To believe in idea of Meta-Cluster personally</li> <li>2. To be devoted to this idea and motivated</li> </ol> Open and communicative. Does not matter the education (ICT of economical), just do

	not be detailed.
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## Which activities should Meta-Cluster perform

### From a marketing perspective

<b>Common web</b>	yes
<b>Linked in</b>	yes
<b>Facebook</b>	Not really, depends on goal of Meta-Cluster – facebook is good to attract the students and young people
<b>Newsletter</b>	yes
<b>Meetings (once in a year, twice in a year)</b>	Yes, once a year + operational meetings remotely (skype)
<b>Meta-Cluster's own conference (once in a year) with fellow entities of the cluster</b>	Meta-Cluster should inform about different meetings and where who will be (the possibility to meet)  Own conference, 3 folds: <ol style="list-style-type: none"> <li>1. Meeting of Meta-Cluster</li> <li>2. Networking <ul style="list-style-type: none"> <li>- Informal dinner</li> <li>- Other activity (e.g. trip), where people can get to know each other better</li> </ul> </li> <li>3. Focused on some topic <ul style="list-style-type: none"> <li>- Topic can change every year according to up to date topic</li> </ul> </li> </ol>
<b>Meet at the other conference (not cluster's)</b>	Can be possibility



### Meta-Cluster's activities

<b>Information how to enter the local market</b>	Upon the mutual tenders (described below): <ul style="list-style-type: none"> <li>• Find partners,</li> <li>• Make business plan,</li> <li>• Find investors</li> </ul> and multiply this possibility to implement this solution to solve similar problem in different regions
<b>Consulting services</b>	
<b>Exchange of students, workers</b>	Yes, connecting people
<b>Information service about the market (news, trends, legal)</b>	Do not have opinion
<b>Ensure a business side of things - arrange tenders</b>	Can imagine the cooperation in terms of international trans-European tenders or pre-commercial pilot tenders – not directly focused on Research and Development but on implementing (engineering).
<b>Networking</b>	Yes, very important is <ul style="list-style-type: none"> <li>• Trust</li> <li>• Personal relations</li> </ul>

### Cluster's own contribution

<b>How much resources are able to devote per year</b>	Prepared devoted time and activities Participation depends on activities, goals
<b>Which activities are willing to support - in terms of time, organizational</b>	In terms of web pages, newsletters – important is the content, meetings Can devote time and people

#### 5.4.5 Olomouc Cluster of Innovations (OCI)

##### About the Meta-Cluster project

<b>Opinion of the legal form</b>	<i>Do not have opinion</i>
<b>Recommendations on the organizational structure</b>	<i>Board manager, executive officer</i>
<b>What should be the facilitator like? (his/her characteristics, or. who should it be?)</b>	<i>The amount of executive officers depends on demand of services (1 manager + 2 operation managers). Facilitator should motivate partners to be active and should come up with effective form of communication (e.g. Skype call etc.). Facilitator should have managerial and business experiences, should be able to recognise potential for new business and should be an expert in IT.</i>

##### Which activities should Meta-Cluster perform

##### From a marketing perspective

<b>Common web</b>	Yes
<b>Linked in</b>	No
<b>Facebook</b>	No
<b>Newsletter</b>	Newsletter is usually erased before the user had read it. Better is to use targeted communication.
<b>Meetings (once in a year, twice in a year)</b>	Once a year coordination meeting – focus on community programs (just for clusters – they are able to find points of cooperation.
<b>Meta-Cluster's own conference (once in a year) with fellow entities of the cluster</b>	Yes

<b>Meet at the other conference (not cluster's)</b>	KOI is able to help with organization. They prefer meeting once a year and appreciate if the regional agency would also participate.
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### Meta-Cluster's activities

<b>Information how to enter the local market</b>	<i>It is not very useful for OKI – They are focused on public administration and e-government.</i>
<b>Consulting services</b>	<i>Do not have opinion</i>
<b>Exchange of students, workers</b>	<i>Do not have opinion</i>
<b>Information service about the market (news, trends, legal)</b>	<i>Do not have opinion</i>
<b>Ensure a business side of things - arrange tenders</b>	<i>Facilitator should guarantee business for partners – e.g. arrange tenders etc. But to monitor all tenders' opportunities is very time-consuming. Everything depends on experiences and abilities of partner.</i>
<b>Networking</b>	<i>Common projects</i>

### Cluster's own contribution

<b>How much resources are able to devote per year</b>	<p>They are not able to estimate. Couple thousands of Euros.</p>
<b>Which activities are willing to support - in terms of time, organizational</b>	<p>Web pages, to help with organization of conference.</p>

## 6 Meta-Cluster Financial Plan

*The financial plan is a key in successful and viable Meta-Cluster project. During the first establishing meeting of Meta-Cluster partners have to decide how the project will be financed. The possibilities are a lot – for example member fees, loan, projects, financial gifts or income from own business activity. You can also find here the Capital structure of Meta-Cluster and Meta-Cluster budget.*

According to the activities of Meta-Cluster it is necessary to have appropriate financial plan. The financial stability is milestone of effective functioning of the Meta-Cluster and is key ingredient of its development.

Unfortunately, the Meta-Cluster is not classic economic unit, as companies are. It may be by time but not for sure in its beginning. That takes along difficulties how to manage strong financial background for the beginning of the Meta-Cluster functioning. This beginning is important for many potential members.

### 6.1 Possible financial resources

For clusters functioning it is always the question of financial resources. The income of clusters is usually:

- *Membership fees*
- *Loan*
- *Projects (different funding – EU, national funds)*
- *Financial gifts (usually from members)*
- *Income from own business activity*

#### 6.1.1 Membership fee

These 4 types of most used financial sources are not appropriate in the beginning. According to the first option, into the cross-national borders, it can be difficult to persuade all the partners to pay any fee. Clusters managers usually have to work with limited budget for current fiscal year. To plan any other expenses can be out of their budget and that it can make impossible. Plus the clusters managers have to vindicate each expense against the members or stakeholders. Every expense has to bring benefit. It is difficult to talk about the benefits of the Meta-Cluster in the beginning.

The benefits of Meta-Cluster are seen already from clusters managers, but it has mostly informative and networking character. For this type of benefits it is difficult to find payer, especially for next few periods. But the finances will be needed.

The size of membership fee is important also. It depends if it will be flat rate or it will depend on some criteria as number of companies in the cluster, revenue of the cluster, consolidated economic strength of the cluster etc. It is important to decide how the membership fee size will be selected together with the conditions (time condition, money transfer condition etc.)

### 6.1.2 Loan

Loan can be difficult form of financial source. In terms of loan the Meta-Cluster manager have to think about:

- *Who will provide the loan*
- *Under what conditions*
- *Re-payment the loan*
- *Risk and responsibility*

Next to these aspects, talking about the bank loan – or loan from institution having bank characteristic, the legal status of Meta-Cluster is important. Any type of loan or liabilities is impossible since the Meta-Cluster will not be any kind of internationally known legal entity. The choice of its legal entity brings also the question of own capital, needed for foundation in the beginning. Since the Meta-Cluster will be corporation without any European recognized legal form the own capital here in the beginning is equal to zero, plus the question of loan is also not up to date.

To take a loan the establishment legal entity is missing. Furthermore, if a leader or project facilitator decides to take a loan, the question of its processing to all the partners, the interest fee sharing and money sharing is very difficult to answer.

The positives of loan money are:

- Low risk
- Easy to gain (in case of common cluster structure)
- Transparency

The negatives of loan money in case of Meta-Cluster are:

- Difficult to diverse
- Difficult to pay back (need to find other financial sources for pay back)
- Responsibility sharing

Even though the partners of Meta-Cluster will decide for loan for Meta-Cluster it also depends on partner, if he will be willing to provide a loan.

If the Meta-Cluster will find subject who will be able and willing to have the funds for a loan, then many aspect have to be solved:

- Core aspects:
  - *Credit amount*
  - *Term of reimbursement*
  - *Type of reimbursement (type and size of instalments, time of , amortization)*
  - *Liability of endorsement*
  - *Size of Rate of return*

Next to these core aspect of loan another loan-oriented questions will be up to here:

- *Who will be responsible for a loan*
- *How the money will be used – redistributed and spend*
- *How money will be pay back*
  - *What activity will gain enough financial resources to pay back*
  - *In what term the money will be pay back in total – time aspect*
- *How the risks will be minimized*

To think about the loan brings always the thoughts about its re-payment, which will bring even more questions and negotiation needed for solving the responsibility and risk. In case of loan it is highly recommended that the Meta-Cluster will be stable entity. The vision and mission is absolutely necessary – to know what the Meta-Cluster want to do, where it would like to be in few years and how it would like to get there.

Loan can be possible also from one Meta-Cluster member or business angel. In this case the subject of loan is needed. On the other hand the conditions and also all the negotiations are getting more feasible. The risk and responsibility is also important here.

### **6.1.3 Project funding**

The project funding can be appropriate form of financial source for Meta-Cluster. It goes hand in hand with vision, mission and activities of Meta-Cluster. It has also time perspective with deliverables. Projects usually bring its benefits and are established under conditions such as:

- Partners consortium
- Partners roles
- Agreement between partners



- Activities planned in time

This type of financing seems to be very suitable, but brings three main aspects.

1. *Partners activity, information sharing and trust*
2. *Pre-financing and funding rate*
3. *Members fluctuation*

#### **Ad 1) Partners activity, information sharing and trust**

This aspect is very important for effective project running. Unfortunately, for the Meta-Cluster it would be suitable to have this aspect in the project in its beginning. On the other hand, in the beginning the partners do not know each other so well. This barrier can be surmounting due to partnership transferred from different project clusters used to have.

Also the negotiations and networking meetings during pre-establishing Meta-Cluster phase can help to increase the trust and information sharing. According to the partners' activity in the project, this aspect is difficult to appraise.

#### **Ad 2) Pre-financing and funding rate**

This can involve key problem if the funding financing of possible project will not be higher than 60%. Also the question of pre-financing is very important. Preferred are such project with the highest possible funding rate and best pre-financed conditions. If these two aspects are not the highest possible, almost equal to 100%, then the discussions about pre-financing is need to be solved in advance and negotiations are required.

#### **Ad 3) Members fluctuation**

While the Meta-Cluster partners' consortium is established and project subscribed, the question of entering new members (or even leaving old ones) is up to. This can be dilemma and it is important to solve this aspect in advance, for example used the memorandum of Meta-Cluster. In such document as memorandum describe the situation of new members entering or leaving conditions to avoid undesirable situations.

### **6.1.4 Financial gifts**

The most appropriate form of financing seems to be the financial gifts. According to other possibilities of financing the Meta-Cluster the financial gift do not bring any aspects about re-payment, value of that finances etc. The question here is who would be willing to provide financial gift to Meta-Cluster. It can be members, business angels or third subjects as regional agencies etc.

### 6.1.5 Income from own business activity

The most suitable for of financial resources is income form the business activity of the Meta-Cluster. Unfortunately, this is the most difficult activity to start and manage. For providing own business activity the Meta-Cluster need s to know market's needs and all the business aspects such as marketing, price establishing, action plan etc. The own business activity is possible but likely not in the beginning of Meta-Cluster.

## 6.2 Capital structure of Meta-Cluster

There are many options of capital structure of Meta-Cluster. The options are summarized in the table below.

Type of financial source	Scenario 1	CLC	Scenario 2	CLC	Scenario 3	CLC	Scenario 4	CLC
<b>Membership fees</b>	100%	E	50%	E	Different proportions	E	variable	EG/G
<b>Loan</b>			50%	EG/G	Different proportions	EG/G		
<b>Projects</b>	variable	EG/G	variable	EG/G	Different proportions	EG/G	variable	EG/G
<b>Financial gifts</b>					Different proportions	PCF/E/Ex		
<b>Income - own business activity</b>					Different proportions	G/Ex	100%	G/Ex

3 Table: Options Meta-Cluster capital structure

According to life-cycle of cluster (CLC), which is similarly used in case of Meta-Cluster, are different financial sources divided into different phases:

- Pre-cluster foundations (PCF)
- Emergence (E)
- Exploratory Growth (EG)
- Exploitative Growth (G)
- Exhaustion (Ex)

### 6.2.1 Scenario 1

Scenario 1 is based only on membership fees which are expected in emergency phase of Meta-Cluster. The advantage of this financing and capital structure is that it is stable and

easy to establish. Also, only own capital is used. On the other hand the disadvantages are the problematic administrative and processing aspects and relatively low financial amount.

The equity capital can be increased using the project funding, but this is relevant in exploratory growth, but likely in exploitative growth phase. (The exploratory growth phase can be preparation phase for the project subscribing.)

Scenario 1 belongs to the most likely scenarios.

### **6.2.2 Scenario 2**

Scenario 2 is based on own and credit financing resources. Here the rate of own and debt financial resources can be 50% to 50%, 40% to 60%, or 30% to 70%. Higher debt financing is not very likely because every debt needs the guarantee.

The possibility of project funding is here also. The percentage rate of the project funding would not be real, that it is why it is not estimated.

### **6.2.3 Scenario 3**

Scenario 3 takes in consideration all possible financial resources, but do not tell its proportions or amount. Some of them can be used, some of them not. Important is the timing of each kind of financial resources. Meanwhile the membership fee can be paid in the beginning of establishing the Meta-Cluster, the loan or project funding is possible in exploratory growth or likely exploitative growth. The financial gift is most likely in the beginning, in the end (when the benefits and outcomes form Meta-Cluster are clear). The own income related to Meta-Cluster business activity is expected mostly in exploitative growth or exhaustion phase.

### **6.2.4 Scenario 4**

Scenario 4 is centred generally on own income from economic activity of the Meta-Cluster. The project funding is possible also. The only question of scenario 4 is, how the Meta-Cluster would be able to manage all necessary conditions and actions for providing own business activity without any capital in the beginning. The answer to that can be Scenario zero, which is described below or by the financing due to membership fees.

### **6.2.5 Scenario ZERO**

Scenario zero plan to do not use any financial sources. The activities and needs of the Meta-Cluster would be divided between members. Each member will have its own scope of

activities and will invest its time and sources into chosen activity. Like this, the Meta-Cluster can work. The disadvantages of this approach is that the thinkable benefits can have only networking and informative character. On the other hand it can be option how to easily start with the Meta-Cluster vision.

### 6.3 Meta-Cluster budget

The budget of Meta-Cluster is established in variants. According to the variant the Meta-Cluster can be more or less active. Some of the activities of Meta-Cluster, which seems to be needed for Meta-Cluster establishing can be done used by variant zero, so costly-effective, or can be outsourced.

Variant/time	Q1/Y1	Q2/Y1	Q3/Y1	Q4/Y1	Q1/Y2	Q2/Y2	Q3/Y2	Q4/Y2	Future
Variant 0	0	0	0	0	0	0	0	0	0
Variant Low	5 000				5 000				20 000
Variant Appropriate	5 000		5 000		5 000		5 000		30 000
Variant Effective	15 000				50 000				100 000
Variant Active	15 000			50 000	15 000	100 000			200 000

4 Table: Meta-Cluster budget in variant and time (in Euros)

Budget variants calculate with the financial amount in the beginning of Meta-Cluster establishment - only variant 0 copy the Scenario ZERO mentioned above – which means that the Meta-Cluster do not share any financial sources.

The variant Low expect to have from each member 1 000 Euros in the beginning of each year. Number of collaborating members is established for the beginning at number 5. By time the amount of members or fee can raise.

The variant Appropriate is based similarly as variant Low but expect to have the financial flow two times per year. There is an expectation that both of these variants – Low and Appropriate – do not let the Meta-Cluster to develop to Exploitative Growth phase, because the financial source will not be enough.

Variant Effective allows the Meta-Cluster to fully develop its activities. The membership fee is expected as 3 000 e per member. Later on the project funding or other financial resources can be up to. The variant Active calculates with project or loan funding and expect the cash flows in the beginning and in the end of the year. The 9 months is estimated time to subscribe the project and have the evaluation also so the project and project funding can

start. Further in another 6 months it is expected to sell the project output, get involved the third subject (e.g. business angel) or ask with another project.

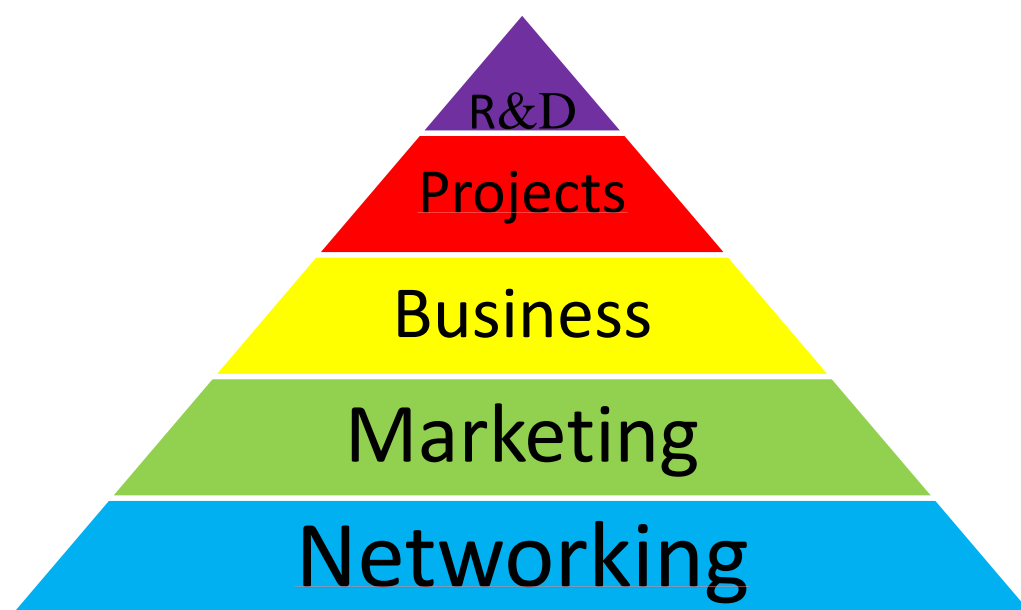
In general the start-up own funding is highly recommended to be at least 5 000 e and be financed from own capital, for example as membership fees.

## 7 Meta-Cluster Action Plan

*The Meta-Cluster action plan is about key activities of Meta-Cluster which were established according to opinions of partners' managers. The common areas for Meta-Cluster cooperation are networking, marketing, business, projects and research and development. The five areas were co-ordinate by the combination of availability, viability and importance into the pyramid.*

According to clusters' managers the Meta-Cluster project should focus on these common areas:

- Networking,
- Marketing,
- Business,
- Projects,
- Research and Development.



10 Figure: Action Plan's pyramid

### Action plan's pyramid

The five areas were co-ordinated according the combination of availability, viability and importance.

- Networking is the most basic activity – it has almost any costs (in comparison with RaD), it is also easy to convince the partners for networking and it helps to build the relationships between the partners.



- Marketing is the second main activity. It has been given on the second position because for doing common marketing they have to know each other. First the partners met, then there is possibility to do common marketing activities and then the Meta-Cluster is known enough to build relationship with other partners (e.g. universities, high schools etc.), which can bring results like spin-offs or internships of students in companies.
- Marketing and Networking should do each partner in its region. The main advantage is that the partner know the ambience, the regional agencies and the important institutions (e.g. the Chamber of Commerce) so the communication between partner and these organizations is simple and on daily basis.
- Business is another section – it is very specific field in partners' cooperation – so it has been given on 4<sup>th</sup> level in the pyramid. If the relationship between the partners is particularly good, business could be on 3<sup>th</sup> level. Business is very important and crucial in the pyramid because it brings financial independence. There are two types of clusters – one is financial dependant and the other one is financial independent.
  - Financial dependant cluster lives from partners' fees. Partners push the facilitator to make a business and the relationships between partners' managers and facilitator could not be good. Sometimes they can think that facilitator doesn't try hard enough to make some business. This form of financing clusters is common at the beginning of cluster's life cycle. For making business cluster must be known and has goodwill.
  - Financial independent cluster is a cluster which doesn't live just from partners' fees. The best way how to reach this form of cluster is to participate in the international tenders. Of course it will take cluster some time to be able to commit to tenders. First activity is always building relationship between partners inside of the cluster then build relationship and connection with other partners (outside of cluster) and after that is cluster able to participate in international tenders.

## 7.1 Networking

Networking is the main key activity in Meta-Cluster. The opinion of clusters' managers is that partners should meet once or twice a year and other business or issues could be adjust via Skype.

- Advantages of personal meetings – if the partners meet personally (for example on conference or other event) the relationship will be always better. The main advantage is that every event has also the informal part when partners can talk about personal

stuff or even about hobbies, families etc. After that next meeting or communication will be absolutely different in comparison with partners who have never met. It will be more open, faster and of course the partner will be willing to do more for a person who knows as compared with a person who has never seen.

- Advantages of Skype communication – the great thing about Skype is that it is for free and you can call anyone anytime – you just need internet connection. The importance and popularity of Skype for managers grows but they usually use it with people who they know. It is not easy to talk with a person you have never met and seen about business or another important stuff. Also the bond between people after Skype call is not deepening. The main advantage of impersonal communication is that is cheap and quick. To organize meeting for partner is very uneasy. First problem is to settle the date which has to fit to everyone. Next problem is pick a place for meeting – the place should be in hotel on congress centre – not in a company office. The place should be also easily reachable for every partner. The manager of the meeting has to think about everything – he or she has to ensure if there is enough parking lots, get someone who will welcome the guests, book catering, set the WIFI in the meeting room and so on.
- Other ways of impersonal communication could be LinkedIn which helps partners to connect with other people, help them to make a business and get new contacts.

The Meta-Cluster's own meeting could be expensive in the beginning. The solution how to arrange a meeting of partners could be to meet on other meetings, conferences or workshops.

The very important is the fact that clusters' managers are ready to help with organization of Meta-Cluster. To ensure the equal responsibility to each partner the conference of Meta-Cluster should be every year organized by different partner. During the year the partner (and the country) could have "presidency" and be responsible for the main meeting and activities of Meta-Cluster for the year. This dividing of responsibility and organization is the best solution how to split the costs between the partners. At the beginning of Meta-Cluster the meeting has to finance the partner who will have the presidency. Later it could be finance by Meta-Cluster itself, of course after cluster made business and will be financially independent. However the first step which is absolutely necessary for establishing Meta-Cluster is networking.

**Networking has two points of view:**

- 1) The first one is networking as a activity which is necessary between partners of Meta-Cluster (viz mentioned above).
- 2) The second one is networking between other partners (from outside) – it can bring:
  - new relationships,
  - projects,
  - business,
  - information about tenders,
  - information about new development in the business area
  - new partners
  - etc.

**Networking key activities:**

- Meeting once a year – after acceptance of meetings every year in different country
- Networking outside of Meta-Cluster – with other partners – via LinkedIn or Skype meetings

Other networking activities can be transfers of technologies and offering of training courses for partners

## 7.2 Marketing

According to American Marketing Association - Marketing is "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large."

Kotler defines Marketing like "the process by which companies create value for customers and build strong customer relationships, in order to capture value from customers in return". The company has to create a marketing strategy - has to settle sales techniques, business communication and business development.

Marketing is an activity which has to identify, satisfy and keep the customers. The question of every marketing manager is what the company should produce, how it should produce and for whom it should be produce for.

The marketing manager has to settle the marketing mix which contains price, place, product, promotion and people. The price of the product is established according to competition or costs. Place means where the products will be distributed and how. Products can be sold

directly to customer or by distributor. Product is the key factor in marketing mix and is created according customers' needs. Promotion assigns the communicating channel which is very important in marketing. If manager picks the wrong communication channel the whole marketing mix will have no effect because the main information about product won't get to the key audience. The promotion has to fit the audience – if you are selling toys for children you have to use children's language.

Meta-Cluster should apart of marketing and networking inform partners about events, conferences, workshops and other meetings. The aim of Meta-Cluster is to be the information service about these important meetings for partners.

The marketing strategy has to contain (according to clusters' managers):

- Logo of Meta-Cluster
- New web pages – the web pages are communication channel between Meta-Cluster and public. There has to be described the reason for establishing Meta-Cluster, the main goal of Meta-Cluster, presentations of partners and other activities. Web pages have to be constantly updated, there must be chosen an administrator of the web pages who will take care of it and who will guarantee the web pages functionality.
- LinkedIn – there is *ICT Meta-Cluster working group* on LinkedIn which collect partners and other people who are concerned in Meta-Cluster project. Via LinkedIn partners can be inform about news in Meta-Cluster project and will be able to see connection of partners which can use for future cooperation or business. LinkedIn is also highly recommended by clusters' managers.
- The Meta-Cluster facilitator on marketing manager has to regularly publish press releases as a useful tool for communication with the public and partners. The Meta-Cluster has to create a database of Medias who will be willing to publish the press release.
- The Meta-Cluster has to make partnerships with other organizations and Medias. One way how to do it is help with promotion of some event – to put the ad for the event on Meta-Cluster web pages and at the same time put the logo of Meta-Cluster on the web page of the event as a Medial partner.
- Meta-Cluster should participate on IT conferences and also on fairs. The facilitator should decide which events are important to participate and which are not.

Marketing should be in charge of every region because the partner knows the ambience, the regional agencies and the important institutions so the communication between partner and public will be easier.

Clusters' managers do not consider Facebook as a relevant communication channel because is mainly use for communication with young people and that is not the target audience.

### 7.3 Business

Networking and Marketing should create goodwill and trust of Meta-Cluster. Business leads to financial independence which is crucial in Meta-Cluster development. There are two main steps which lead to financial independence:

**1. Mutual tenders** - partners in Meta-Cluster project offer business to other partners. Common business between the partners has these steps:

- 1a) Find partners
- 1b) Made business plan
- 1c) Find investors
- 1d) Feasibility study
- 1e) Pilot plant

These activities bring the multiplying effect and will implement solutions to solve similar problems in different regions. The common way how to reach the multiplying effect is to make up a plan for project and connect with university or another similar organization. For example cluster would like to built a CSIRT center. First of all cluster will have to make up a plan for this project and then start to cooperate with universities or regional agencies. This model will be applied in other region as well and it all brings the multiplying effect.

The aim is firstly think up a project and then find investor – not to wait for some investment incentive. This way could appear uncertain or highly risky but it is the easiest way how to achieve the multiplying effect.

**2. Tenders** – after partners will achieve the multiplying effect the next step is common business – tenders. This step will bring financial independent of Meta-Cluster but the partners of Meta-Cluster will have to wait at least three years for it (after Meta-Cluster will have goodwill and will be known as a credible entity. The successful business depends on Meta-Cluster partners – how well will they be connected and willing to cooperate and it also depend on relationship between the partners. Business is also under influence which do not

depend on partners – how the Euro rate will be developing in the future, how stable will be the situation on the market and other macro-economic indexes.

The probability of making big business by Meta-Cluster is low because it is very hard to achieve business with new entity on the market. But if it will happen Meta-Cluster will be financial independent, will become recognized entity and will be able to exist for tens of years.

## 7.4 Project and R&D

All clusters' managers would welcome common projects with other Meta-Clusters' partners or also with other entities. It is complicated which legal form is appropriate to choose for projects between organization and other entities. Usually this problem is solved by picking one partner who will be representing Meta-Cluster. In clusters' managers opinion is that projects' opportunities should find Meta-Cluster facilitator.

Currently are offered these programs in ICT field:

### **FP7-ICT-2013-10:**

**Objective ICT-2013.1.5 Trustworthy ICT** - d) Technologies and methodologies to support European trust and security policies – CSA (up to one CSA per bullet point shall be supported), indicative budget up to 3 million, deadline 15/01/13

- Develop a cyber security research agenda, including anticipation of future trends, directly inferred from the European strategies for internet security and addressing the needs for interoperability;
- Analyse the innovation process in privacy and cyber security technologies, identifying the obstacles and propose improvements; identify market conditions and economic incentives for organisations to invest in ICT security and integrate it into their products, services and systems;
- Facilitate the application of privacy and security by design practices in the development and implementation of products and services, foster a risk management culture among users and support an unhindered usage of Internet and other telecommunications technologies against arbitrary disruptions, censorship and surveillance

**Objective ICT-2013.10.1 EU-Japan research and development Cooperation** - c) Cyber security for improved resilience against cyber threats – STREP, deadline 15/01/13

The goal is to collaboratively develop a demonstrable and state-of-the-art prototype to improve and enhance cyber security against existing and emerging cyber threats in Europe and Japan.

**FP7-SEC-2013-1:**

**Topic SEC-2013.2.2-3 Protection of smart energy grids against cyber attacks** – STREP, deadline 22/11/12

The objective is to analyse the smart grid system and then to develop ways to make the system more resilient and less vulnerable to cyber attacks. Methodology and tools should be developed for a high-level security risk assessment in order to minimise the impact of cyber attacks on the smart grid. Moreover, the project should contribute to raising awareness of stakeholders.

**Topic SEC-2013.2.5-1 Developing a Cyber crime and cyber terrorism research agenda** – CSA (Coordinating Action), deadline 22/11/12

The objective is to develop a research agenda which provides concrete answers to the following issues: In what categories can we subdivide Cyber crime and cyber terrorism? What are the major research gaps? What are the challenges that must be addressed? What approaches might be desirable? What needs to be in place for test and evaluation? To what extent can we test real solutions, etc.?

**Topic SEC-2013.2.5-2 Understanding the economic impacts of Cyber crime in non-ICT sectors across jurisdictions** - STREP, deadline 22/11/12

The aim is to measure and analyse the economic impact of Cyber crime on non-ICT sectors (i.e. transport, energy, finance, health etc) and analyse the criminal structures and economies behind such crimes.

**Topic SEC-2013.2.5-3 Pan European detection and management of incidents/attacks on critical infrastructures in sectors other than the ICT sector** (i.e. energy, transport, finance, etc.) – IP, deadline 22/11/12

The objective is to improve the detection and management of highly sophisticated security incidents/attacks, including cyber attacks/incidents against critical infrastructures (i.e. transport, energy, finance, and water supply sectors) by enhancing a pan-European and shared situational awareness of vulnerabilities, threats and events.

**Topic SEC-2013.2.5-4 Protection systems for utility networks** – STREP, deadline 22/11/12



The objective is to categorise different types of utility networks (i.e. water, pipeline, gas, etc, that are loosely or not at all connected to telecommunication networks; but excluding telecommunication networks themselves) that can be considered as critical infrastructure.

CSA (Coordination and Support Actions) are networking projects, the rest of them STREP (Specific Targeted Research Projects) and IP (Integrated Project) are research projects.

Each common project should have a person who will be responsible for all of the projects' activities or the responsible subject will be partner who will have the "presidency" for certain time. Project can be also divided into several areas and each partner could have one particular area which he will create and for which will be responsible for.

The decision about who and how will be responsible in project is up to partners agreement which should be signed on first Meta-Cluster meeting.



## 8 Step-by-step approach how to established Meta-Cluster

This chapter is step-by-step recommendation of Meta-Cluster foundation. This should help not only establish the Meta-Cluster but also start his regular processes and functioning. This is only recommendation, some of the steps can be not fulfilled, and also it can be created new ones, depends on the current situation, partners requirements etc.

### Step-by-step approach

1. Find cooperative partners
2. Start effective communication
3. Manage 1<sup>st</sup> meeting (can be transmit one (skypecall, teamspeak etc.)
4. Define the Meta-Cluster activities in time
5. Choose the legal form
6. Describe the rules and responsibilities
7. Find the Meta-Cluster manager
8. Comment legal form, rules and responsibilities (use googledocs)
9. Manage Letter of Intent (Cooperative Memorandum)
10. Organise face-to-face meeting
11. Subscribe the Letter of Intent

Upon the above agreed and signed next steps should follow, such as:

12. Create logo
13. Create web pages of Meta-Cluster
14. Gathering the information from the partners
15. Defining the actions in one/two year horizon
16. Regular exchange of information (update)
17. Regular meetings (personal and transmit ones)
18. Development of mutual business

The establishment of Meta-Cluster should be done in one year horizon otherwise there is risk of lack of future cooperation. For finding the partners the different events are recommended such as conferences, clusters meetings, etc. The partners can be also searched using the information sources like clusters observatory, national chamber of commerce, national clusters agencies etc.

## 9 Rules and Recommendation of Meta-Cluster functioning

The effective functioning of Meta-Cluster has to have its rules and regulations. Just to establish some kind of virtual organization through borders who communicate different languages simply cannot bring appropriate benefits. It is necessary that each partner will cooperate and dedicate time to achieve the highest possible profits.

It should be natural, that each partner dedicates definite time to Meta-Cluster activities – concrete x hours per month. Further the exchange of information is really crucial for being the Meta-Cluster organization well known and recognized as expert on the market. The exchange of information should consider the local market information, national market information (legal environment, business environment, industry environment information). To gather the information in customized format the forms are recommended. The Meta-Cluster facilitator should create information forms and send it to all partners with deadlines. After gaining the information from the partners, the facilitator works with the information – issue them, advertise them on web pages etc. Also the regular information update is needed.

Beside the time dedication and information service, which is the two key elements of starting the Meta-Cluster functioning, **the core is proactive approach of each partner of Meta-Cluster. Without proactive approach the whole idea will not work.** Once, the information service works well, and the minimum of marketing of Meta-Cluster is done (logo, webpages) the real meta cl Meta-Cluster activities can start to work such as business activities and project activities. Those activities can let live the Meta-Cluster long time, bring to it the tradition and brand to be recognized expert, because those activities bring the financial stability, which is also crucial.

Meta-Cluster have to be open to its partners and itself. This means that any partner can bring new ideas, projects, ask for information, cooperation in any specific way. Further each partner should have same right of vote. The Meta-Cluster should have controlled budget and respect the accounting rules.

We recommend thinking about these aspects and subscribing them into the Letter of Intet:

- Time dedication of each partner
- Compulsory information service (with periodical frequency)
- Division of voting rights
- Budget and accountancy rules
  - (e.g. any purchase above 50 Euro have to be agreed with 2/3)
- Annual report (responsible facilitator)

## 10 Conclusion

Cluster is co-ompetition organization which brings new connections and possibilities. Clustering of firms in the same industry brings higher level of cooperation, clustering of firms in different fields can bring new way of solving problems, creating new blue oceans – new markets with new product. Knowing your partners neither in the same industry nor in different one is the element of innovation. Innovation then brings sustainability.

Some of the industries represent only few big players, other many different small and middle size ones. This is the background of clusters creation. The size of the market, the export percentage, area of country, distance and technology level – this is the background for searching for cooperation or new market out of the native country.

Clustering in between the clusters can bring higher co-ompetition, new connection and possibilities even wider – if we imagine the pyramidal structure of connections. Brings also improving the skills and knowledge cross border. Can play important role if we understand the market internationally, can compete with over-oceans markets.

It seems that the clusters over the Europe got ready to start to know each other better and start networking. To deepen the relations and increase the probability of future cooperation the organization such as Meta-Cluster seems to be the right one.

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## 12 List of Figures

1 Figure: Clusters organizations and cluster initiatives in the Czech Republic .....	16
2 Figure: Clusters and Clusters' initiatives .....	16
3 Figure: Elements of cluster .....	36
4 Figure: Life cycle of cluster .....	36
5 Figure: Important factors for choosing optimal organization structure .....	55
6 Figure: Functional structure .....	56
7 Figure: Divisional structure .....	56
8 Figure: Hybrid structure .....	57
9 Figure: Six keys areas for quality facilitator .....	58
10 Figure: Action Plan's pyramid .....	103

## 13 List of Tables

1 Table: Comparison of legal forms .....	54
2 Table: Profile of a Quality Facilitator .....	59
3 Table: Options Meta-Cluster capital structure .....	99
4 Table: Meta-Cluster budget in variant and time (in Euros) .....	101