A Center of Excellence in ICT Training and Certification

Rollout Scenario for the CoE Development
 DISCLAIMER

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Table of Contents

I. Document Information ........................................................................................................... 3
II. Introduction .......................................................................................................................... 4
III. Background ........................................................................................................................ 6
IV. Opportunity for a Center of Excellence in ICT Training and Certification ..................... 9
   1. Core Initiatives of the Center of Excellence ................................................................. 10
   2. Organizational and Facility Requirements .................................................................... 11
   3. Facilities Requirements ............................................................................................... 13
   3. Catalytic Funding and Transition to Self-Sufficiency ...................................................... 14
IV. Activation Path .................................................................................................................... 16
   1. Initial Activities ............................................................................................................ 16
   2. Ongoing Activities ....................................................................................................... 17
APPENDICES ............................................................................................................................ 18
   Appendix 1 Center of Excellence Context ........................................................................ 18
   Appendix 2 Center of Excellence Activities ..................................................................... 19
   Appendix 3 Close-up: Academic and Industry Council Composition and Functions .......... 20
   Appendix 4 RCI Competitiveness Pyramid: General Framework for an ICT Sector Process Improvement Program ................................................................. 21
I. Document Information

The purpose of this document is to propose key steps towards the creation of Center of Excellence in ICT Training and certification. The document is designed to be used as a reference generic concept for individuals and organizations who are interested to develop Centers of Excellence in their area or region. The USAID Funded Regional Competitiveness Initiative is willing to provide specific consultancy and methodological support to initiatives interested in the development of Center of Excellence in ICT Training and Certification in South Eastern Europe and the Caucasus. If you are interested in receiving such a support please contact Mr. George Sharkov, Manager ESI Center Eastern Europe at gesha@esicenter.bg, tel. +35924899740.

This document is build upon the successful experience gained by the European Software Institute Center Bulgaria/Eastern Europe in establishing public-private partnerships and developing a regional excellence center in software engineering. The document’s structure and methodology follow and further develop the guidelines for Center of Excellence creation initially developed by Mark Frazier, president of Openworld Inc and ESI Center Bulgaria/Eastern Europe in the framework of RCI.
II. Introduction

A Center of Excellence in ICT Training and Certification offers a means for the Country and the Region to gain global standing in the global ICT markets through supporting the local and regional ICT individuals and companies to reach the global standards for quality and productivity.

The Center can be a hub for initiating, planning and execution of joint ICT Competitiveness programs aiming at increased quality and productivity of the ICT intensive organizations not only in the country in which it will be established but also in the whole SEE and Caucasus region and other partnerships with internationally-known figures and institutions in the area of specialization.

The activities of the Center of Excellence will open new opportunities for the local ICT firms to collaborate with international counterparts and to accelerate the pace of innovation in the country as a leading center for ICT training, certification and know-how transfer.

The proposed Center of Excellence initiative builds upon recent decisions from the Regional ICT Workshop “Building a Sustainable Regional ICT Training and Certification Network” aiming to encourage linkages between key stakeholder institutions and global counterparts in the interest of enhancing the SEE and Caucasus ICT competitiveness.

The goal of the overall initiative is to establish a sustainable network of ICT Quality competence centers in the countries of Eastern Europe, including also the Caucasus region. The network will build the necessary infrastructure for ICT competitiveness on regional level and will magnify the results related to the increased regional competitiveness achieved so far. The backbone of such infrastructure will be provided by a number of training and certification excellence centers.

RCI is aiming to achieve a few major objectives with the development of the centers of excellence and the promotion of the network:

- Increased awareness about the models and corresponding trainings and certifications that can improve the efficiency and effectiveness of the ICT individuals and companies.
- Increased optimized regional capacity for providing of training and certification services based on cooperation and know-how transfer among the suppliers.
- Development of a regional market for training and certification in terms of increased informed demand for services and promoting regional suppliers who can provide quality solutions.
Center of Excellence in ICT Training and Certification Concept

- Increased regional ICT competitiveness and cooperation based on the improved quality of the ICT products and services.

All organizations and individuals who perform or plan to develop ICT training and certification services will be invited to join the network. It is a continuation of the systematic USAID activities to support the establishment of a common regional ICT brand based on high quality and innovations. As a result of the previous projects and USAID/RCI programs, also in synergy with national ICT strategies and other business support organizations, in the majority of the countries from the region there is already an initial awareness and understanding of quality as a major component and key competitiveness factor of the region. The ICT Competitiveness pyramid programs have been jointly implemented by USAID/RCI, ESI Center Eastern Europe and local USAID projects. The current model known as ICT Competitiveness Pyramid was efficient and proved valuable to all countries that have been involved so far. This model could be further adapted to the increasing demands for specific knowledge and assistance closer to the industry, education and knowledge society. In addition, although initial awareness and first best practices are already in place, there are still significant gaps between the levels of different countries.

RCI is planning to extend the model of services and, in partnership with regional ICT stakeholders, develop a network of competence centers in sub-regions (groups of countries). The centers will be initiated and established by local stakeholders developing or using the best model that corresponds to the specific needs of the local and regional stakeholders. Upon request from the network members, ESI Center Eastern Europe through RCI will be able to provide initial level awareness and consultancy services, maintain development of national ICT support programs, and facilitate faster knowledge adoption and practical experience sharing. Academic support (especially in the field of project management, software engineering organization and competitiveness) will be among the priorities. The profile of each center is supposed to be developed on the basis of the objective assessment of the industry readiness and demands. The network will be methodologically and organizationally coordinated by RCI.
III. Background

The ICT sectors of the SEE countries have gone through significant transformations in the last two decades. A shift from the capital-intensive hardware production to the knowledge-intensive software production has taken place simultaneously with the privatization of some companies and the creation of new start-ups. The well-educated human resource and the long-lasting traditions in ICT, in combination with the competitive labor costs, have been the main success factors that contributed towards the growth of the ICT Sectors in the countries. The companies in the region, most of which are Small and Medium-sized Enterprises (SMEs), face global competition by several times bigger outsourcing destinations such as India, China, Russia and others.

An important prospect for the SEE and Caucasus countries, that did not exist until very recently, is the opportunity for small and new entrepreneurs to build effective cooperation based on quality, using the latest models for organization and management of engineering processes in order to improve the effectiveness and efficiency of their operations. Getting the people-process-technology triad working at “its best” is imperative for those organizations in the region that want to compete on the global market.

The complexity of the products and the influence of internal and external requirements and pressures indicate that organizational prosperity in the future will be highly influenced by the willingness of the organizations in the region to address process improvement across the entire product development life cycle – from conception through delivery and maintenance.

Currently many companies in the region explore the relevantly low cost of the qualified labor as a primary competitive advantage. Having into account the fragmented regional market with limited resources this “efficiency-
focused” model will not be able to support sustainable development of the ICT sector.

A significant opportunity exists for the countries and the regions to transform the competitive advantages of the ICT Sector from relevantly cheap labor with good technical knowledge and skills to capacity for development of cost-effective quality ICT solutions with high added value for the organizations and economy.

The main barriers in front of the transformation of the ICT sector from the “efficiency-focused model” to models with higher value added could be defined as:

- **Low level of awareness about the business efficiency and effectiveness and methods to achieve high competitiveness on senior management levels**
  
  In most of the cases the local companies do not have knowledge and skills to manage their cash flows and to optimize the business performance. The business plans and detailed project plans are very rarely documented and used.

- **Fragmented market in many cases focused on the “very domestic” opportunities for growth and development.**
  
  The small ICT companies are working very locally in most of the cases in their town and area working with ad-hoc models and processes. They are not targeting regional and global markets that limit the opportunity for economic growth.

- **Difficult access to knowledge, training, consultancy and certification based on world recognized models, standards and certification schemes**
  
  Due to the small-sized emerging markets and different languages in the countries the leading providers of training and certification services are not well presented in the countries and there is a lack of content adapted to the specifics of the regions. The proximity and the lack of the local resources result in a higher price and difficult access to the services compared to the developed markets.

In order to remove the existing barriers and to provide competitive advantage for the countries and the regions, the countries can establish training and certification centers and promote cooperation within the regional training and certification network. These actions are expected to result in:

- **Increased ICT Competitiveness**
  
  - Increased visibility of the country and region as ICT competitive area and better integration in the international markets
  - High number of companies that increased their competitiveness, respectively value added based on the implementation of models and standards for process improvement.
Center of Excellence in ICT Training and Certification Concept

- High number of individuals that increase their professional skills, capabilities and capacities
- **Effective eGovernment**
  - Development and use of modern methodologies for eGovernment development
  - Increasing the competences of the local ICT companies as suppliers of ICT solutions for eGovernment development
- **Modern Education**
  - Easier access of the Universities to modern knowledge, trainings and certifications adapted to the regional specifics
  - Cooperation between Universities and ICT industry in the development of R&D projects
- **Sustainable Economic Growth**
  - Increasing the overall economic competitiveness through promotion of ICT penetration in all economic sectors
  - Further development of the information society
IV. Opportunity for a Center of Excellence in ICT Training and Certification

A Center for training and certification (physical or virtual) will help move the country to the forefront of a key arena for ICT competitiveness

This result will be achieved through strategic alliances and partnerships with leading international counterparts, with a focus on joint research projects, development of learning resources, and pilot implementations of innovative approaches for increased competitiveness.

Proposed objectives of the Center can include one or a number of the strategic goals proposed below:

- Increase in the competitiveness of the IT industry;
- Development of effective eGovernment services
- Modernize the ICT education
- Support acceleration of economic growth through higher penetration of ICT in the other industries

These benefits underscore the value of the opportunity to establish a specialized Center of Excellence in the near future.

Who gains from a Center of Excellence in ICT Training and certification?

Center of Excellence will create the following advantages for Country ICT Cluster stakeholders:

- Improve the know-how and capabilities of ICT firms to deliver complex solutions for national and international clients
- Connect ICT companies in the Country to influential thought leaders ("gurus") who influence global ICT industry decisions
- Reinforce Country’s international promotion campaigns by positioning the country as market leader in a key growth area

The Center will create advantages for ICT sector and NGOs as follows:

- Improve the quality of offshore software development solution providers
- Accelerate development of ICT clusters and communities of practice
1. Core Initiatives of the Center of Excellence

The Center of Excellence will provide a range of practical benefits to the organization of the public and private sectors of the Country and the Region.

Among the activities of the proposed Center could be defined:

- **Development and execution of complex ICT competitiveness programs** on national and regional levels that support the sustainable development of the IT including:
  - Advising Government and public institutions on technical standards for ICT
  - Certification of ICT organizations
  - Training and certification of experts
  - Development of R&D projects

- **Raising awareness** about the important role of the different training and certification models and international partnerships for the increased competitiveness of the ICT sector through:
  - Organizing seminars and workshops in cooperation with the leading international providers.
  - Organizing annual awards that recognize innovations and outstanding achievements in ICT.
  - Publication of reports and benchmarking studies in the field of ICT
  - Development of case studies

In order to be able to effectively perform the customer-related activities the center should perform ongoing activities that will ensure strategic alignment to the specific needs of the Country and the region and will strengthen its capacity:

- Obtain and maintain strong commitment from all relevant stakeholders.
- Performing need analysis and surveys.
- Development of partnership business model for effective cooperation with ICT training and certification partners.
- Design of the business processes and establishing core information infrastructure and systems that will support the center ongoing operations.
- Continuous business planning, monitoring and control.
- Building capacity for execution of the customer oriented activities including qualification of trainers, appraisers and consultants.
- Building capacity in support activities such as: marketing, project management, financial management and others.

These activities can ensure that the Center will highlight the country command of the latest achievements in these fields and provide a tangible
Center of Excellence in ICT Training and Certification Concept

door-opening advantage to the entrepreneurs in their global marketing efforts on an ongoing basis.

In undertaking these activities, the Center of Excellence can capitalize on the assets of the country (sample list):

- Improving telecommunications and Internet infrastructure;
- Competitive skills and labor costs, drawing upon the skills base of ICT training and certification network and affiliated local and national training and educational institutions;
- Established service providers interested or active in global markets; and
- Resources available in well established ICT companies in the country to develop state of the art process improvement and project management capabilities.

2. Organizational and Facility Requirements

The Center of Excellence can be operated as nonprofit organization (foundation, association or any other form), with minimal initial staffing and physical requirements.

Stakeholders

The creation or development of the centre of excellence requires a consensus in the society and strong commitment form the key ICT stakeholders from the private sector, public sector and intermediate organizations. In order to ensure successful development the center can obtain commitment from high level representatives from the following stakeholders:

Government:
- High level decision makers – patronage from the President or Prime Minister aligned with the overall ICT strategy of the country.

ESI Center Bulgaria as an industry driven initiative obtained commitment from international stakeholders

The European Software Institute (ESI) Center Bulgaria was set up in December 2003 as UNDP supported project initiated and organized by the Bulgarian Association of Software Companies (BASSCOM) and the European Software Institute (Spain) with the support of The Ministry of Transport and Communication. The preparation and the execution of the project were performed following the principles of Public-Private Partnership. The PPP commitment demonstrated by all stakeholders has played a key role for Bulgaria to be chosen for one of the 5 World Centers of ESI – the Regional excellence center for Eastern Europe. In only 5 years in the framework of the USAID-funded Regional Competitiveness Program ESI Center Bulgaria in partnership with business development programs organised and implemented software process improvement programs in more than 10 countries in SEE and the Caucasus.

Microsoft Innovation Centre Varazdin, Croatia

The Microsoft Innovation Centre, established in May 2005 and inaugurated in October 2005 by the Croatian Prime Minister Dr. Ivo Sanader, is hosted in the City of Varazdin with the main goal to assist the development of the local economy as well as to support small and medium-sized enterprises (SME) in Croatia. With the support from the Government of the Republic of Croatia, the project is based on an agreement between the United States Agency for International Development (USAID), Microsoft and the City of Varazdin, as well as partners from the ICT sector in Croatia, CISCO, HP, and T-CO. The Microsoft Innovation Center was founded to provide infrastructure and resources for the ICT industry, and especially to ISV’s (Independent Software Vendors).
Center of Excellence in ICT Training and Certification Concept

- Commitment and strategic partnership with the ministries and National Agencies who plan and execute the ICT policy in the country.

Private sector:
- Big multinational companies that have international commitment to ICT training and certification such as Cisco, HP, IBM, Intel, Microsoft and others.
- Key ICT companies in the country.
- Small and medium sized enterprises that form the ICT sector.
- The key clients of the ICT in the country such as banks, insurance companies, big production companies, etc.
- Local training and consultancy companies.

Intermediate organizations
- Leading NGOs and think-thanks that influence the country ICT strategy and policy
- ICT associations

International business support organizations
- Country programs such as USAID, CBN, GTZ, and others
- International institutions such as EBRD, UNDP, World Bank and others
- EU programs and initiatives

Educational sector and institutes
- Universities
- High schools and colleges
- Specialized institutes

The center should be able to involve as many stakeholders as possible. The success of the center will highly depend on its ability to obtain strong commitment from stakeholders that represent all of the above mentioned groups. Balancing between the interests of the different stakeholders is a difficult task therefore the stakeholders that provide the strongest commitment should be encouraged to lead the initiative and to contribute to its success.

Working Team. Key personnel for the core working team can be assembled to serve in the following capacities:

**Executive Committee** – initiates lobby and approves the programs, budgets, and staffing decisions

**Manager** – develops the business, reports to the Executive committee and manages delivery of Center of Excellence programs

**Consultancy team** - part time or full time specialists that meet the initial requirements for qualification as trainers, appraisers and consultants in the chosen focus areas

**Visiting Fellows** – paid or unpaid researchers contributing to Center-sponsored research and pilot projects
Operational and Administrative Support - part-time/full-time assistants to support the Center of Excellence Manager. The staff should be able to operate as project management office.

Interns – actual and virtual volunteers in research project teams

International Academic Council. The Center’s operational team can be assisted by an International Academic Council, drawing wherever possible upon leading specialists in the field of ICT training and certification including notable in-country and international persons who have direct experience in the fields relating to the Center’s specialization.

These Council members would be invited to provide inputs to the strategic directions of the Center’s planning and program design, and to participate in teleseminars and video conferences.

International Industry Council. A number of potential overseas allies and partners in leading businesses with interests in ICT training and certification are also candidates for affiliation with the Center of Excellence, to offer inputs to the Center’s research and pilot project agenda and feedback from business perspectives on innovations developed and promoted by the Center initiatives.

3. Facilities Requirements

In the early stages, the Center of Excellence can work almost in a purely virtual form (if sufficient and affordable international bandwidth is available). Or physically, the Center of Excellence in the near term could share an existing part of facilities provided by its stakeholders, in anticipation of potential future allocation of dedicated space.

The Center should have access to a multimedia facility where it can conduct teleconferences/video conferences and put highlights of its activities into digital form to share with other interested parties.

Attracting Academic Council Advisors

Well-known figures can be invited to contribute as advisors and teleseminar participants to the Center, provided that they are offered in-kind value in return.

- Opportunities to suggest projects for the Center’s research agenda;
- An “advance look” opportunity to review the results of Center benchmarking studies and/or other research studies before their global publication; and
- Access to top CoE-affiliated university talents (through virtual internships and work/study projects) for doing research at low/no cost on specific projects of interest to each advisor.
3. Catalytic Funding and Transition to Self-Sufficiency

The Center of Excellence can seek ongoing sponsorship and support for its activities from the government as well as from leading global firms and institutions concerned for the increased competitiveness in the country and the region.

The Center’s programs are expected to achieve increasing self-sufficiency over the first three years of operations through development of the following revenue sources:

- **Fees from initiation, management and support of competitiveness programs for the ICT industry.** Significant incomes for the center could be guaranteed through the initiation, management and support of projects and programs oriented towards increased competitiveness of the ICT sector. The center is a natural focal point for such projects and can manage public and private funds. The major role of the center will be to define the common interests and benefits of the different public and private organizations and build trust for initiation and execution of public private partnership programs.

- **Fees from consultancy and training** Center-sponsored services can include fee-paid workshops, consultancy, certification, conferences, and seminars. The Center can assure good revenues streams from these offerings by keeping services aligned with the specifics of the concrete clients. If there is no internal capacity available in the center, initially the services will be provided in cooperation with other partners and the net income will be created mostly by commissions and project management activities. It is important in this phase to ensure know-how transfer to local consultants in order to guarantee sustainability and increased added value for the excellence center.

- **Sales of information products and tools** in the area of the Center of Excellence’s specialization that help private and public sector productivity advance. In preparing benchmarking studies and other original research

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**How can the Center become sustainable?**

- Initiation and management of PPP programs
- Providing consultancy and trainings
- Organizing conferences and events
- Research studies and publications
- Equipment, software and know-how donations from well established ICT companies.
- Patents and royalties
- Potential shares in ICT Cluster-affiliated E-Centers and Technology Park projects

Important: in the first three years the priority focus of the initiatives should be on building capabilities and developing the market rather than maximizing short term cash flow.
projects, the Centers can build national and global market demand for their output by emphasizing the engagement of "brand name" international advisors as participants and reviewers of Center of Excellence project teams.

- **Contracts and donations to fund research and demonstration projects** by the Center and applying innovations in ICT in high profile demonstration projects that meet the needs of the ICT industry as well as the public sector and private sector organizations. All ICT leaders who are present in the country could be convinced to participate in the center and contribute to its development by different donations: funds, equipment, know-how transfer, training and consultancy services, etc.

- **E-Center and Technology Park development partnerships.** The Center can also offer a virtual and/or actual presence in affiliated E-Centers and Technology Parks benefiting from transfers of municipal and/or national government land conveyances. Private E-Center/Technology Park developers, through Build-Operate-Transfer agreements, could convey beneficial interests in the real estate developments to the Center. Upfront concession fee payments in some cases may be secured from the developer(s) chosen and applied to meet the costs of Center programs.

- **Potential Implementation partnerships** with the Government to implement elements of the Government ICT initiatives. The Center can seek compensated advisory and review roles in eGovernment initiatives.

- **Annual membership fees for the Center's Sponsors Council.** A full and associate membership option could be provided in the Sponsors Council.

Over a three-year period, these resource flows could grow to meet 100 percent of Center operating requirements.
IV. Activation Path

Over a half-year period, a range of Center activities can be launched. The following is a preliminary overview of possible startup steps and ongoing programs. The suggestions presented here are offered as baseline ideas to be enhanced and expanded by the Center’s founding team and international advisors.

1. Initial Activities

The specific activities in the pre-launch stage (before full-scale facilities are operational) are proposed to include:

- Define high level strategy and communicate it with the relevant stakeholders.
- Obtain commitment from relevant stakeholders.
- Form the Executive Committee and appoint CoE Manager and support team.
- Identify the specific ICT needs and define priority interests in training and certification services-related training programs and pilot demonstration projects.
- Prepare strategic 3-year plan and 1-year operational plan
- Develop presentation materials.
- Form highly-regarded international Academic Council and Industry Council.
- Perform awareness campaign.
- Prepare and communicate proposals for initial research and competitiveness programs.
- Launch of the Centers programs with a focus on capacity building and market needs development.
- Develop center processes, build infrastructure, measurement, monitor and control activities.
Completion of the pre-launch activities will enable the Center of Excellence to effectively position the country in the global market as an important nexus for skills in competitiveness initiatives.

2. Ongoing Activities

Specific ongoing activities for the balance of the first year could include:

- Direct presentation of the activities to the most important stakeholders and potential clients.
- Organizing awareness seminars for each target group.
- Initiation and launching of a pilot project for training and certification.
- Organizing annual conference.
APPENDICES

Appendix 1 Center of Excellence Context

![Diagram showing the Center of Excellence (CoE) context]

- **Government**:
  - International Institutes
  - Effective eGovernment
  - Multinational Companies

- **ICT Sector**:
  - Increased ICT Competitiveness

- **Economy**:
  - Sustainable Growth

- **Educational Sector**:
  - Modern Ed. Curriculum
  - Regional T&C Network

Projects:
- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6
Appendix 2 Center of Excellence Activities

**Strategic Outputs**
- Effective eGovernment
- Sustainable Economic Growth
- Increased ICT Competitiveness
- Modern ICT Educational Curriculum

**Core Activities**
- eG Training and consultancy
- ICT Certification – Organizations
- ICT training & certification – individuals
- R&D projects

**Strategic Alignment**
- Needs Analysis and definition
- Building Partnership and Alliances
- Competitiveness programs
- Awareness campaign

**Institutional Building**
- Stakeholders Commitment
- Strategic & Operational Management
- Project Management
- Qualification of own resources
Appendix 3 Close-up: Academic and Industry Council Composition and Functions

(Based upon model of the Business Technology Management Forum)

Academic Council

Members:
Members possess a specialization in one or more Center of Excellence focus areas and interact with Industry Council members around essential trends and issues.
Responsibilities include:
- actively contributing to the research and publication process,
- formulation of seminar criteria and curricula, and
- development of transferable knowledge.

Structure:
Chair
Advisors
Research Body
Contributing Academics

Industry Council

Members:
Members include CIOs from leading organizations engaged in software development. Industry Council members work with the Academic Council to get specific insight into their most pressing concerns. This exchange facilitates the development of an industry-driven research agenda.

Responsibilities include:
- provide their Academic Council counterparts with feedback on corporate IT strategies, priorities, challenges, responsibilities, and needs
- provide insights into proven and experimental methods in use in the industry.

Structure:
Chair
Advisors
CIO Council
Appendix 4 RCI Competitiveness Pyramid: General Framework for an ICT Sector Process Improvement Program

The mission of the Program is to increase ICT Sector competitiveness through process improvement in the organizations.

The Program can capitalize on the experience accumulated by RCI and ESI Center Eastern Europe in working in the SEE and Caucasus regions.

The program’s goals are:

- To build organizational capacity for planning and execution of a process improvement program in the ICT Sector
- To build expert capacity for process improvement using the latest management and engineering models and standards
- To support large number of SMEs to increase their competitiveness and to cooperate through implementation of process improvement initiatives
- To support industry leaders to certify their processes according to the world recognized models and standards.

In order to achieve the Program goals a set of activities should be performed in 7 phases. A short description of each phase has been provided in the “Program Phases” Table. The overall program is illustrated in the “Program Architecture – Sample” Figure.
## Program Phases

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| **Phase 1**  
Development of the base for increased ICT competitiveness through quality | Analysis of the conditions and identification of a public-private partnership model and stakeholders. The model has to ensure sustainable development of the program.  
Strategic and operational planning.  
Initial information campaign.  
The most important output from this goal is that local partners will build the fundamentals of the program and acquire strong commitment from stakeholders from the Government, Business and Academia. |
| **Phase 2**  
2.1 Building awareness and initial training on corporate excellence, IT security and CMMI  
2.2 Creation of implementation capacity – professional training | According to ESI’s experience, and endorsed by the international authorities on process improvement (such as ISO), management leadership and commitment are key drivers for a successful and sustainable improvement program, together with the educating of the personnel on process improvement concepts. These factors contribute to increasing the organization’s readiness for process improvement.  
Capacity building in organizations in the region through training and certification of experts. |
| **Phase 3**  
Process Improvement Program Initiation in SMEs | Communication with SMEs, government organizations and business support organizations for the establishment of process improvement programs and obtaining commitment to them;  
Selection of pilot organizations.  
Development of high-level plans for execution of the programs for the group of organizations and for every organization that will participate. |
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<th>Phase</th>
<th>Short Description</th>
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| Phase 4 | **Quick assessment of the processes maturity in a cluster of SMEs**  
Review the processes in each organization to determine the degree of implementation and institutionalization of the selected process areas with the objective of identifying the potential gaps that must be addressed by the organization to satisfy the goals of the improvement initiative. Based on the results from the assessment focused process improvement plans are developed for every organization and for the group of the organizations as a whole. |
| Phase 5 | **Process Improvement Program implementation on cluster and on SME level**  
Technical and management support to the organizations during the implementation of their strategic improvement plans to ensure that the improvement actions are being implemented effectively and efficiently.  
Perform periodic quantitative and qualitative evaluations of implementation progress, taking corrective action when actual performance deviates significantly from the plan, to ensure that the organization is prepared to undergo a formal evaluation.  
The topics that are common for many organizations who participate in the program will be discussed in a group session. Exchange of know-how and good practices between the organizations will be facilitated. |
| Phase 6 | **Readiness check for process maturity appraisals**  
Checkpoint for official certification. A document review plus workshop approach provide objective picture of the process maturity in the organization. Focus on areas that need most attention. A process improvement plans for the organizations that have significant gaps will be developed. |
| Phase 7 | **Process maturity validation**  
Certification against advanced standards and models. |
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Program Activities

Phase 1
Development of the base for increased ICT competitiveness through quality

Phase 2.1
Building awareness and initial training

Phase 2.2
Creation of implementation capacity – professional training and certification

Phase 3
Process Improvement Program Initiation in SMEs

Phase 4
Quick assessment of the processes maturity in a cluster of SMEs

Phase 5
Process Improvement Program implementation on cluster and on SME level

Phase 6
Readiness check for process maturity appraisals

Phase 7
Process maturity certification

Program Architecture - Sample

ORGANIZATIONAL INFRASTRUCTURE IN PLACE

RESULTS ORIENTED TOWARDS BUILDING OF ORGANIZATIONAL CAPACITY

ORGANIZATIONAL CAPACITY BUILT

RESULTS ORIENTED TOWARDS INCREASED COMPETITIVENESS

ORGANIZATIONAL EXCELLENCE AND SUSTAINABILITY

RESULTS ORIENTED TOWARDS INCREASED ICT LEADERSHIP

Indicators of achievement:
• 10-20% of the organizations* completely implement and are certified for the leading industry models and standards
• 30-40% of the organizations* partially implement the leading industry models and standards and have obtained intermediate validation

Indicators of achievement:
• 70% of the organizations* increase their competitiveness based on more effective and efficient processes
• 50% of the organizations* gain strategic competitive advantages based on continuous improvement of the efficiency and effectiveness of their processes

Indicators of achievement:
• 10-20% of the organizations* completely implement and are certified for the leading industry models and standards
• 30-40% of the organizations* partially implement the leading industry models and standards and have obtained intermediate validation

*Percentage are indicated against the initial number of organizations

Results oriented towards building of organizational capacity

Results oriented towards increased competitiveness of the ICT sector