

GOALS AND RESULTS OF PROJECT ICoSCIS

Talk Layout

History

Some history behind the consortium

Previous joint attempts

Regional
needs

An analysis of the Regional SWOT analysis

How we chose and planned our project

Partnership

How the partners were chosen

What was their contribution?

Results

An overview of the results

Did we manage to achieve our goals?

Future

Setting new goals

Can we profit from the new networks of collaboration?

History

Some history behind the consortium

- First try dates back to 2003
 - May 2004 Interreg IIIA : "Implementation of Advanced Methods in Computational Sciences and use of GRID Computing, with Applications to Natural Sciences and Engineering" project was approved with a budget of € 150000.
- This project funded the Greek side only, not the Bulgarian.
- The goal to gain the knowledge needed was achieved for the Greek side.
- Unfortunately, the Bulgarian side was not funded by the corresponding PHARE – CBC project.
- An introductory computing equipment was acquired.

Regional Needs

An analysis of the Regional SWOT analysis

- Regional projects aim to exploit/treat the Strengths, Weaknesses, Opportunities and Threats (SWOT)
→ we focused on relating to these.
- Universities relate to education and research mostly.
- We had to address several of the following (which were found on the Operational Programme manual):

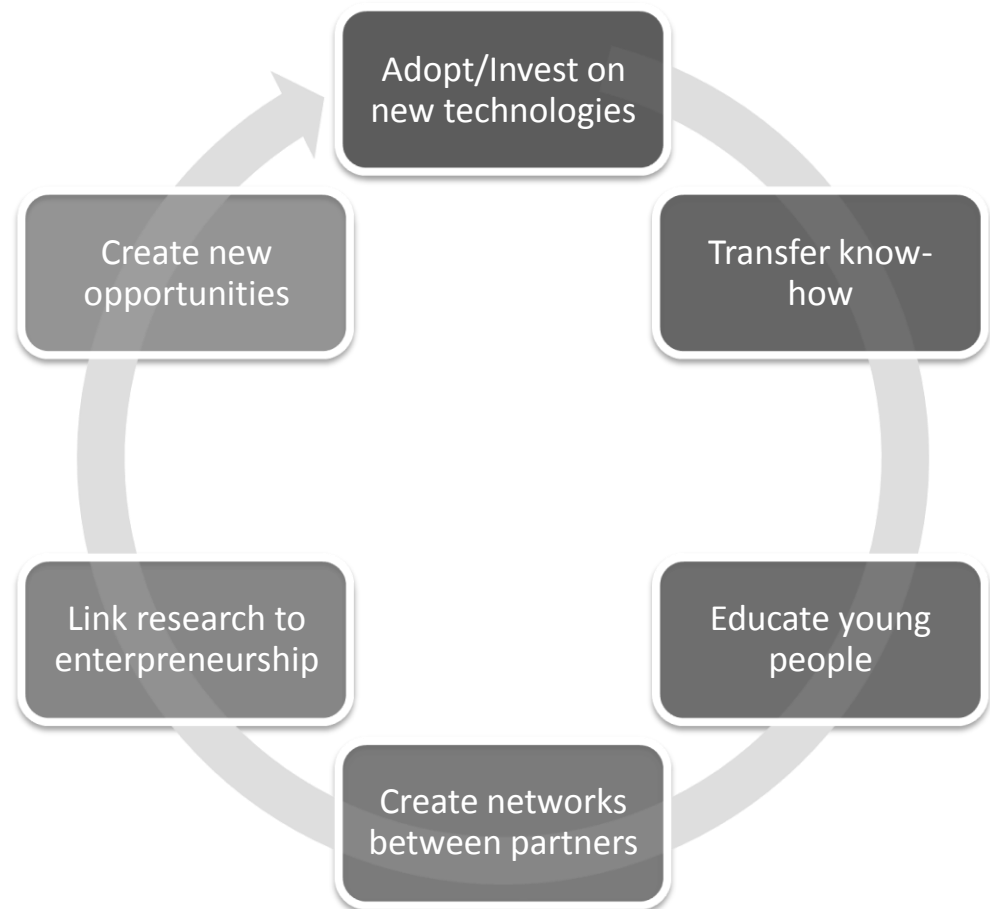
Sector	Strengths	Weaknesses	Opportunities	Threats
• Business Environment & Primary Sector	•Concentration of significant economic activities in urban centres •Thessaloniki, centre of economic activity •Existence of incubators for SMEs •Both areas belong to EU member states • Development of networks of cooperation	•Low employment rate of the active population •High unemployment of vulnerable groups of population •Delay in the adoption of new technologies and incorporation in productive activities •Lack of highly specialized human resources	•Financial instruments and assistance for entrepreneurship •Funding opportunities through FP7 •Transfer of know-how and business networks and cooperation via EU cross-border programmes •Investments in new technologies and innovation	•Low cross- border cooperation of local economies •Deterioration of the market conditions for the local traditional enterprises due to strong competitiveness in Europe •Loss of working places •Loss of conventional markets
• Natural & Urban Environment • Infrastructure • Information Society	•Existence of important urban centres in both sides •Sufficient infrastructure to support high speed IT connections •Development of telecom enterprises	•Low integration of high technology in the majority of the productive sectors	•Decreasing cost and improving work conditions •Improving competitiveness of economy •Strengthening communication through innovative methods	•Low integration of new technologies in rural and remote areas.
• Human Resources (Education, Research, demographic profile, equal opportunities) • Public Administration	• Existence of prestigious Universities and Technological Institutes in the area • Existence of Research Institutes	• Significant number of unqualified human resources • High unemployment of young people and Women • Low cooperation between research and entrepreneurship	• Developing research activities and innovation • Increasing labour force efficiency • Measures that promote women and special groups towards entrepreneurship, employment, training and education • Investments in education and training • Programmes for training, re-qualification • Training programmes for public servants	• Immigration of active population to urban centres and/or other EU countries • Reluctance of the oldest to new technologies • Resistance in change • Centralized Public Administration

Regional Needs

An analysis of the Regional SWOT analysis

- We focused on trying to:

- *We created a project for an infrastructure on the new technologies (GRID computing) used in science, training people on how to use them and finally opening up their mind to a new – complex – way of thinking.*
- *In the process we hoped to know each others work, as well as meet some private sector people's work and exploit new opportunities that would open up in 2014.*



Sector	Strengths	Weaknesses	Opportunities	Threats
• Business Environment & Primary Sector	•Concentration of significant economic activities in urban centres •Thessaloniki, centre of economic activity •Existence of incubators for SMEs •Both areas belong to EU member states • Development of networks of cooperation	•Low employment rate of the active population •High unemployment of vulnerable groups of population •Delay in the adoption of new technologies and incorporation in productive activities •Lack of highly specialized human resources	•Financial instruments and assistance for entrepreneurship •Funding opportunities through FP7 •Transfer of know-how and business networks and cooperation via EU cross-border programmes •Investments in new technologies and innovation	•Low cross- border cooperation of local economies •Deterioration of the market conditions for the local traditional enterprises due to strong competitiveness in Europe •Loss of working places •Loss of conventional markets
• Natural & Urban Environment • Infrastructure • Information Society	•Existence of important urban centres and services •Sufficient infrastructure to support high speed IT connections •Development of telecom enterprises	•Low integration of high technology in the majority of the productive sectors	•Decreasing cost and improving work condition •Improving competitiveness of economy •Strengthening communication through innovative methods	•Low integration of new technologies in rural and remote areas.
• Human Resources (Education, Research, demographic profile, equal opportunities) • Public Administration	• Existence of prestigious Universities and Technological Institutes in the area • Existence of Research Institutes	• Significant number of unqualified human resources • High unemployment of young people and Women • Low cooperation between research and entrepreneurship	• Developing research activities and innovation • Increasing labour force efficiency • Measures that promote women and special groups towards entrepreneurship, employment, training and education • Investments in education and training • Programmes for training, re-qualification • Training programmes for public servants	• Immigration of active population to urban centres and/or other EU countries • Reluctance of the oldest to new technologies • Resistance in change • Centralized Public Administration

By focusing on those, we achieved most of what SWOT told us

Partnership

How the partners were chosen

- ICoSCIS is not a research project. It focuses on transfer of know how between academic institutes.

- AUTh is the LP – PP1.



- SWU Neofit Rilski is PP2.



- UoM is PP3



- AUBG is PP4.



Partnership

How the partners were chosen

- Why them?



is a leader in scientific computing and has extensive international experience



is the leading educational institution in Southern Bulgaria and could physically accommodate some of the projects needs



has a team dedicated to Econophysics, one of the pillars of this project



has an informatics group that has long experience in teaching computer languages (a necessity of the project)

Results

An overview of the results

EQUIPMENT IN GREECE

A DELL cluster of 128 computing cores, 256 GB RAM and 30 TB storage space



EQUIPMENT IN BULGARIA

An IBM cluster of 128 computing cores, 256 GB RAM and 30 TB storage space



Results

An overview of the results

GENERAL COURSES

1. Programming in C
2. Programming in C++
3. Programming in C#
4. Programming in Fortran
5. Introduction to Linux
6. Programming in Java
7. Mid-level Programming
8. Scientific Programming

COMPLEX SCIENCE COURSES

1. Introduction to Complex Science
2. Complex Science II
3. Introduction to Networks
4. Dynamics and Evolution of Complex Networks
5. Econophysics I
6. Econophysics II
7. Sociophysics
8. Language Evolution
9. IT Research

Results

An overview of the results

WHAT WE WERE HOPING FOR

- Number of courses : 12
- Number of trainees : 80
- Percentage of women participation : 30
- Number of

1.  - 
2.  - 
3.  -  -  - 

WHAT WE ACHIEVED (SO FAR)

- Number of courses : 17
- Number of trainees

participation :

networks formed: 5

OVERACHIEVERS

1.  - 
2.  - 
3.  -  -  - 
4.  -  - 
5.  -  - 

Future

Setting new goals

- We have already started to work on new ideas
- We have submitted some proposals in a European level already
- Horizon 2020 gives opens up new opportunities!
- We hope to fill in the specialized researchers gap that most SMEs of the region have
- We hope that some of the companies here will fill our own applied research gaps

THANK YOU
FOR YOUR
ATTENTION!

THANK YOU
FOR YOUR
ATTENTION!

Regional Needs

An analysis of the Regional SWOT analysis

An analysis of the Regional SWOT analysis

- By adopting new technologies such as Scientific and GRID computing
- And transferring know-how by training people in the use and administration of the above
- Young people (mainly young researchers) were our trainees
- New networks were created between project partners
- Regional innovative companies were contacted in many levels
- New opportunities for future collaborations (in fact some efforts have already been made in other levels)