Local Analysis

North Aegean

Greece

RESPONSIBLE INNOVATION
in South East Europe countries

LOCAL ANALYSIS

NORTH AEGEAN REGION

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RESPONSIBLE INNOVATION
in South East Europe countries

SOUTH EAST EUROPE
Transnational Cooperation Programme

Table of content

1   Executive summary

The aim of this report is to examine, analyse and present the context of Responsible Innovation (RI) in North Aegean (NA) Region, in Greece . The results obtained from the analysis will be used later on as the basis of further RI realeted actions inside North Aegean Region such as a small number of pilot projects in the Region and of course the elaboration of the road map for the Regional Action Plan for Responsible Innovation. So the results (completed with the result of the FARINN project partners) will contribute to picture the general situation of the SEE region in terms of RI.

The starting point of the analysis focused on the general characteristics of the Region including the natural environment, the most important dempographical and economic indicators. The strong insular character of the North Aegean Region is reinforced by the special identity of each island, a fact that reflects on the plethora of local resources, which gives high quality agricultural and farming products, highlighting the relevance of the agricultural sector. The region has a particularly rich natural environment with important ecosystems and a great area is integrated in the NATURA 2000 network.

After sketching the wider general context, we described the competitiveness and innnovation performance of the territorial unit. The general conclusions reflected that the North Aegean Region has limited business and scientific ability, but is characterized by a rich cultural and environmental diversity. Moreover, the economy of the islands is dependent on public sector funds; the important is that there is positive entrepreneurial culture of different islands. In addition, it's needed to highlight the lack of the corporate presence in the innovation activity.

It is known that the insular and rural character of the region influences the specialization profile of the North Aegean. According to the Regional Innovation Monitor, the most energetic manufacturing sectors are food and drinks, manufacture of fabricated metal products, of furniture and wood and of products of wood. Their share in value added has increased the last decade, as a result of regional policies to diversify the regional economy away from tourism and agriculture.

Moreover, it is important to underline that the academic research potential on the islands is partly brought into line with the economic reality, especially with the environmental science potential. The rich biodiversity and the good environment's quality of the islands is the factor that has been used in innovative actions.

To assess the responsible innovation situation of the Region we chose to collect the inputs and different perspectives of the innovation actors and stakeholders. In one part the questioning of the innovative actors was delivered by a questionnaire and the stakeholders were asked in the form of in-depth interviews. The innovation activities cover a wide spectrum of technologies and industries in our area. The results of the questionnaire and the in-depth interviews showed that the most of the interviewees have never heard about responsible innovation, but they are aware of its parameters. The North Aegean's companies have not been updated for what and how important is Responsible Innovation for their own business and for society itself. From the results of this study can easily been seen that innovation activities in NA is still at an early stage for this particular market.

2. General conditions of the territorial unit

Geographical Position: North Aegean Region is situated in the north-east of Greece and is a boundary of the Europe towards Turkey.

Natural Environment: It is an insular region, with natural wealth and beauty and consists of 3 prefectures. The prefecture of Lesvos, of Chios and Samos with 9 inhabited islands (Lesvos, Limnos, Agios Efstratios, Chios, Inousses, Psara, Samos, Ikaria and Fournous).

Area-Population: The total area of the islands is 3.3836 Km^2 and the population (according the 2001 census) is 204.108 inhabitants, from which half of them live in Lesvos. Administrative Centre of the Region is Mytilini , the capital of Lesvos.

Culture-Education: The Region has a rich cultural heritage and many remarkable personalities like Sappho of Eressos- Lesvos, Pythagoras of Samos and Homer of Chios. Giving unique contribution to poetry, science, and literature. Furthermore, the early History of Greece has still to show their unique personalities like Odysseas Elytis, Mikis Theodorakis, who offered many to European culture.

The University of the Aegean[1] is one of the fundamental sources of education and research in the region. With University Units located on five different islands in the Aegean sea, it has an innovative network promoting a learning and knowledge environment. The University has 5 Schools, School of social sciences based in Mytilini with 4 Departments, School of the environment based in Mytilini with 3 Departments, School of Business based in Chio with 3 Departments, School of Sciences based in Karlovasi of Samou with 3 Departments, School of Humanities based in Rhodo with 3 Departments and the University Unit of Syros based in Ermoupolis of Syrou.

Products–Services: The strong insular character of the North Aegean Region is reinforced by the special identity of each island, a fact that reflects on the plethora of local resources, which gives high quality agricultural and farming products. Some of the products of Protected Designation of Origin (PDO) / Protected Geographical Indication (PGI) are:

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[1] Further information: http://www.aegean.gr/aegean/en/intro_en.htm (english version)

1. **Agricultural:** mastic of Chios (a worldwide unique product of Chios), olive oil of Mytilini, Wine of Limnos, Wine of Samos.

2. **Farming:** Local cheese varieties of Limnos and Mytilini ("kalathaki" cheese of Limnos, "graviera" and "ladotyri" of Mytilini)

3. **Manufacture:** Ouzo of Plomari, Ouzo of Mytilini

4. **Tourism:** spiritual relaxation, religious, outdoor activities, hot spring water in Mytilini, and other forms of alternative tourism.

The following maps indicate the location of the region and the 9 inhabited islands.
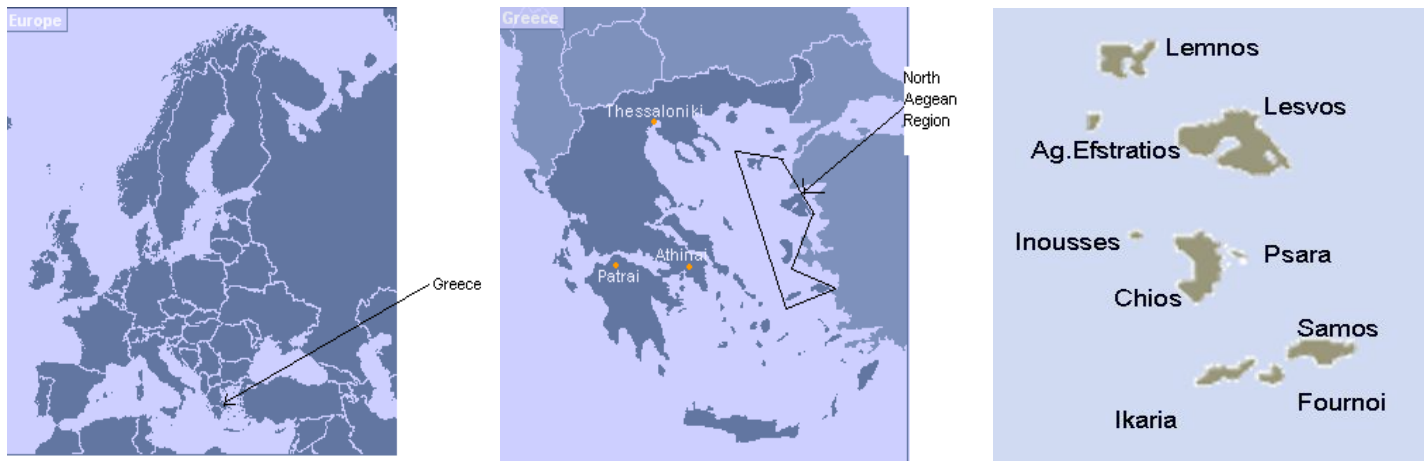
Relative Organizations:

- **Region of North Aegean**

Link: http://www.northaegean.gr/english/index.html

77 P. Kountourioti St, Mytilini, 81100

- **Regional Development Fund of North Aegean**

Link: http://www.ptaba.gr/portal/index.php

Arg. Eftalioti 3, Mytilini, 81100

- **Intermediate Managing Authority (IMA) of the North Aegean**

Link: http://www.kriti-aigaio.gr/en/Pages/EDAVoreioAigaio.aspx

1st klm of Mytilinis- Loutron rd, Mytilini, 81100

3   Secondary survey

3.1   Methodology

The reports and relative surveys have been conducted for Responsible innovation are not many, especially for the North Aegean region. Responsible Innovation is a new concept:

"Responsible Research and Innovation is a **transparent, interactive** process in which **societal actors** and innovators become *mutually responsive* to each other with a view on the **(ethical) acceptability, sustainability** and **societal desirability** of the innovation process and its marketable products (in order to allow a proper embedding of *scientific and technological advances* in our society)"

The methodology that has been used at this survey is from bibliographic and statistical data and the results of enterprises' interview of the North Aegean Region.This report is an attempt to be connected the ethical, natural and all advantages that a region has to one and main process, to be innovative, developed and evolving.

As, we have underlined the majority of the data are from bibliography and European data basis.

More sincerely, <u>Data bases</u>:

- **Region of North Aegean**,

    http://www.northaegean.gr/english/index.html

- **University of Aegean**,

    http://www.aegean.gr/aegean/en/intro_en.htm

- **Regional Development Fund of North Aegean**,

    http://www.ptaba.gr/portal/index.php

- **Intermediate Managing Authority (IMA) of the North Aegean**,

    http://www.kriti-aigaio.gr/en/Pages/EDAVoreioAigaio.aspx

- **North Aegean region**,
    http://www.northaegean.gr/isite/home/english.asp

- **European Commission**,
    http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/index.cfm?q=p.baseline&r=GR41

- **GRST,**
  http://www.gsrt.gr/central.aspx?sId=119I428I1089I646I488772&JScript=1

- **Hellenic Statistical Authority,**
  http://www.statistics.gr/portal/page/portal/ESYE

- **Observatory for Digital Greece**,
  http://www.observatory.gr

- **Greek Scientific Publications**,
  http://metrics.ekt.gr/en/report02/index

Bibliography:

- **ERMIS - Project, SWOT** Analysis, North Aegean Region

- **Al. Reid., N. Komninos., Jorge-A. Sanchez-P., P. Tsanakas**, 2012, A report to the European Commission, Directorate General for Regional   Policy, Unit I3 - Greece & Cyprus

- **Reports of European projects for the North Aegean region**

Results of enterprises' interview-questionnaire:

- **10 in depth interviews with local stakeholders and actors in the regional innovation process**

- **50 local medium-sized and large enterprises**

3.2. Basic competitiveness indicators of the territorial unit

The region of North Aegean is found in north-eastern side of Greece and South-eastern border of European Union. It consists of 3 provinces, Lesvos, Chios and Samos

with 9 islands (Lesvos, Limnos, Agios Efstratios, Chios, Inousses, Psara, Samos, Ikaria and Fournous).[2]

The prefecture of Lesvos includes the islands of Lesvos, Limnos and Agios Efstratios, the prefecture of Chios includes the islands of Chios, Oinousses and Psara and the prefecture of Samos includes the islands of Samos, Ikaria and Fournoi.

The total extent of the Region is about 3.836 sq.km. and total population of 204.108 citizens(2001 census). Lesvos belongs to the islands of the North Aegean. The biggest inhabited islands of the Region are Lesvos, Chios, Limnos, Samos and Ikaria. The total extent of Lesvos is 2.154 km2, the total length of coasts is 696 km, and the total population is about 105.194 people. In Lesvos there are 2 main mountainous regions almost with an altitude of 1000, Olimpos and Lepetimnos respectively. The average rainfall is 750mm per year and the main characteristics of the weather are mild winter and hot summer.

The North Aegean region was established in the 1987 administrative reform. In 2010, according to Kallikratis plan, its powers and authority were redefined and extended. The capital of the region is situated in Mytilini on the island of Lesvos. Until the Kallikratis plan, the region consisted of three prefectures (prefecture of Samos, Chios and Lesvos). Since 1 January 2011 it is divided into 5 regional units, Chios, Ikaria, Limnos, Lesvos and Samos. Moreover, the total area is 3,836 km^2 and the population is 199,231 (2011).[3]

Its major income is from trade, public administration, tourism, and agriculture. Moreover, the small size of firms in all sectors and the thin public research infrastructure have as a result a low level of innovation activities compared to the national as well as the EU average.[4]

The services sector accounted that is 83.5% of the regional added value in 2009 while the contribution of the sector of industry and construction was of 12.4% and that of

[2] Further information: http://www.northaegean.gr/isite/home/english.asp (english version)

[3] http://en.wikipedia.org

[4] http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/index.cfm?q=p.baseline&r=GR41

the agricultural sector of 4.1%, declining over the past decade, but with a slight increase between 2008 and 2009.

Table 1: Allocation by region of GSRT grants for RTDI projects (State Aid) under the

OP Competitiveness and Innovation

Region	Enterprises	Research organisations	Other entities	Grand Total	% share
Attica	€ 78,383,203	€ 33,291,462	€ 480,411	€ 112,155,076	47.4%
Central Macedonia	€ 22,588,727	€ 13,566,039	€ 38,300	€ 36,193,066	15.2%
Western Greece	€ 22,841,816	€ 8,901,221	€ 7,000	€ 31,750,037	13.4%
Crete	€ 3,623,524	€ 13,728,214	€ -	€ 17,351,738	7.2%
Central Greece	€ 9,388,903	€ 1,397,119	€ -	€ 10,786,022	4.6%
East Macedonia & Thrace	€ 5,886,928	€ 1,864,884	€ 25,090	€ 7,776,902	3.3%
Thessaly	€ 4,648,471	€ 2,134,643	€ 253,000	€ 7,036,114	3.0%
Epirus	€ 2,403,100	€ 1,887,252	€ -	€ 4,290,352	1.8%
Peloponnese	€ 3,382,986	€ 545,200	€ -	€ 3,928,186	1.7%
North Aegean	**€ 1,813,280**	**€ 425,506**	**€ -**	**€ 2,238,786**	**0.9%**
West Macedonia	€ 1,355,665	€ 524,695	€ -	€ 1,880,360	0.8%
Ionian Islands	€ 388,000	€ 120,000	€ -	€ 508,000	0.2%
South Aegean	€ 476,000	€ -	€ 18,750	€ 494,750	0.2%
Grand Total	€ 157,180,603	€ 78,386,235	€ 822,551	€ 236,389,389	100%
	66.5%	33.2%	0.3%		

Source: Data received from the GRST on 10 October 2012. Calculations authors. RIS3

The region has a particularly rich natural environment with important ecosystems and a great area is integrated in the NATURA 2000 network. However, ADE (2011) noted that due to their small size, the islands tend to have few land resources for agriculture, while they regularly have lack of natural resources, including adequate water supplies, fossil fuels but also non-fuel minerals.

The following table provides relevant information on the frontiers of the region, based on data from the Hellenic Statistical Authority.

3.2.1. Economy

The island's economies depend on the Rural Sector (23%), Industry (22%) and Services (58%). Although the main source of income comes from Services, the 55% of the population is rural.

Use of land :

- Agricultural Land : 30%
- Pastures: 49%
- Forests: 16,6%

The top 3 industries in the region (in terms of share of employment) are:

- Wholesale and Retail Trade
- Agriculture, Forestry and Fishing
- Hotels and Restaurants

The North Aegean region has limited business and scientific ability, but is characterized by a rich cultural and environmental diversity. Moreover, the economy of the islands is dependent on public sector funds, the important is that there is positive entrepreneurial culture of different islands. [5]
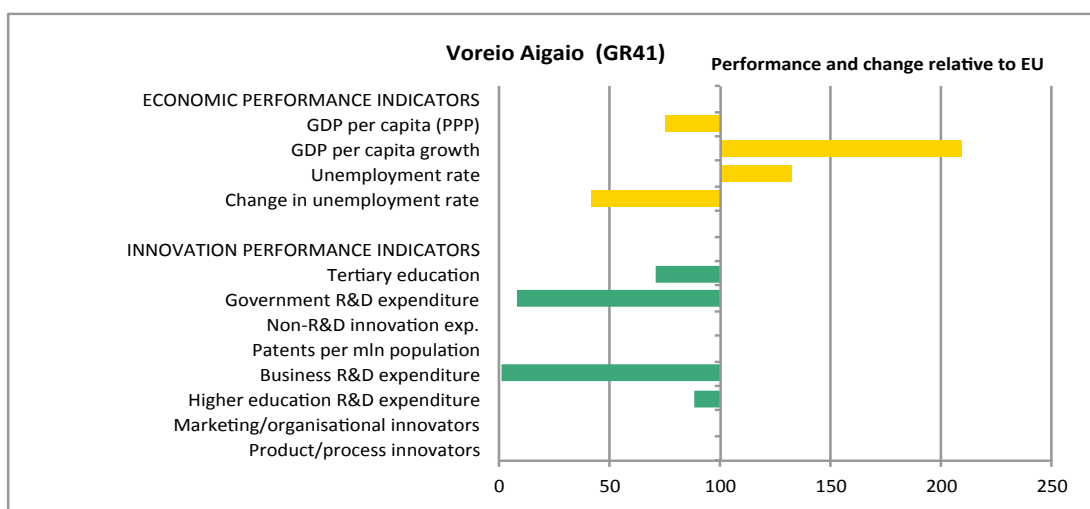
Figure 1, depicts that the economy of the islands has been growing during the decade (up to the 2008 crisis) this is at lower rate than the national or European average so there is no convergence (and the GDP of the region is still only 76% of the EU27 average, i.e. 1.4% of the national GDP in 2009). Moreover, the active population is much lower and less educated compared to the national average, depicts the consequences of emigration. [6]

The region has a weak innovation performance, compared to the EU and national, average, as we can see from figure 1. The causes of this weak are because of insular nature of the region, small scale of firms and limited higher education and public research infrastructure.

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[5] Ermis, Swot Analysis, North Aegean Region.

[6] Al. Reid., N. Komninos., Jorge-A. Sanchez-P., P. Tsanakas, 2012, A report to the European Commission, Directorate General for Regional   Policy, Unit I3 - Greece & Cyprus.

Figure 1: Summary benchmark of regional innovation performance

Voreio Aigaio (GR41) **Performance and change relative to EU**

- ECONOMIC PERFORMANCE INDICATORS
  - GDP per capita (PPP)
  - GDP per capita growth
  - Unemployment rate
  - Change in unemployment rate

- INNOVATION PERFORMANCE INDICATORS
  - Tertiary education
  - Government R&D expenditure
  - Non-R&D innovation exp.
  - Patents per mln population
  - Business R&D expenditure
  - Higher education R&D expenditure
  - Marketing/organisational innovators
  - Product/process innovators

0   50   100   150   200   250

Source: Regional Innovation Monitor, data used is 2011 or latest available year.

Trend data is over latest three year period for which data is available.

During 2000 -2008, the region represents, on average, 1.1% of the national gross expenditure on R&D (GERD). At regional level, GERD accounted for 0.5% of the regional GDP in 2005, a share lower the national and EU27 averages (0.6% and 1.83% respectively). However, with an annual growth of 8.2% in R&D expenditures, which was higher than the national average of -0.5%, the region improves its position. However, this is largely due to the RTDI activities of the University of the Aegean. Definitely, the only sector where the R&D expenditure as a share of GDP is above the national average is the higher education (0.46% in 2005). In contrast, business expenditure on R&D (BERD) is non-existent (0.03% of GDP, 0.6% of GERD in 2008).

Furthermore, it is known that the insular and rural character of the region influences the specialization profile of the North Aegean. According to the Regional Innovation Monitor, the most energetic manufacturing sectors are food and drinks, manufacture of fabricated metal products, of furniture and wood and of products of wood. Their share in value added has increased the last decade, as a result of regional policies to diversify the regional economy away from tourism and agriculture. Moreover, it is important to underline that the academic research potential on the islands is partly brought into line with the economic reality, especially with the environmental science potential. The rich biodiversity and the good environment's quality of the islands is the factor that has been used in innovative actions.

The mastic creators of Chios are probably the best example in the islands, from a group of entrepreneurs, who try to add value to a traditional product and increase exports through marketing and design innovation, as well as through finding new applications and derivative products for mastic of Chios.

3.2.2. Programmes

The region of North Aegean, through its Regional Development Funds (R.D.F), has taken part in many European projects in cooperation with Greek and European regions in areas of environment, innovation, employment, entrepreneurship, new technologies etc.

The Regional Development Funds of North Aegean region has the flexibility and the ability to manage funds as well as to coordinate the partners ensuring the successful result of each project that undertakes.

The Region of North Aegean participates in the below European Networks:

1. Inter-Mediterranean Commission
2. Conference of Peripheral Maritime Regions
3. C.P.M.R. Islands Commission
4. Balkan and Black Sea Regional Commission
5. Association of European Border Regions
6. Europe Direct
7. Association of European Border Regions

Some European projects that Region of North Aegean participated in, are:

- Regional Operational Programme (ROPs) of Crete and the Aegean Islands 2007-2013

The Regional Operational Programmes (ROPs) is an significant tool for the regional authorities in order to implement not only their RTDI strategy, but also their development strategies.

Specifically, in terms of RTDI policy, the main aim is the support of selected public R&D infrastructures based on the region of North Aegean on technological upgrading and on measures promoting innovative investment projects for firms.The strategic goals are to strengthen competitiveness and promote this region (Crete and the Aegean islands) under conditions of development and progress.

The total sum is estimated to reach EUR 1,498,000,178.

Especially:
1. Boosting of entrepreneurship and attraction of investments in the regions affected by the programme
2. Promotion of innovation and research and their linking with entrepreneurship
3. Ensuring the sustainability and functionality of regional infrastructure, with an emphasis on developing environmentally friendly forms of energy
4. Improving the quality of life
5. Strengthening productive activities and promoting the region as an area with investment opportunities
6. Training of human resources in order to strengthen employment, productivity and social cohesion

Moreover, the region of North Aegean is on Priority Axis 2: Accessibility Infrastructures and Services in the North Aegean, and the interventions, that will be carried out, aim at improving and expanding port infrastructure, national highways and the regional / trans-municipal road network in the region.[7]

- Identification of Technology Based Opportunities in North Aegean, MET3 project

MET3 has as aim to develop a network for integrated trans-regional cooperation between knowledge and technology providers, innovation mediators and facilitate an industrial and commercial use of research results taking into account technology.

More specific:
1. Agrofood: The Melissotheque of the Aegean (museum reference collection of wild bees and other pollinating insects from the Aegean area) Marine Reserves

2. ICT: PrivaSIP: Identity Privacy in Session Initiation Protocol, Marine Traffic: Marine Vessel Traffic Management Information System

3. Environment: Autonomous floating ecological and efficient desalination

- NAIAIS programme (Regional Innovative Actions Program)

The NAIAIS programme, includes six major actions:

1. Development of an e-commerce portal for regional products

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[7] Further information: http://www.espa.gr/elibrary/Summary_of_OP_Crete_Aegean_Islands.pdf

2. Trialing of an innovative olive oil waste water treatment system

3. Support regional enterprises to develop new products using traditional local resources

4. Expansion of services in the business innovation centers of the chambers

5. Creation of a local corporate-responsibility label

- BIOBUS programme (Biodiversity Resources for Innovative Business Development, 2006-7)

It is building on NAIAIS programme, concentrated on innovation and biodiversity through:

1. Establishing three regional business and biodiversity resource centers (RBBCs) advising enterprises on biodiversity and business

2. Identifying biodiversity and business growth opportunities

3. Developing corporate biodiversity action plans for regional enterprises

4. Investing in biodiversity businesses and products of selected enterprises

- ICHNOS PLUS - Innovation and Change: Network of One-Stop Shops

This programme aims at transfer and deployment of the Regional Competence Center (RCC) model and its mainstreaming into regional policies through the ERDF Operational Programmes. The RCC model has been conceived as a structure to co-ordinate "One Stop Shops" acting as single contact points for enterprises. Moreover, the duration of this programme was form July 2008 - June 2010.

- OCR INCENDI – Pilot actions for preventing the danger of forest fires in the Mediterranean region.

The theme of this programme was the sensitization of the population in confronting forest fires and other natural disasters that can derive from forest fires. Formation of geographical databases and maps with respect to the current situation. The duration was from January 2005 – July 2008.

- CORI – Coastal Risk

The subject of this programme was the prevention and management of marine hazards in coastal zones, with duration from June 2006 – December 2007.

- EX-INT - From external to internal: managing the transformation of borders and preparing for the new neighbourhood

This programme aims at managing change of the EU borders from external to internal and the preparation of the new cross-border cooperation framework. The duration of programme was from May 2005 – April 2007.

- MEDRISK – Protecting the Environment, Prevention and Risk Management

This programme had as goal the solving of non-satisfactory cooperation in the operation of prevention systems for hazards threatening the environment and sound management of natural resources. The duration was from June 2006 – December 2007.

- MOONRISES – Integrated Monitoring System for Calculating Desertification Danger

This programme tried to develop an integrated system on monitoring and calculating desertification danger, using field research, models and sensitivity indicators, as well as using modern technologies (GIS and GPS), from June 2006 – December 2007.

- PACINTERREG

Its subject is about supporting the objectives of INTERREG projects on local development and enhancing local government with duration April 2004 – December 2006.

- WETMUST – Integrated Multilevel System on Monitoring Wetlands with the Use of Modern Technologies

The aim of this programme was the development, evaluation and implementation of an innovative analysis system for the swamplands with international importance that will contribute to their improved management. The duration of the programme was from June 2006 – December 2007.

- ORPHEAS - Local strategy for the promotion of employment within the framework of sustainable development

The subject was about designing and implementing an integrated local strategy to support employment in the region of North Aegean. Master Plan for supporting employment in North Aegean region. The programme's duration was from November 2002 – February 2005.

- DIAS-NET

The goal of this programme was about e-learning platform for the development of information society in the European islands and remote areas, from April 2002 – March 2004.

Moreover, the regional development and innovation planning in North Aegean for the 2014-2020 period foresees the participation and coordination of many actors, such as the Inter-ministry Committee for Policy Design at Ministry of Development and Competitiveness, the regional stakeholders that define R&I and ICT (Information and Communication Technology) priorities and objectives, and many relative others.

More specifically, about:

Primary sector: Represents a significant share of the regional economic activity, with growth potential if combined with ICT tools.

Agriculture, fishing, and aquaculture enterprises need modern control, administration, monitoring, and marketing and logistics tools. Moreover, added value bio-agricultural and alternative agriculture producers can benefit from Internet in their marketplace participation, optimize branding, etc. Farmers could also be supported to optimize their production activity, employing monitoring tools, especially in reducing the cost of energy by using alternative sources.

Transportation: The cost and the time that citizens and enterprises consume on transportation is enormous. For this reason, smart transportation approaches, based on ICT, should be deployed, to minimise the cost of travelling, reduce the consumption of fossil fuels and generally improve the efficiency of businesses.

Energy: The cost and the consequences of energy consumption are challenges for the region. ICT tools should be used in a systematic way in order to help reduce waste and improve efficiency, at residential and business settings.

Tourism and culture: The Region hosts many archaeological and religious sites, that attract large numbers of visitors. For this reason, the SMEs should be motivated to exploit modern technology and synergies to depicts the beauties of the region, minimise management and advertising costs, and as a result extend the tourist season and create more jobs.

Food and Beverages: The SMEs in this sector can improve their profit margins through the branding and advertising, with modern e-commerce platforms.

Education: The education system of the North Aegean region should be supported in order improve the ICT skills level of the citizens and enhance the ability of higher education institutions and research centres to carry out research for new and innovative products and services.

Broadband Internet: The availability of an affordable broadband connections for the households is a major european target. The Region have to do all the related national- and EU level actions, to further extend broadband in the region, giving emphasis on the smaller islands.

3.2.3. Research, Development and Innovation

The country's Strategic Plan for the Development of Research, Technology and Innovation 2007-20013 continues the tradition of focusing on infrastructure development.

The key priority for the region is the improvement of transportation links[8]:

1. Between the region's islands and mainland Greece
2. Among the islands themselves
3. Within the islands' remote areas and the islands' administrative, business and transportation centers (ports, airports)

At the same time, emphasis will be given on the protection on the environment, which is the key economic resource for the region.

In terms of business - economic development, the aim is to focus on the "green economy", giving emphasis on tourism and agriculture. Moreover, investments in technology will be distributed to infrastructure projects, such as the development of broadband networks and Wi-Fi infrastructure for enterprises.

For this reason, it is significant to emphasize that according to the survey of the Observatory for Digital Greece[9] on Internet users in Greece (March 2010), the North

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[8] Further information:

http://www.espa.gr/elibrary/Summary_of_OP_Crete_Aegean_Islands.pdf

Aegean is classified fifth for the PC usage (41.7%), and fourth for the use of the Internet (41.9%). However, the use of Internet the period 2005-2008 had more than doubled and at household level, the percentage of home Internet connections was 38.9%.

The implementation of these plans will be guided by the recently updated EU Regional Innovation Scoreboard, in order the funds be assigned.

They key metrics that will be in focus are :

- Enablers
    1. Tertiary education
    2. Life-long learning
    3. Public R&D expenditures
    4. Broadband access by businesses

- Business activities
    1. Business R&D expenditures
    2. SMEs innovating in-house
    3. Innovative SMEs collaborating with others
    4. Patents filed with the European Patent Office (EPO)

- Outputs
    1. Product and/or process innovators
    2. Marketing and/or organizational innovators
    3. Resource efficiency innovators (labor, energy)
    4. Employment in medium-high and high tech manufacturing
    5. Employment in knowledge-intensive services

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[9] Further information: http://www.observatory.gr

Table 2: The values of these metrics for years 2000-2005

Regional innovation performance metrics (ranking of our region: 202 out of 208 regions) – Year 2006	T – 4	T – 3	T – 2	T – 1	T
Human resources in Science & Technology (% of population)	N/A	64	61	58	61
Public R&D expenditures (% of GDP)	32	32	32	32	32
Business R&D expenditures (% of GDP)	1	1	1	1	1
Employment in medium-high and high-tech manufacturing (% of total workforce)	10	10	10	10	10
Number of patents applied for at the European Patent Office (per million population)	0	0	0	0	0

Source: 2006 European Regional Innovation Scoreboard, figures are relative to EU
and for a period of 5 years.

It is known that the levels of business R&D in official statistics are low, however, this does not mean that there is no innovation. The efforts are many and focus on the rich biodiversity that exist on the island in the form of products or services based on the natural environment. However, the most important is that the efforts to support regional enterprises to innovate are at the margin and not at the basic of structural fund interventions.

The North Aegean region has limited business and scientific capacity but, has rich cultural and environmental diversity. The islands' economy is based on public sector funds, however, the stakeholders speak for the positive entrepreneurial culture that have the islands. For this reason, they try to build and expand the previous efforts to implement innovative solutions to tackle insularity and protect biodiversity, giving potential for new value added on products and services. Among other, the region has a comparative advantage in future research and innovation co-financed by the ERDF on bio-economy.

Furthermore, it is recognized the important role of the University of North Aegean as an agent of change for the local economy and society, but this, is not translated into concrete actions to keep this role. Additionally, the National/GSRT priorities for 2014-2020 seem incompatible to the needs and capabilities of the North Aegean innovation and productive system.

Moreover, the Region should strengthen the support on ICT for the most crucial sectors such as, tourism and culture, primary sector, transportation, energy and environment, food and drinks, and education.

At the same time, governance of development in North Aegean does not adopt principles of systemic innovation. Regional innovation funding is minimal, for private and public, there is limited tradition on innovation actors' cooperation and regional policy is not focused on creating collaborations, networks, clusters and linkages to internal and external.

3.2.4. Education

The higher education research sector has developed over the last decade through the link of the activities of the University of Aegean; however, the interfaces with local business remain limited. Education has to be supported to improve the average digital skills of the workforce.

In terms of human resources, only the 1.3% of Greek human resources for science and technology (HRST) are located in the region, or 12.2% of the regions workforce, a share under the EU27 average (14.6%). Furthermore, the North Aegean region has only the 1.4% of total Greek researchers and the 0.08% of private sector researchers. However, the University of the Aegean ranks 9th out of the 21 Greek universities with 959 publications for the period 2006-2010, representing 2.5% of the "production" of Greek universities (Thomson Reuters data from 2010[10]). Out of these publications, 40% involved in an international collaboration and 40% a national collaboration and the citation impact[11] of the University of the Aegean is 0.71 (14th rank). [12]

The University is active in,

1. Natural sciences (736 publications, 1,955 citations, citation impact of 0.74),

2. Engineering and technology (229 publications, 494 citations, citation impact of 0.61)

3. Social sciences (148 publications, 203 citations, citation impact of 0.6)

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[10] Further information: http://metrics.ekt.gr/en/report02/index

[11] The relative number of citations to publications of a university compared to the world average.

[12] Al. Reid., N. Komninos., Jorge-A. Sanchez-P., P. Tsanakas etc.

4. Primary survey

4.1. Questionnaire survey

After the presentation of the basic components of Responsible Innovation during the 2nd meeting of the North Aegean Regional Committee for Responsible innovation and the discussion that followed it was decided that there will be an attempt to interview with potential Regional Actors for Responsible Innovation based on the following issues - questions.

4.1.1 Methodology

The interviews were performed in two phases. A first pilot one, in a small number of mainly private sector bodies which would be followed by the completion of the questionnaire for Responsible Innovation (as agreed and described among FARINN partners) and a series of interviews presenting at the same time, for discussion, the results of the questionnaire.

The questions for this interview were finalized in the following:

- Question 1: How do you assess the innovative activities in the North Aegean Region?

- Question 2: What do you think are the actors of innovation in general? You can name specific actors of innovation in the region?

- Question 3: Do you have any relationship with them? If you have a relationship with them, what kind is this?

- Question 4: To what extent it is considered that drivers of innovation include the environmental, ethical and social impact of produced innovative products or services during their innovative activities? Could you report such organizations in the region of the Aegean Sea, which take all those into consideration?

- Question 5: Could you influence the region's actors, in order to take into account the environmental, ethical and social impact of innovation with greater intensity? If Yes, what features do you have? If not, what are the factors that prevent you?

- Question 6: What kind of features and resources you have that could affect NA actors to consider environmental, ethical and social impact of innovation?

✛ Question 7: What kind of advice would you give to Social Actors and Actors of Innovation in the Region of North Aegean to enable them to include in their operations more environmental, ethical and social impact of innovation?

The first interviews with executives in the North Aegean (North Aegean Region, University, Cooperatives, Entrepreneurs and Consumers' Institute) have highlighted a shortcoming in the familiarization with the basic principles and parameters of responsible innovation. This created the urgent need for completion and analysis of the questionnaire for Responsible Innovation in order to became the basis upon which the regional actors will get familiar with the topics of responsible innovation.

So, the first findings from those interviews were:

✓ There is a primary need for informing and training executives of local and regional actors, entrepreneurs, researchers and academics on issues of responsible innovation.

✓ There is increased sensitivity to issues related to environmental, ethical and social implications. Public bodies and private companies are more careful. Regarding the concern that the crisis that affects the whole country would reverse this situation, the opinion of the experts is that it will not greatly affect.

✓ There is a need for effective 'use' of the existing infrastructure, business and research capacity of the region.

✓ There should be one or two "good" pilot projects, which can serve as 'guides'.

✓ The consumer's movement is ready to "support and push" businesses in the region in the direction of responsible innovation and corporate social responsibility actions.

✓ Special attention should be given to groups or individuals as e.g. the cooperatives.

✓ The revival of old forgotten seeds and plants-herbs could itself constitute a form of Responsible Innovation.

The North Aegean Region's participation as one of the first European Regions participating in Responsible Innovation programs and the active involvement of its executives are very good first steps in the direction of finding resources for RI actions.

The objective of this research is the recording and analysis of the innovativeness and the behavior of firms in the area of Responsible Innovation in the region of North Aegean. In order to obtain better results, many parameters of innovation were studied. The data collection was based on an extensive questionnaire based on the harmonized questionnaire of the fourth Community Innovation Survey (CIS IV) and other studies for measuring innovation and responsible innovation behavior of firms.

The type of research was the on-site interview with enterprises in the region following a telephone very sort discussion. This telephone call was the first contact with companies and from this communication was decided if the particular company would eventually participate in completing the questionnaire. If the company was given negative answers to questions of a short questionnaire then the process stopped there.

The basic questions that were determining the company's participation to the on-site interview were:

➢ **Information of New Activities**

• The last three years, do you have entered into the market at least one new product (or service)?	YES ☐　　　NO ☐
• Do you have introduced in your business some organizational change or some new technology the last 3 years?	YES ☐　　　NO ☐
• Do you plan to enter a new product, service, and technological or organizational change in the next three years?	YES ☐　　　NO ☐
• Has, the last 3 years, your company cooperated with some University or other Research Organization with the aim of creating new technological-innovation?	YES ☐　　　NO ☐
• Is your firm certified? (according to some standard e.g. ISO, HACCP, EMAS, EFQM etc.)	YES ☐　　　NO ☐

In the event that the above responses were negative, the section below was not filled out.

➢ **Specialized information for Innovative Activities**

• Has your company applied for patents?	YES ☐ NO ☐
• Do you have R&D department in your company?	YES ☐ NO ☐
• In your business, do you have specific budget for the design and development of new products ' (or for R&D) and if so what is the percentage of turnover (or profits)?	YES ☐ NO ☐ ....%

In this research 50 enterprises of the region eventually participated in. To ensure reliable conclusions medium-sized and large enterprises from various industries were selected.

The data processed by a statistical method, the descriptive statistics. This method was used specifically for organizing, simplifying, and presentation of data. The results were analyzed in detail with the help of charts that assisted to better formulate proposals for further development of innovation in regional enterprises.

The questionnaire began with a letter from the Director of the Regional Fund with an introduction to the purpose of the questionnaire and the expected benefits for business and also for the better planning on the part of the region.

Subsequent sections of the questionnaire were:
1. General information about your organization
2. General information for innovation
3. Innovation activities
4. Responsible innovation activities
5. Environmental sensitivities
6. Social sensitivities

Because the study of the entire population of North Aegean's business is not possible, because its size is too large, a subset of the population, a sample of companies was the subject of the study. The sample was chosen in order to represent the entire population of businesses in North Aegean and in this study were fifty businesses.

It is obvious that any sample even the most representative cannot fully provide a faithful representation of the population. So, there will always be a discrepancy, or in other words an error percentage between the statistical indicator that is derived from the sample, and the corresponding value of the population parameter. In this study it is believed that the chosen sample leads us with great security in drawing conclusions about the entire population of businesses in North Aegean.

In the next sections and for deeper and more useful "reading" of the results listed for each question, the question itself, a graph of statistical processing of replies related to the specific question and a short commentary of data resulting from the analysis of the answers to the question.

4.1.2 Characteristics of the responders. - General information about the sample organizations.

The vast majority of companies, with a share of over 60%, are either sole proprietorships or 'Société Anonyme'. In view of the specific nature and importance of cooperatives in the North Aegean a percentage greater than 10% of the sample are cooperatives.

The participation of service firms in this research at a rate of over 60% in combination with the lack of industry (only 13% participation) is a negative factor for innovation in the region.

Two in three sample enterprises employing up to 10 people when one in three employs from 10 to 50 people. There were no companies with more than 50 people.

The 65% of employees holds a secondary education certificate while it is important the fact that more than 27.5% has a tertiary education (20% with University degree and 7.5% with Technological Education Institute, TEI, degree)

The dispersion among the sample companies shows a specific interest in terms of turnover, where 30% of the companies have a turnover up to 100 thousand Euros or between 200 and 500 thousand Euros. A significant proportion of 23% are companies with turnover of over half a million Euros.

The figure for the total assets of enterprises is following the same path as their turnover
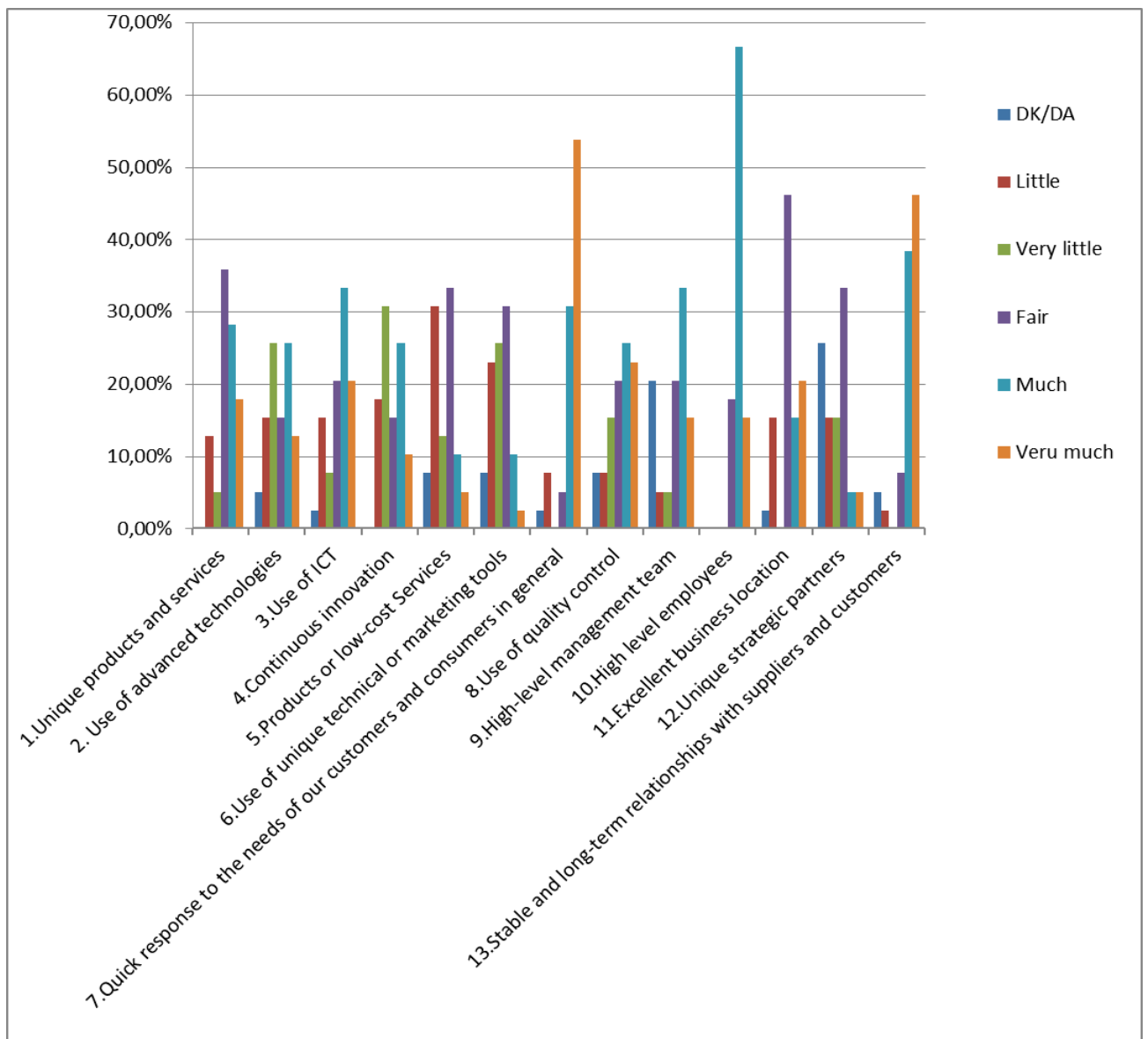
North Aegean companies consider that the factors that set them apart from their competitors, to the better of course are:

- Stable and long-term relations with suppliers and clients

- Quick response to the needs of their customers and consumers in general

- High level human resources

- High level management team

It is obvious that companies in NA are 'people-centered' companies and this makes the development effort of innovativeness special and difficult. It is evident the lack of any technical approach.

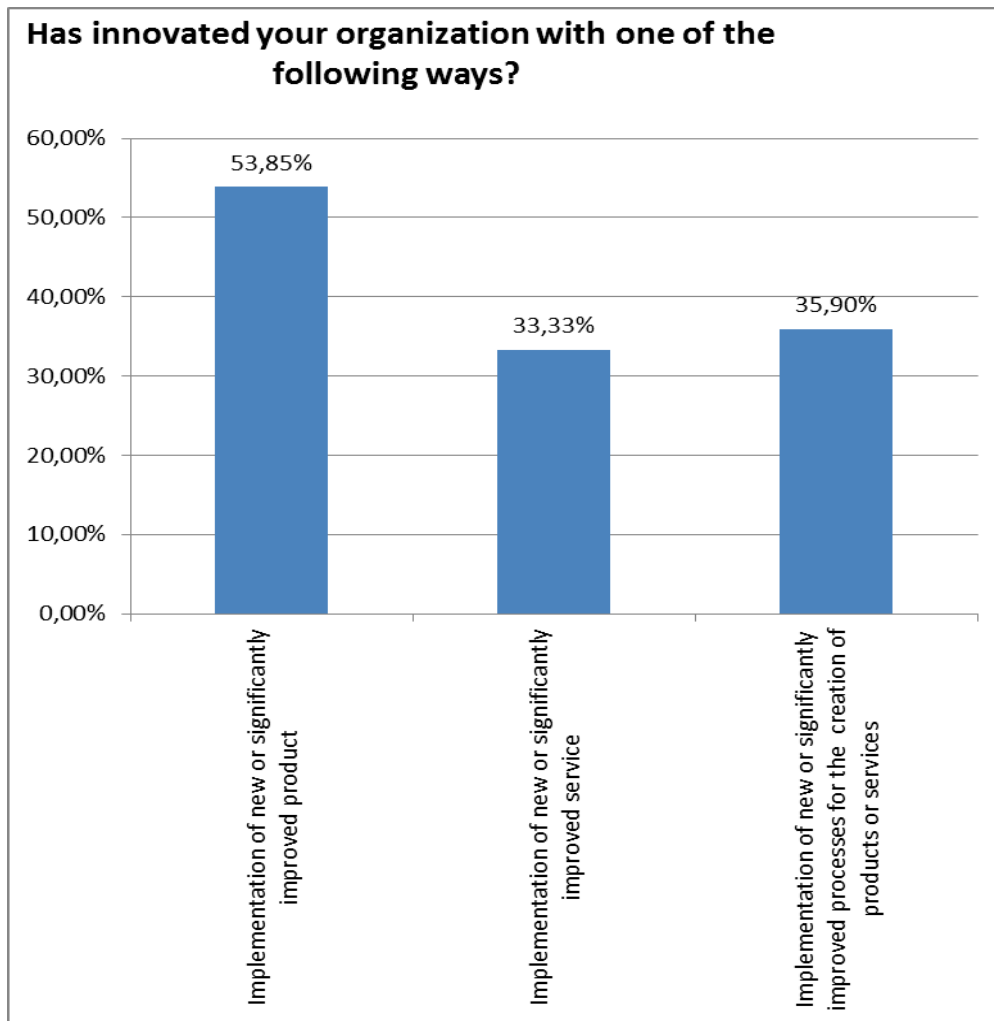### 4.1.3. Answers about innovative activity - General information for innovation

The 90% of businesses indicates that it knows what innovation is, though it causes questions the remaining 10%.

A percentage of around 70%, not particularly high for European averages knows examples of innovation from other companies and businesses. This is a sample as well of not a great openness.
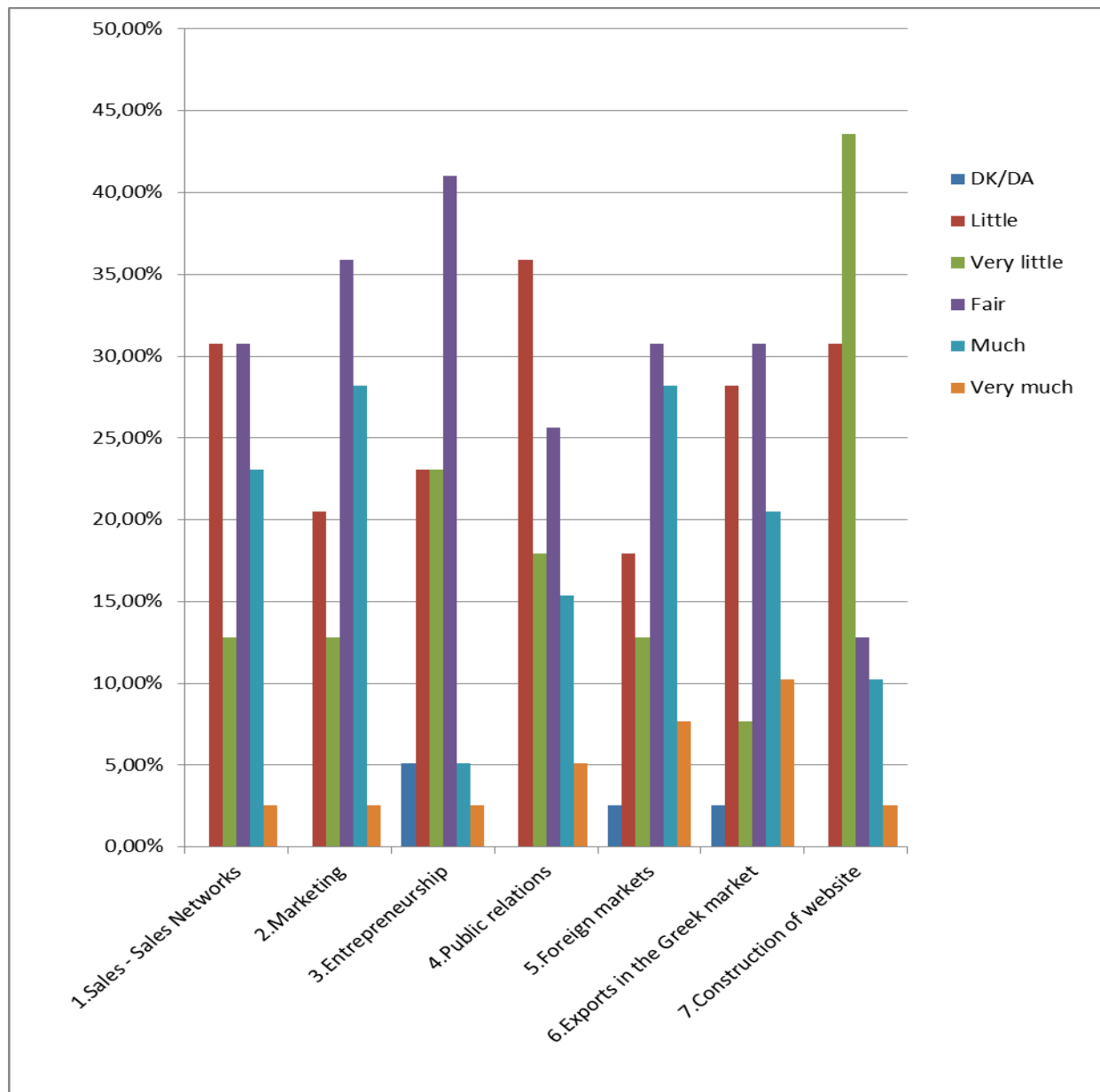
Marketing, exports and foreign markets are the areas that companies consider that they are lacking behind and need help.

Half of the companies would like consultancy services provided by an external partner and a 70% consider that it would rely primarily on own resources – existing staff. They suggested the support from the state through the adaption of best practice of competing countries within and outside the EU.

Has innovated your organization with one of the following ways?

| Category	Percentage
Implementation of new or significantly improved product	53,85%
Implementation of new or significantly improved service	33,33%
Implementation of new or significantly improved processes for the creation of products or services	35,90%

The innovation of enterprises, by 55% focuses on implementing new or significantly improved product. As we could see in this research the companies in North Aegean do not fall short in terms of new products or processes. The problem lies in marketing-promotion innovation and organizational innovation.

Companies develop their innovations either with own sources within the company or other entities such as other enterprises, universities, research centers do the "work" for

them. It really causes negative impression the non-existed
effective cooperation with other companies, universities and research centers.

Almost half "innovations" been developed by companies were something new for them rather than for the market they activate.
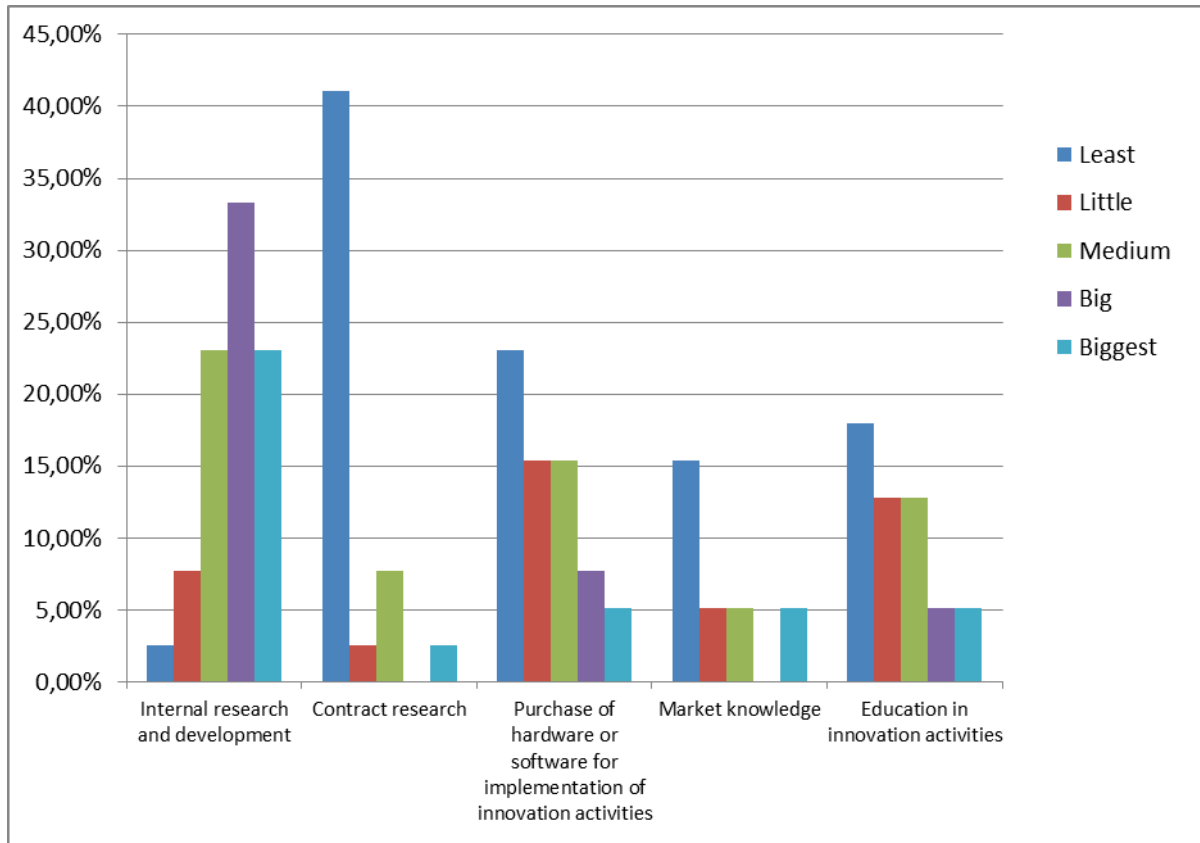

The direct involvement of employees of enterprises in innovative activities developed by the companies isn't great or important except in the cases of internal research and development. It is interesting that not even in the know-how or software market the involvement is serious.

A single digit number of business indicates that holds patents.

The 80% of the sample companies do not know what Responsible Innovation is. The need for information is more that obvious.

4.1.4. Answers about Responsible Innovation and about cooperation and source of information related to Innovation Activities
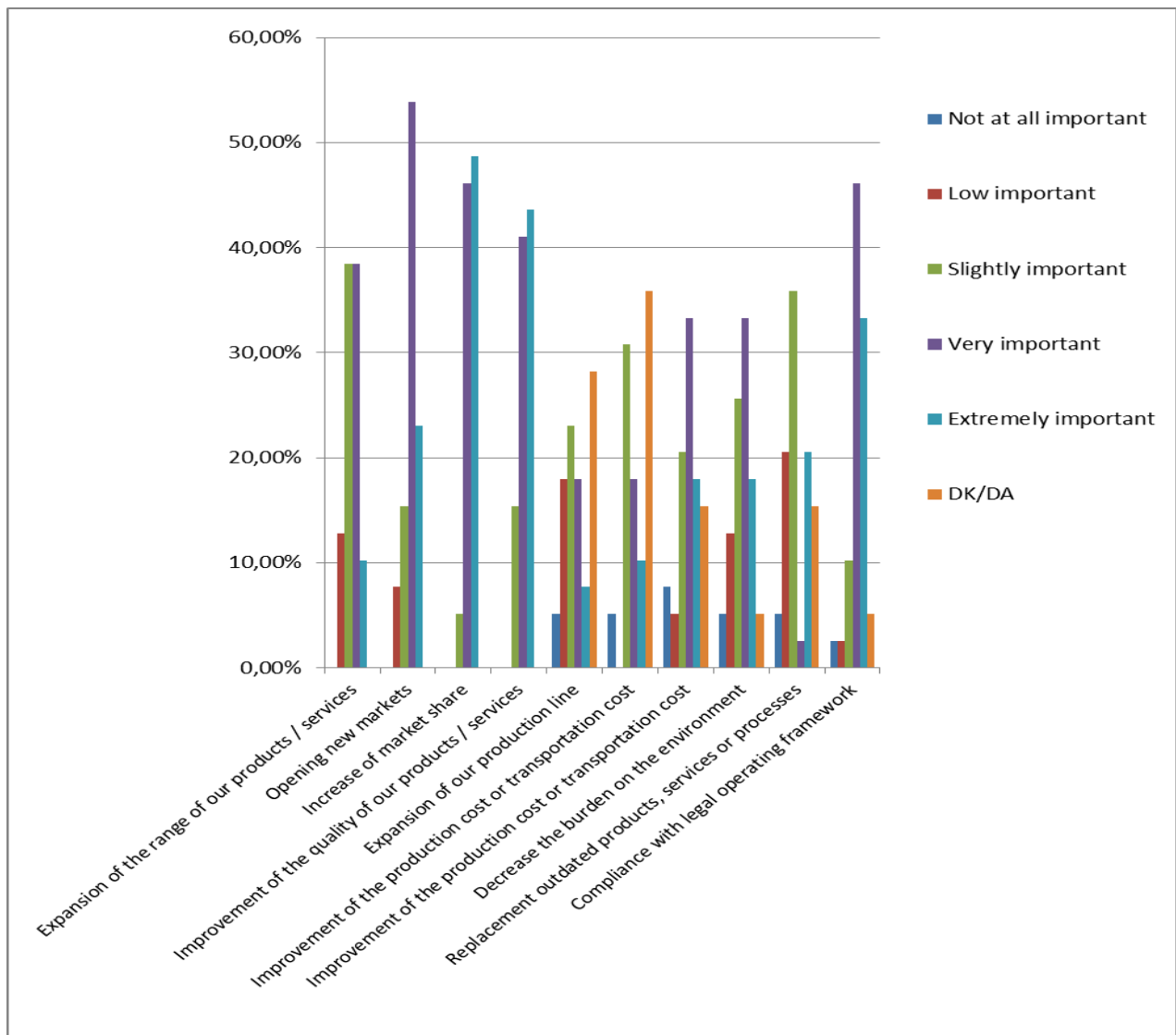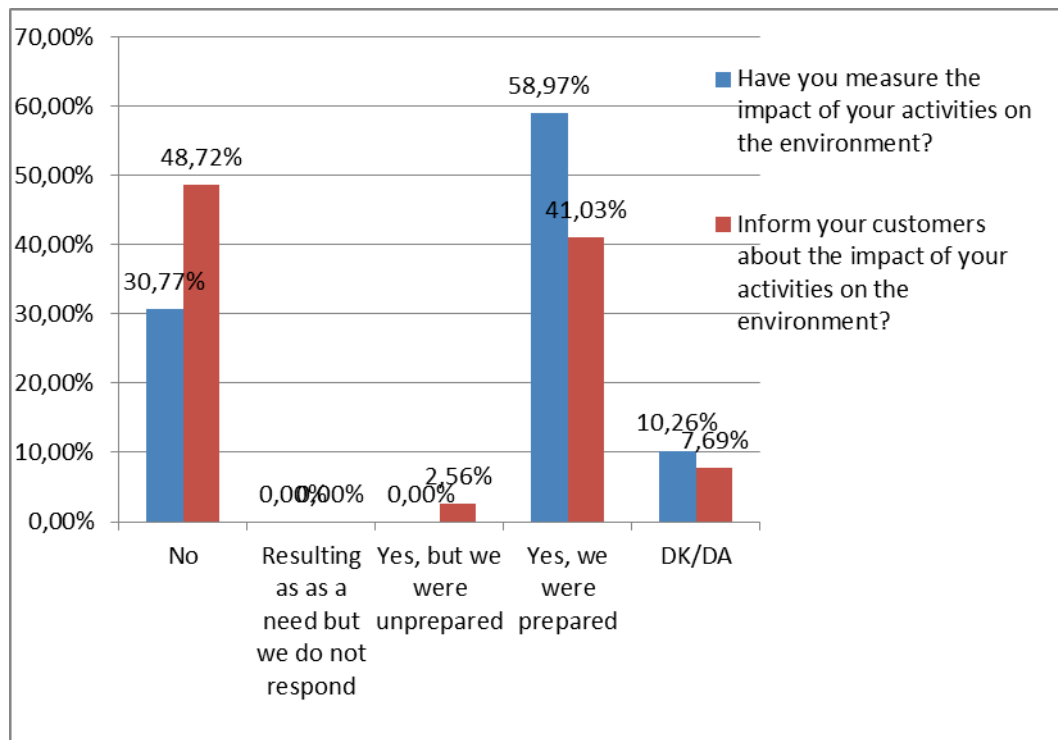
The major factors that influenced the decisions they took the business on innovation activities in the last 3 years are: Increasing market share; Improvement of the quality of products/services; Compliance with legal frameworks; Opening up new markets

A 26% holds a HACCP certificate, virtually all food companies in the sample. No companies are EMAS certified.

The 65% of the companies holds an ISO, a percentage that could grow and will grow as half of the remaining 35% of enterprises intend to be certified in the next 1 to 3 years.

The vast majority of firms believes and declares that their activities are friendly (80%) or almost friendly (15%) towards the environment

Bar chart with axis from 0,00% to 70,00%.

Legend:
- Have you measure the impact of your activities on the environment? (blue)
- Inform your customers about the impact of your activities on the environment? (red)

| Category	Have you measure the impact (blue)	Inform your customers (red)
No	30,77%	48,72%
Resulting as as a need but we do not respond	0,00%	0,00%
Yes, but we were unprepared	0,00%	2,56%
Yes, we were prepared	58,97%	41,03%
DK/DA	10,26%	7,69%

or inform their customers about that impact, half of them replied that they have not figured out and not inform their customers and the remaining half that yes they do so and were prepared for it.

A 70% of businesses have recycling activities within the same company.
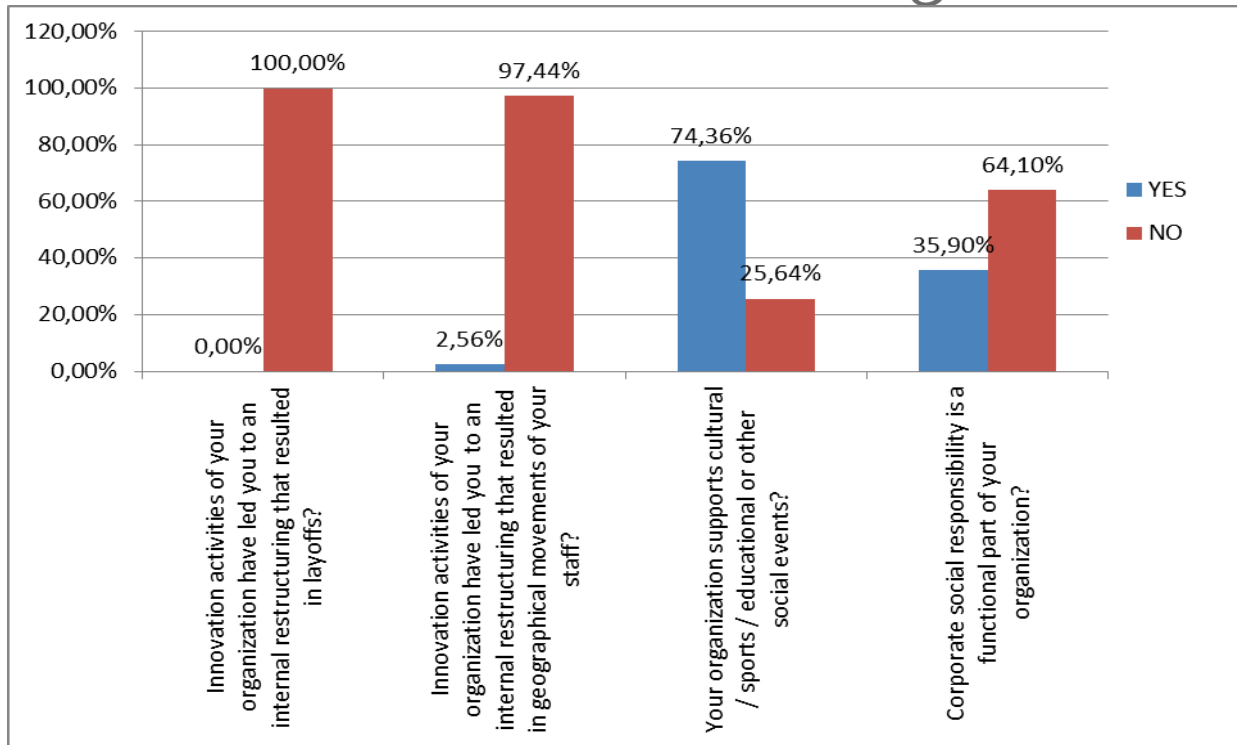
* The innovation activities of enterprises did not lead to internal restructuring that resulted in job loses.

* The innovation activities of enterprises did not lead to internal restructuring which resulted in geographic movements of staff.

* A 75% of businesses support cultural/sports/education or other social events.

* Only in 36% of companies corporate social responsibility is one of their operating parts.
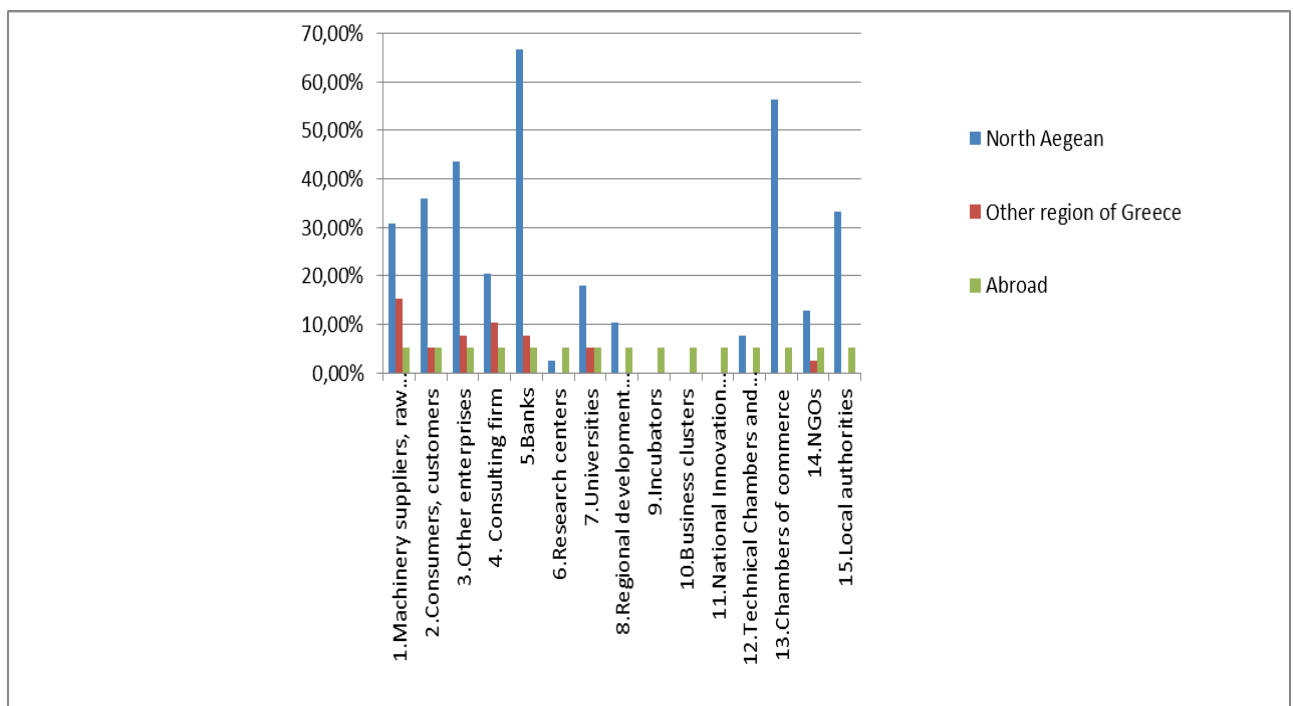
The vast majority of all cooperation (where and when these occurred) originated and takes place in the North Aegean and only suppliers of machinery and consultancy firms in the first place and then Universities, show a little mobility and cooperation with actors outside the region but always within Greece.
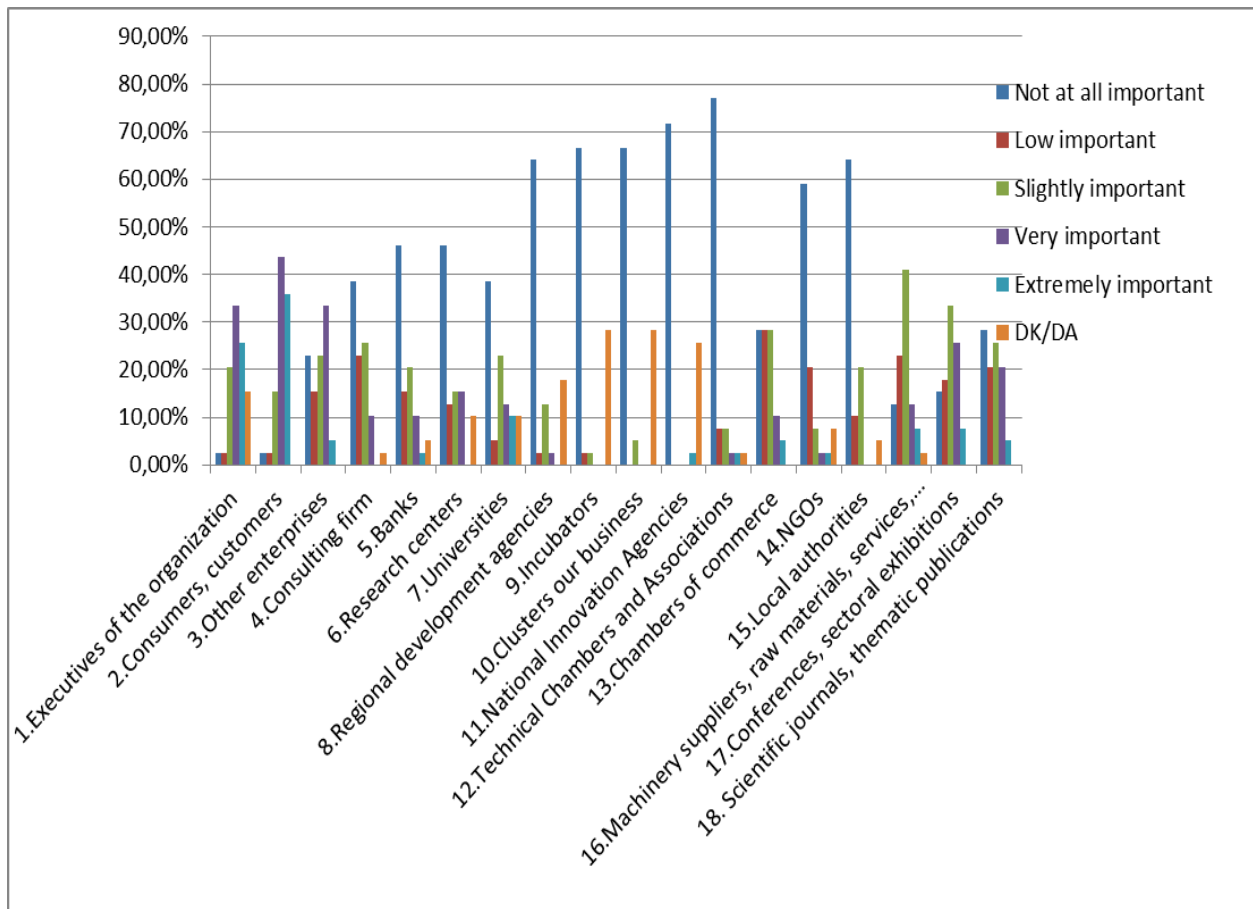
North Aegean companies consider as non significant sources of information (they do not take them into account when implementing their Innovation Activities), such as, National Innovation Agencies, Business Clusters, Incubators, Universities, Local Authorities, NGOs and all stakeholders generally with institutional and public character.

Businesses do not consider any source of information totally or at least very important and state that they take into account mainly their consumers – their customers, some sectorial exhibitions-conferences, sectorial journals, their own managers and less consultancy firms and their suppliers.

4.1.5: Conclusions-Proposals

Summing up the results of this study and the analysis we concluded that the North Aegean's companies have not been updated for what and how important is Responsible Innovation for their own business and for society itself. From the results of this study can easily been seen that innovation activities in NA is still at an early stage for the particular market.

The largest percentage of businesses included in the survey has invested mainly in products and less to innovation services in order to enhance their export profile and to boost marketing and diffusion of their products. Very few things are happening in innovation regarding the organizational structure of the businesses themselves.

Important findings of these interviews, in the form of a questionnaire are that:
- The North Aegean companies are self-centered and are not opened to collaborations either with other companies or other organizations related to innovation.
- They are not aware of the issues of responsible Innovation as it happens with the majority of enterprises and institutions throughout Greece and Europe
- They do not fall short in terms of new products or processes. The problem lies in marketing-promotion innovation and organizational innovation.

North Aegean's businesses are still at an early stage in the field of innovations. The good news is that the interviews demostrated that businesses from their side, in their biggest percentage at least, show a positive attitude in innovative development. However the high cost of innovation, combined with the significant lack of funding is the biggest obstacle they encounter in this development. If we add here the current very difficult situation in terms of liquidity in the market, the situation becomes much more difficult.

Summarizing, therefore, we can say that the innovative entrepreneurial activity in the North Aegean is in an evolutionary phase. What is missing is the business risk. Of course we must not forget the factor of funding, which is clearly of the utmost importance. With proper funding and the necessary business risk, investing correctly and with more confidence in the innovative management and marketing the current situation in North Aegean business could become much more powerful.

As observed during the last three years, the innovation does not evolve in the market with the pace that everyone would like mainly because of the economic crisis. It is necessary therefore to provide facilities and incentives for developing innovations. In addition seminars and workshops could be run for business awareness and information. Through the meetings, these businessmen will be able to discuss with their competitors and have a full picture of the market for innovation demand.

Also partnerships between research institutions and enterprises deemed of great importance. The funding of Universities and Institutes for research in innovation can evolve

quickly the innovation from the planning stage to implementation. In this way the companies will consult on their activities qualified entities.

Unfortunately the concept of Responsible Innovation is an unknown concept and this is a fact for all the Greek territory and perhaps for a very large majority of European Institutions and Enterprises. The structure of Enterprises in the North Aegean and the social environment, allow enough optimism toward actions and activities for Responsible Innovation and meaningful actions on corporate social responsibility.

5   SWOT analysis

The SWOT analysis disposes the finding of the local analysis based on the fact if they can be qualified as strengths or weaknesses in the given strategic territory. The analysis use different methodologies to create input, which gives ideas regarding the current and future situation of the given strategic territory and these result can be presented in a clear way thanks to the structure of the analysis.

It is well known that **SWOT** is an English acronym composed by the capital letters of 4 words:

- **S**trengths – internal factors: these are positive factors, which work appropriately, but with the project results can be influenced to become more effective and beneficial.
- **W**eaknesses – internal factors: these factors do not work appropriately, but they can be influenced and developed be by the project results to become positive factors.
- **O**pportunities – external factors: these are given, positive external factors, which can't be influenced by the project results. Building on them, we can capitalize on the Strengths.
- **T**hreats –external factors: these factors are barriers, negative external factors which can't be influenced by the project results. They can reduce the possibility of success, so they should be taken into consideration because they are the risk factors.

Figure 1 The traditional 2x2 SWOT-matrix

Source: David Morris

Table 1.   The SWOT matrix of the Province of North Aegean

Strengths	Weaknesses
- Good quality and variety of local agricultural products. - Exceptional concentration of cooperative activities (mainly woman cooperative businesses) - Rich culture. - Many SMEs produce and export local agricultural products. For example, mastic production in Chios is a global monopoly. - The University of the Aegean plays an important role in the promotion of innovation of the region (however, there are lacks in connection between the entrepreneurs of the region). - Public R&D investment but limited to infrastructure projects. - Presence of Greek banks, with financial products, concerning access to finance. - University of the Aegean has many researchers in various fields (600 in 2009). - In 2009, 5,000 workers were involved in science and technology (education, occupation) in the region. - According to infrastructure, there are many airports in several of the islands in the region (Chios, Mytilini, Samos, Ikaria, Limnos) and ports. - Governance fund education and workforce training through the national social security system. - There is favorable taxation, compared to mainland Greece. - Rich and pure biodiversity. - Entrepreneurial culture (especially in Chios).	- Low productivity across industries in the region. - Many infrastructure facilities need further improvements (ports, roads, etc.). - New energy sources or expansion of existing are needed. - Ageing population. - The cooperation among the industry sectors is low. - Small firms are focused on the region's markets, which are too small. - Average educational level of the region's workforce. - Highly educated workforce is usually temporary in the region and the offered opportunities are not able to reside permanently the workforce in the region. - There are gender inequalities on access to the labor markets in the region. - Low adoption (use) of new information technologies. - No recent patents or patent applications. - No high tech companies and no medium tech companies. - No venture capital firms and business angels. - Low private R&D investments and venture capital investments. - The majority of those involved in science and technology are involved in the education part, according to human capital. - Many of students, who come from outside, they return to their home regions after graduation. - Limited number of foreign post-

• Natural advantages for tourism. • Good quality of food and drink due to the region (origin). • University attracts skilled students and help in development and diffusion of technologies into regional firms. • Regional government agencies such as, RF, IMA, have established cooperation.	graduate students. • No executive education. • Limited life-long education. • There is no business incubators (private or public). • There is high bureaucracy in starting or closing a business. • There is no patent application office. • There is a small number of firms that take benefit of state-subsidized for the workforce training. • Insularity has higher costs for businesses that operate from the islands. • Lack of quality services for business support. • University is disconnected from regional enterprises, even if there is co-operation.
Opportunities • Protection and correct manipulation of natural and cultural resources. • Improvements in transportation in order to "connect" the region with the rest of Greece and Europe in order to help businesses from isolation. • Turning its "frontier region" position into a position of "port of entry" to the Europe. • Expand the region's tourism industry. • Increase cooperation among the firms in order to lower their costs, as well as develop joint products and services. • Be more outward facing about new markets. • Better links and generally cooperation with the University of the Aegean, the region tries to establish academic and research institution. • Greek government (and EU) funds the link between SMEs with the	**Threats** • The country has affected by economic crisis, the same and region of North Aegean. The efforts are focused more on containing public deficit rather than achieving growth. • Economic crisis decrease the number of people (and especially skilled workers), which want to stay or to move into this isolated region, as is North Aegean. • Local entrepreneurs find it difficult to differentiate their products and services from competition (within and outside Greece). • Local workforce finds it difficult to constantly adapt to technological innovations. • There is a restructuring of the regional public sector in Greece delay somehow the award of public funds. • There is no clear strategies that offer access to seed and venture capital, beyond bank loans. • There are no clear policies to attract

University and other R&D institutions. Especially the life-long education in the region. • Funding from the Greek government to increase innovation through development of a regional business incubator. • Access to EU funds and Greek government funds. • Large community of emigrated inhabitants from this region who may be like to invest in their motherland. • Large number of Greek ship-owners who may be like to invest improving the economic profile of the region. • The Greek government propose a new legal framework to help new entrepreneurial ventures become faster than past. • New legislation for SME development with tax subsidies. • There is a new structure of regional public administration since 1/1/2011, giving space for new ideas and propositions. • There is a new legislation that provide public loans, investments and public support for business start-ups. • A new legislation for tax credits on SMEs that reinvest on sales proceedings in the growth of the firm. • Motivations to skilled workers and businesses to move and reside in the region. • Exploitation of tourism from Turkey and other non-EU countries. • Rich potential for new products and services based culture of each of the islands in the Aegean region. • Good digital network connection and improving usage of Internet potential.	external know-how, such as consultants. • There is lack of technology-skilled workers. • External migration leads to reduce "good brains". • Potential conflict between development of tourism and the island biodiversity. • There is a lack of experience in designing and implementing innovation measures. • Risk of lack of 'joined-up' regional development policy (programmes and funds) and of mainstreaming of successful actions.

6 Development oriented "special" SWOT

The above presented factors of the SWOT analysis are used to indicate and present the situation of the territorial unit, but in this form they can't be used to mark the possible directions of the strategy. This is the reason, why we extended 2x2 SWOT matrix, and apply its innovative version with external and internal boxes. This developed version is used as the link between the situational analysis and the strategy.

The "special" SWOT analysis gives the opportunity to evaluate the result of the analysis regarding the consequences of the findings to the strategy and based on these inputs can be decided which areas will be important to investigate and take into consideration during the creation of strategy. The extended framework allows to draw conclusions and to use the results to build up the strategy. Moreover, in the context of the examined strategic areas it contains findings, which reflects the expectation of the future.

In the practice, it means that the boxes presented above will be the external boxes of the extended frame and in the inside boxes will appear the possible strategies of the common part of the external boxes as presented in the figure 19.

Figure 2 "Special" SWOT Analyses

	Strengths	Weaknesses
Opportunities	Strengths-Opportunities Strategies	Weaknesses-Opportunities Strategies
Threats	Strengths-Threats Strategies	Weaknesses-Threats Strategies

Table 2. *Special* SWOT of the North Aegean territorial unit

Special SWOT Analysis	Strengths	Weaknesses
Opportunities	**Strengths-Opportunities Strategies** • Reinforcement of Cooperative Movement and improvements in transportation in order to increase promotion and sales of the unique products (mainly agricultural) of the region. • Facilitating University Initiatives in order to attract students and researchers with qualifications to help-assist-consult firms to improve their performance. • Improvements of ports and airports infrastructure in the islands of the region for better and more effective connect ability to Greece and Europe. • Exploitation of natural advantages of tourism attracting new visitors and investors in diverse forms of tourism.	**Weaknesses-Opportunities Strategies** • Increase of industry productivity through the new improvements of transportation. • Supporting – facilitating the return to North Aegean of the young population after finishing their studies or their first years of work experience. Cooperation with the University of the Aegean would help and accelerate it.
Threats	**Strengths-Threats Strategies** • Providing solutions to the problem of adaption to technological innovations of local workforce. • Increasing the percentage of technology-skilled workforce with initiatives such as "working force involvement in science and technology (2009).	**Weaknesses-Threats Strategies** • Facilitating Actions (targeted training) in order the assist local entrepreneurs to find their way to differentiate their products and services from competition.

7.

7 Best practice of the Partner

The best practice has 2 significant functions within the project.

On the one hand, they help us to identify some positive, on-going initiatives on which we can build during and after the FaRInn project.

On the other hand, they can be of interest to other project partners, who can learn from the experiences and, possible, try to implement similar actions in their own territorial unit.

Within the FaRInn project, no specific criteria have been set for defining a Good Practice at this stage.

The responsible innovation, which through the entrepreneurial activities could lead to economic welfare and growth, should be made one of policy tools for sustainable development for regions, such as the North Aegean region.

The analysis of the status regarding Responsible Innovation in North Aegean Region demonstrated among others the lack of targeted training of the local entrepreneurs and the young and potential work force. All traditional forms of training have been not as successful as designed for and wanted.

One good and successful practice that used in the Western Macedonia Region is the "training by example" of local entrepreneurs, self-employed through well structured "mentoring". This initiative - practice was implemented for the first time by the University of Western Macedonia and many entrepreneurs and self-employed from the region were participated.

This practice had two phases. The first included the selection of the mentors and their training in order to became "mentors". The selection of the potential entrepreneurs and their training (basics of entrepreneurship and world wide markets) run in parallel but, and that was very important, without mixing those two groups. The second phase started with the match of mentors not with the students but with their proposed idea presented in the form of a draft business plan. Students shared those ideas and concerns with entrepreneurs and entrepreneurs helped them to further develop it and even start their own business. Special emphasis was given to all aspects of Responsible Innovation such as ethical, environmental, economic.

It was very encouraging that from the first year a number (even a small one) of new business were started and two of them were participated in venture capital events.