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The Development of the Islands – European Islands and Cohesion Policy (EUROISLANDS)

Targeted Analysis 2013/2/8

Inception Report



This report presents a more detailed overview of the analytical approach to be applied by the project. This Targeted Analysis is conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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Inception Report Annex

Please also consult this Annex which contains further information, clarifying and complementing the information given in the Inception Report

1 Insularity and Attractiveness: the general approach

1.1. Territorial cohesion and sustainability: the overall goal

“Territorial cohesion is about ensuring the harmonious development of all *the European* places and about making sure that their citizens are able to make the most of inherent features of these territories. As such, it is a means of transforming diversity into an asset that contributes to the sustainable development of the entire EU”, was communicated from European Commission to the other European Institutions (EU, Turning territorial diversity into strength, 2008, p.3).

European Commission also underlines that “many of the problems faced by territories cut across sectors and effective solutions require an integrated approach and cooperation between the various authorities and stakeholders involved. In this respect, **the concept of territorial cohesion builds bridges between economic effectiveness, social cohesion and ecological balance, putting sustainable development at the heart of the policy design**”.

The concept of a territorial dimension within the European Union is hardly a novel idea. After all, the various structural policies that have been issued over the years by the European Regional Development Fund (ERDF), the European Social Fund (ESF) and other agencies have aimed, at least in part, to rectify regional imbalances and reduce core-periphery disparities. However, the traditional thinking of dealing with such issues through the twin aims of social and economic cohesion simply did not go far enough. **Most importantly, the top-down sector-specific policies and programmes that were issued within the framework of the search for economic and social cohesion were often contradictory, reflecting minimal coordination between the various agencies responsible for these actions.** This meant that all too often, in the past, the attainment of balanced forms of development within various regions throughout the European Union has remained an unattainable objective. Moreover, the dominant approach until now has been one that has implicitly treated the issue of regional inequities as one between advantaged and disadvantaged places, failing to recognize that territorial diversity can actually be a key strength, one that can lead to ‘sustainable development of the entire EU’ as mentioned above. The underlying principle behind territorial cohesion is that all regions throughout the EU should improve their competitiveness and through this, enhance the quality of life of their citizens whilst ensuring

that environmental (natural and human built) resources are not compromised.

EU has already accepted that "The concept of territorial cohesion extends beyond the notion of economic and social cohesion by both adding to this and reinforcing it. In policy terms, the objective is to help achieve a more balanced development by reducing existing disparities, preventing territorial imbalances **and by making both sectoral policies which have a spatial impact and regional policy more coherent**" (CEC, 2004, p. 27).

What this could mean for regions with specific geographical features and particularly the islands? Answering this question is the main goal of the present study.

1.2. Areas' attractiveness and territorial cohesion

The settlement pattern of the European Union is unique (EU, Turning territorial diversity into strength, 2008, p.4) but uneven; it is even more intense concerning economic activities. Territorial cohesion asks for more "balanced development" as there is ascertained "the excessive concentration of economic activity and population in the European "pentagon", the imbalance between the main metropolitan areas and the rest of the countries, the growing congestion and pollution and the persistence of social exclusion in the main conurbations, the presence of rural areas suffering from inadequate economic links and peripherality, the sprawling nature of urban growth, the accumulation of natural and geographical handicaps in outermost areas" (ESPON, TIP TAP 2013 Project, Inception report, 2008 p.13).

But what can explain the actual spatial pattern that –it has to be underlined- is not stable but under perpetual change through the centuries following major socio-economic changes? What features do attract people and activities within some areas, mainly in the European pentagon?

The attractiveness of an area within the dominating development model has been based on economies of scale (increasing output), low transport costs (high accessibility) and agglomeration economies (positive external economies) in order to achieve low production cost, necessary condition to be competitive. This means availability of human capital and natural resources, good transport infrastructure but mainly low distance from the production and consumption centres plus

urban agglomerations. These features have led by the cumulating effect to high concentrations and unbalanced development within the European territory concerning industry, decision making, administration, transport activities, knowledge, communication facilities, tourism, other services and population.

Is this pattern changing now?

According to the French Interministerial Delegation for Territorial Planning and Competitiveness (DIACT, <http://www.diact.gouv.fr/>), attractiveness has to be considered into its global context; taking into account economic, demographic, social, cultural and environmental aspects, attractiveness sets the question about the functions of a territory. DIACT considers that there are different factors contributing to a territory's attractiveness, which are not easy to rate.

These factors could be classified as:

- **Economic, technical and financial environment:** size of the market (final demand, size population, revenue), fiscal system, quality of industrial environment (agglomeration of activities), presence and quality of services for business, R&D environment, support mechanisms for enterprises.
- **Network of transport** (accessibility): organized and diversified.
- **Human resources:** diversification and quality of education and training system, labour availability, productivity and qualifications.
- **Quality of life:** Natural and urban environment, access to collective and private services, quality of services, security for people and goods.
- **Actors' organisation** (social capital): confidence, cooperation, dialogue among actors, quick implementation of common projects, social innovation.
- **Region's image:** image of the main urban centre, sectoral excellences, quality perception of natural and urban areas, valorisation of big projects concerning public equipment (energy, water, sewage, health etc) supply.

On the issue of attractiveness for population, "most economists currently conceptualize human capital as a stock or endowment, which belongs to a place in the same way that a natural resource might. But the reality is that human capital is a flow, a highly mobile factor that can and does relocate. The key question then becomes: What factors shape this flow and determine the divergent levels of human capital across regions?" (Mellander and Florida, 2007, p. 6). Wage levels, economic opportunities, university presence, land rent, quality-of-life amenities (consumer and personal service industries such as

restaurants, theatres, and museums), the lifestyle (in the form of entertainment, nightlife, culture, and so on), production of artistic and cultural amenities, tolerance and openness to diversity, are considered to be the main parameters of attractiveness.

One of ESPON's recent findings is that "Low urban influence, low human intervention" areas had recorded rather good results on the European average during last period in most of socio-economic indicators (ESPON, Monitoring Territorial Development, p.43). Is it an indication that the way it is analysing the situation and the attractiveness of regions is changing and other parameters -as "quality of life"- but also socio-institutional parameters (social capital, governance) and features of the organisation of the local productive system (local networks), are becoming part of the attractiveness and competitiveness characteristics of territories?

"Attractiveness and liveability of an area do not only depend on the hard and tangible factors such as infrastructure, human capital and risk of hazards. Soft location factors are of increasing importance for an area to attract both investments and also skilled labour. Soft factors like governance, culture and high quality urban and natural environment are important parts of regions' territorial potential and offer synergies for jobs and growth agenda" (ESPON, Territory matters for competitiveness and cohesion, 2006, p. 7).

1.3. Islands characteristics as permanent obstacles for attractiveness

According to the Green Paper on Territorial Cohesion "three specific types of region in some cases face particular development challenges: mountain regions island regions the 18 sparsely populated regions....." (EU, Turning territorial diversity into strength, p.8).

Islands characteristics¹ as small size, remoteness and isolation are not compatible with the attractiveness principles of the dominating development model². Activities on islands:

a) cannot enjoy the privilege of economies of scale as islands have limited variety and quantity of resources,

¹ For a complete reference to islands characteristics, see Annex 1.

² The dominate mode of production is characterised of by a mass production of standardised goods located in or near urban centers; it's the main reason why the islands characteristics have frequently are labelled by the negative term "insularity" rather by the neutral "islandness" (see below, par. 3.1).

b) cannot have good accessibility and low transport cost, as islands are isolated and remote areas

c) cannot profit from agglomeration externalities as islands have limited population and activities.

The decrease of the strategic importance (economic, commercial, political) of islands during the 20th century resulted mainly from: (a) the change of production mode by the prevalence of the mass production and (b) the revolution in transportation system with the "revolution" in land (road and train) and air transportation that combined with the change in the size (and the technology) of ships, marginalised islands.

So, islands territories cannot be competitive "vis a vis" the European mainland (and the worldwide economy) if they try to compete over the same products and services, as they have to face a lot of extra costs. Islands cannot be attractive for the same reasons as the mainland and especially urban areas, as they have different characteristics.

At the same time islands are costly areas for the public sector which has to provide infrastructure (e.g. ports) and services (e.g. transport, health, education, administration etc) even for a very small number of inhabitants.

On top of that, islands are generally characterised by low level of infrastructure and services offered to the enterprises and to the population. As part of the peripheral areas of Europe they are lagging behind the core areas concerning the Services of general economic interest as transport, communication, energy, research and development activities and other public services such as health care services, educational and lifelong learning services, water provision, etc. Consequently the attractiveness of the islands for enterprises becomes even lower.

Educated people (with university degree) are preferring large cities in their attempt to become a part of the knowledge economy; this fact is showing lower employment and career opportunities out of the big cities, fact that aggravates the capacity of the islands' economy for innovation, necessary step for the establishment of a competitive economy. The inadequate level of Services of General Economic Interest, of cultural infrastructures, activities etc, encountered by islands are making worse the level of attractiveness.

Even if the environmental characteristics of islands restrict the gaining of a competitive advantage associated with production cost³, the situation is different with other factors related with the socio-economic lagging of most of the islands. **Islanders, as all European citizens, have to benefit of an equal access to networks and a more efficient and sustainable use of infrastructure and services coupled with the broadest possible dissemination of knowledge and innovation capacity.** Therefore, in order to ameliorate all those parameters conditioning attractiveness, important efforts have to be considered, giving priority to the “softer” ones.

1.4. Islands' policy in order to exploit islands characteristics

The Green Paper on Territorial Cohesion (CEC, 2008), which launches a wide debate on Cohesion Policy, highlights as well the specific types of territories and regions. To better understand the strengths and weaknesses, which a specific region possesses, and to develop policies accordingly, there is a high demand for comparable and comprehensive evidence and knowledge from a European perspective for each type of region them. Against this backdrop, the Green Paper holds the respective subtitle “Turning territorial diversity into strength”.

Apart from that, the Territorial Agenda of the EU (CEC, 2007) already underlined that diverse territorial potentials may form the basis for sustainable economic development. It states that “(...) *the diverse territorial potentials of regions for sustainable economic growth and job creation in the EU must be identified and mobilised. (...)*”

Territory is where processes take place. The challenge is that economic or social processes are not inevitably coupled to specific territories. Some territories favour specific activities, but in a globalised world the territory and its characteristic features do not play the role as in former centuries. Only if regions can transform them into specific territorial advantages and respond effectively and flexible to new demands they can withstand. (ESPON, 2007, p. 17).

This ESPON's research aimed to create a list of the island functions that can lead to general factors of success. Even if we apprehend the classical problems faced by islands, i.e. transport, tourism, energy, water... there are other ways of getting involved in island functions.

³ Even if there is a generous policy to compensate the extra costs for islands, it will be extremely difficult to neutralize them.

What can be said about the role that islands will play in a better distribution of population and activity over European territory? Is the European Pentagon the epitome of a sustainable EU, if one thinks in terms of quality of life, technologies of communication, transport congestion...?

The islands remain significant as depositories of both extensive cultural and biological diversity, and therefore platforms of differences in the context of an encroaching sameness exacerbated by globalisation. Is this function to be only at the service of a tourism approach?

Without going any further here, one clearly sees that the stakeholder's by these simple questions are having a vision for these island territories that requires an integrated policy. The territorial strategies that are implied by a global vision of "Islands" as a unique object of research and political action clearly require the adoption of appropriate policies taking insularity as a whole concept.

So, the study has to analyse which of the islands' characteristics could be turned to comparative / competitive advantages and how:

- The small size, the remoteness and the isolation are characteristics prohibiting low cost production on islands; nevertheless traditional activities on islands use to have small scale, diversified, safe and high quality products. These (agricultural and manufactured) products, marginalised in the past, have now new markets and consumers ready to pay for better quality.
- The particular rich and vulnerable natural and cultural environment plus the unique experiential identity of islanders have to be exploited in order to offer a high level quality of life and opportunities for new (service) activities.

Development cannot be based only on existing activities and "recognised" resources. Development process is a dynamic one, revealing "new" resources, tangibles or intangibles that the local system has to identify and capitalize on them. **The challenge for insular space is to exploit the constantly changing global environment, and make use of the characteristics of insularity as advantages rather than disadvantages⁴.** So, policies (both structural and sectoral) have to sustain this process.

In order to ameliorate islands' attractiveness and to support their comparative advantages, a better "coordination between sectoral and territorial policies is important to maximise synergies and to avoid

⁴ For an analysis of changes in islands' environment and the new challenges see annexe 2).

possible conflicts" (EU, Turning Territorial Diversity into Strength, 2008, p.9). Amelioration of islands' accessibility to Services of General Economic Interest and other services connected with career opportunities and quality of life are necessary to improve attractiveness, which is very low in many cases. Structural interventions; adaptations in the first pillar of CAP, the employment strategy, the environmental policy, the improved access to high quality research, the differentiate regional aid for enterprises; the adaptation of competition and of fiscal policy; could be some of the measures of sectoral policies in order to sustain economic activity (EU, 2008, p.9-10).

2 Methodology and hypothesis for further investigation

The basic assumption is as follows: **an area that is not (any longer) attractive for establishing (competitive) economic activities and attracting or retaining (active) population will witness a reduction of its socioeconomic base and its overall viability, and will diverge increasingly from EU and national goals for sustainable development, as well as those for economic, social and spatial cohesion**⁵. The reasons for this loss or decline of attractiveness may be either attributed to external factors (e.g. globalisation) or to internal socio-economic and environmental parameters (e.g. low level of human capital). Thus, it becomes imperative to apply appropriate policies, which can enhance the islands' attractiveness.

The three fundamental questions that must be answered within the context of this study are the following:

- What is the situation of Europe's islands within the context of sustainable development?
- What has caused this situation? Here, the concept of attractiveness is utilized to search for an answer.
- What policies would be appropriate for increasing the attractiveness of islands and ensure that their development meets the tenets of sustainable development?

Within this framework, the concepts of **attractiveness** and **sustainability** have to be integrated within a common context (Figure 1) for analyzing the situation and revealing problems (question 1); researching the causes that have led to this situation (question 2); and supporting the processes of planning and policy formulation (question 3).

The Figure 1 has to be analyzed in 6 steps:

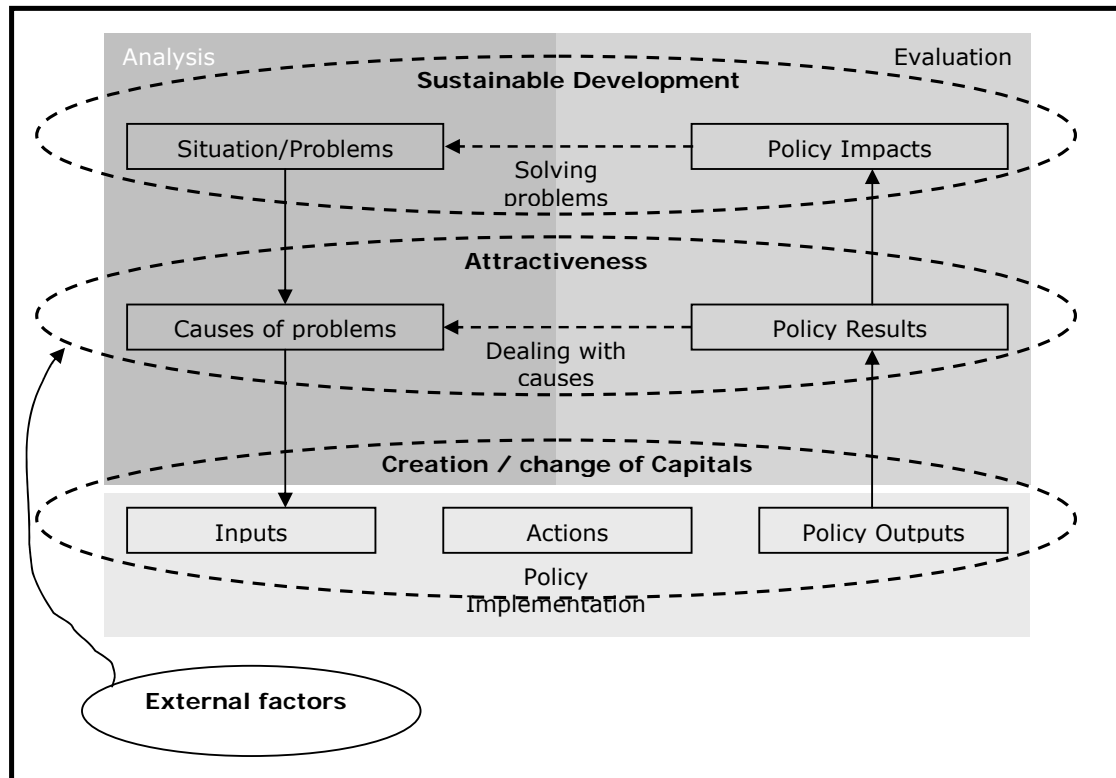
1st step: Analysis of the situation of an area/island within the principle of sustainable development. Detection of problems within the 3 dimensions: economic efficiency, social justice/equity and environmental conservation. *E.g. growth rate of the GDP is lower compared to the national rate; employment is declining in absolute terms when it is increasing at the national level, population ageing; specialization of the economy in low added value activities.*

2nd step: Specification and analysis of the causes of the problems (external factors or internal elements of the regional system) that

⁵ Comparisons have to been made with European and national trends and results.

make the area partly or totally unattractive. *E.g. low investments due to low accessibility of the area, lack of mechanisms sustaining the creation of enterprises, lack of innovation, lack of qualified human capital.*

Figure 1: Conceptual framework for analyzing the islands' state



3rd step: Policy propositions in order to ameliorate the attractiveness of the area. Policy measures affect directly or indirectly the availability of area's capital (economic, human, natural and social). *E.g. Differentiation of investments' grants, amelioration of transportation and communication infrastructures and services, financing of a regional innovation program, creation of spinoff companies, elevation of sea level that decreases natural capital.*

4th step: Policy implementation and policy outputs. Control if the proposed policy measures and plans are materialized. *E.g. availability of grants for enterprises, port and airport amelioration, construction and use of better ships, broadband infrastructure and lower costs for using internet, actions of the local development agency for tourism promotion, seminars for entrepreneurs and employees.*

5th step: Policy results dealing with the detected causes (in short or medium terms). *E.g. better accessibility by ameliorating of port and airport services, using better ships with more services per week, more enterprises using internet services for e-commerce, new patents, local networks creation, amelioration of staff skills, creation of new exporting companies.*

6th step: Amelioration of areas' situation (in medium and long terms). *E.g. Augmentation of employed people, Diminution of unemployment rate, increase of women's activity rate, augmentation of GDP growth rate, emergence of new activities with high added value.*

This framework gives us the advantage of drawing a line between **short/medium-term policy goals** (such as those targeting improvement in accessibility or increase in productivity) and the **long-term policy goals** (such as those targeting sustainability) when formulating, implementing and evaluating policies. The framework also allows us to distinguish between the **issues/problems** and their **causes**, while analyzing the situation of an area, looking to establish a cause-effect link. Parameters describing the situation are the dependent variables and parameters describing the causes are the independent ones.

As it is mentioned on the Figure 1, the same framework is used for the evaluation of policies. More details on this topic will be given in paragraph 2.5.

2.1. Sustainability and attractiveness estimation. The islands' atlas and the islands' monitoring system

As for all the projects dealing with specific territories, it is crucial to determine the studied area and primarily the territorial level of the analysis. Even if islands are "naturally" better defined than mountains or boarder areas, there are still some obscure points. For this project, only one criterion of the EUROSTAT definition for islands (EUROSTAT, Portrait of Islands, 1994)⁶ used concerns the exclusion of islands having a "fix link with the mainland"; that excludes a growing number of coastal islands mainly in North Europe. Unlike, Malta and Cyprus – two island states – are included, as well as islands with less than 1km distance from the mainland. Islands with less than 50 inhabitants are significant in number but they have not affect the analysis as they can be considered within

⁶ *An island is a territory surrounded by water:* 1. inhabited by more than 50 permanent people, 2. not linked to the mainland by a permanent device (bridge, tuneltunnel...), 3. distant by at least 1 Km from the mainland, 4. with no capital of an EU member state.
1. inhabited by more than 50 permanent people, 2. not linked to the mainland by a permanent device (bridge, tunel...), 3. distant by at least 1 Km from the mainland, 4. with no capital of an EU member state.

the sub-group of the very small islands. Finally islands in inner waters are not considered in this study as well as ultra-peripheral islands.

Even though having an exhaustive list of islands for the present study was not necessary, an attempt to record them was undertaken. Based on previous investigations and information collection from different sources, 362 islands were listed with more than 50 inhabitants plus more than 200 small islands with less than 50 inhabitants (Annex 3).

In ESPON 2013 program, islands are listed as one of the specific types of territories that have to be studied in order to offer "comparative insight and understanding on territorial potentials and challenges from a European perspective and to ensure that other (similar) types of territories/regions can benefit from the output of the analysis". **So the analysis has to show off islands' common characteristics in comparison with other European territories taking into account their territorial, administrative and other particularities.** For this reason, the project will address the "*islands' question*" in two different but parallel levels:

- The first level is the horizontal analysis of all islands NUTS II and NUTS III regions, since comparable data are available for them. **This will give a first analysis and comparison with European average using already existing data⁷.** This comparison is indispensable in order to document the necessity of a European island policy within territorial cohesion principles. **More information -as specified in the analysis that follows- will be searched out from stakeholders and the ESPON's national focal points to address specific islands' features that have not been studied yet from previous ESPON's projects.**
- **The second level will be an analysis at the island level - complementary to the horizontal one-, in order to facilitate islands' classification.** Since data is available for a limited number of islands -the European islands which are a State, a NUTS II or a NUTS III area- more data will be collected from secondary sources, plus from field research for 6 islands that have been chosen for this purpose. **These 6 case studies are chosen to be representative of the remaining islands in order to complete the analysis of State, NUTS II and III islands, necessary for the extraction of conclusions for all the European islands and for the monitoring system.**

With respect to the project's specifications and based on the analysis concerning the case studies selection (Annex 4) the

⁷ It concerns comparative data existing in previous works at the EU level as the ESPON Database, the Studies for the ESPON 2006 programme and other European Documents (mainly documents of DG REGIO).

information research effort will be concentrated on the following 28 islands: **Cyprus as Sovereign state, Aland mainland, Corse, Sardegna island, Sicily island and Crete as NUTS II and Gotland, Isle of Wight, Lewis and Harris, Orkney mainland, Shetland mainland, Bornholm, Majorca, Minorca, Kerkyra island, Lesvos island, Malta island, Zakyntos island, Kephallonia, Samos island, Chios island and Gozo as NUTS III islands (22 islands in total, 7 islands from the north and 15 from the south) plus the 6 case studies: Saaremaa, Samsø, Kokar, Ibiza, Salina, Kalymnos-Lipsi (3 from the north and 3 from the south).**

The classification of the islands, necessary in order to draft island policy it will be based on the analysis of these 28 islands; nevertheless information for other islands is also welcome, as it will give a “clearer image” of European islands.

In order to respond to the questions raised in the previous paragraph and generally to set up a monitoring system for the islands, there is a need for quantitative and qualitative information that has to fulfil 3 principles:

- to be scientifically sound for responding to the submitted questions,
- to be based in a large part on existing data and indicators to limit cost and time needed for their collection and to facilitate comparisons within EU,
- to be pertinent for islands, taking into account insularity characteristics.

But, **what is the aim of a monitoring system for islands?** “Spatial monitoring aims to measure and to analyse spatial phenomena in order to interpret the living conditions of people, business conditions and to explain the differences with regard to an equivalent and balanced territorial development. This information is not only needed for the spatial structure, but also for elements that influence and change the spatial reality. Spatial monitoring must satisfy both the demands for an analytical base for sound spatial analysis and also for the varying political demands enabling the evaluation of policy strategies and the assessment of the achievement of policy aims. A policy-oriented spatial monitoring system needs the sound base of indicators to cover a detailed and profound demand for information arising from the need of interpreting different regional levels and also enabling a detailed thematic evidence base” (ESPON, Tentative Spatial Monitoring Report, 2006, p. 8).

“Continuous monitoring of spatial development, mostly based on the analysis of quantitative indicators, is a major tool for policy-

makers to assess recent development trends, identify problems and communicate needs for action. Monitoring is also vital to be able to present the results of “successful policies” and to compare general policy values and concepts with actual states and perspectives of the territory” (ESPON, Tentative Spatial Monitoring Report, 2006, p.14).

To set up the monitoring system, 3 steps have to be followed:

- Describe the **parameters** to be taken into account,
- Define the **variables** and **indicators** necessary to respond to expressed needs (***routine indicators*** and ***wish list indicators*** according to ESPON’s definition),
- Define the **proxy variables** as substitutes of non-existent / non available variables.

Accordingly different European Sources (ESPON, Eurostat, EEA), data are generally available for routine and proxy variables at State and NUTS II level, but not always at NUTS III level. Few of them exist for NUTS 5 or LAU 2 level. Information for wish list indicators has to be provided for all levels.

It has to be stressed here that a pertinent monitoring system for islands has to include:

- information (quantitative and qualitative) dealing with islands’ particular features,
- information on the island level, irrespective of the administrative unit it belongs to.

An overview of the information system is presented in the Annex 5

a) Analysis of the situation of islands

Based on the aforementioned discussion, **the answer to the first question ‘what is the situation of European islands within the context of sustainable development?’** rests on the goal of fleshing out the differences that separate islands from the EU -27 as well as the national entities in terms of various sustainability indicators. Specifically, it is important to monitor how the islands vary from the EU and national means in terms of measures of economic efficiency, social justice and equity, as well as environmental conservation.

Regarding the **efficiency of an area’s economy**, it is necessary to record how effective and competitive the area’s economy is today and to provide information about its perspectives. The main parameters and variables to be considered are the following⁸:

⁸ The list of data needed are presented in the Annex 6

The efficiency - competitiveness of an economy is measured by the evolution of the output (growth) of the productive system in question in units of GDP. The more competitive an economy is, the more products and services it produces. The following indicators are proposed to describe the situation and to allow comparisons between the different areas and through time; they are also necessary to show the relative position (divergence-convergence) of each examined area with the areas of reference (EU 27, member states):

- GDP per capita
- GDP per employee, which measures the productivity of the specific economy
- Change rate of GDP and GDP per capita

In the case where no data of GDP can be obtained (data of GDP generally are not available at level lower than NUTS III), employment and the rate of change of employment are proposed as proxy variable-indicator.

With regards on showing the level of development of the economy and its prospects in time, it has been considered that qualitative information is more requisite, and thus the following parameters are proposed:

- Weight of competitive economic branches: As competitive economic branches are defined the ones which export, as well as, the ones that cover local needs which could be replaced by imports. For both categories stands that, when these economic activities are no longer competitive, they get reduced or they stop producing locally. This category includes the primary sector, mining and manufacture, as well as tourism and services to enterprises where, the sectors of construction, energy and other services (commerce, banking, transport, administration, education, health care, personal services....) are placed among the non competitive economic activities⁹.
- Qualitative characteristics of the main branches: all branches do not contribute in the same way on the development of an area. Branches which produce products and services with increasing demand, low competitiveness and high added value (integration of advanced technological capital and employment of qualified human capital in creative functions) have an enhanced potential, a better

⁹ The analysis on a two digit statistical code for which there are data at a local level, contains sub-branches which could be included in a different category, but it is considered that the error is small with respect to the information obtained. Also, the technological turns (development of e-shopping, e-booking and buying of tickets, e-banking, long distance education) result on a shift of the localisation of some services considered as "residential", contributing on the "shift" of the boundaries between competitive and non competitive branches.

yield/profit, while they have a more promising prospect. For example, the specialization of an area into agricultural production, into weaving/textile manufacturing or into mass tourism, is not the same as being specialized into computing and communications, biotechnology, organic products, or special interest sustainable tourism.

- Degree of dependence on main activity(ies)-monoculture: the dependence of a local economy on one or a very limited number of producing (competitive) branches can not be considered as an evidence of economic stability, since it is relatively very fragile and susceptible to changes/shifts or crisis. This refers specially to the dependence from "traditional" and declining branches, while, is valid even for the "modern" branches (new economy), over-dependence does not underlie a stable prospective.
- Economic leakages: It is generally accepted that economies which have relative low leakages are considered to be "developed", with the sense that the main part of the product being produced remains in the area. It refers to the part of GDP which leaks from an area as the revenue of "foreign" capital invested locally, as income/wages of persons/employees of non local residency, as imports of goods and services. Since the quantification of leakage (or the corresponding degree of coverage of needs/demands from the local production) through the estimation of the multiplying factor of imports, is a difficult task which requires the complete outline of each island economy separately, the use of this parameter, or it will be approached qualitatively, or it will be substituted by the "weight of competitive economic branches". Information on the proprietors of the companies and the localization (residence) of employees can complete the knowledge about leakages.
- Residential economy: it refers to the flux of revenues acquired out of the local production system (from abroad or from another region) by certain residents. These economic agents are people that are living during a period in a place, but their revenues are not coming from a local activity. These are namely the pensioners, the commuters, the tourists and the second home owners'.

Social justice/equity records the diffusion of the benefits arising from economic growth to the overall society; it is depicted in the structure and evolution of the population and in social cohesion. The main parameters to be evaluated are the following:

The population structure and evolution shows the existence or not of a driving force (dynamism) in an area, as a result of the economic development, while it can be affected by the diffusion of prosperity in the local society. More specific, it is proposed to record and evaluate the course of the following parameters:

- Population and population change (absolute change and growth rates, natural movement, replacement rate)
- Migration
- Active population
- Dependent population (>15 years old and <65 years old)
- Aged population (<65 years old)

The parameter of "social cohesion" shows the grade of diffusion of the benefits of economic development in the local society. The proposed parameters and variables/indicators are:

- Unemployment: total, female, young
- Long term unemployment
- Income per capita,
- Distribution of income (grade of uneven distribution of income)
- Life expectancy (it shows the quality of life and the quality of health system)
- Early school leavers (it shows the discrimination in opportunities which is repeated in groups of population with the characteristics of economic and social underdevelopment)

Environmental conservation concerns the capacity of the natural capital to ensure the supply of environmental goods and services to a specific society and to preserve ecosystem functions, in an effort to increase quality of life. Here, both the built and cultural environments are also added to the natural environment, since they are not renewable resources and contribute to the quality of life as well.

Due to the relatively small land masses and isolation, islands are typically land-resource constrained. This limits living space, space for infrastructure, areas for waste disposal, agricultural production, industrial development, water resource availability etc. Additionally, it results at very **vulnerable ecosystems** with high endemism. So, pressures resulting from human activities can have more severe impacts on insular environments, invaliding their capacity to supply goods and services and to sustain life.

Successful environmental management and policies will, and can be, the basis for the success or failure of the economy and the social system. Thus it is important that environmental conditions are monitored at the same time as those concerning human systems to ensure a better interaction between the two.

Bearing in mind also the impact of climate change in Europe and the European islands, especially the small islands since they are among

the most vulnerable, a series of environmental parameters needs to be considered:

- Availability and quality of water resources: It refers to the preservation of ecosystem services and functions that permits the supply of necessary (quantity) and appropriate (quality) water for different uses. Nowadays societies experience an ever increasing demand for water of good quality due to increasing populations and economies (agriculture, industries etc.) and the result is that several regions across Europe face water scarcity. This is more severe on islands, where often over extraction of freshwater resources takes place. There is a need for sustainable use and proper management of surface and ground water, watersheds, wetlands and forests which are important elements of how ecosystems interact with the hydrological cycle, and the avoidance of damage through salinization, extraction of groundwater, and damage to rivers, lakes and other habitats. Also there is a need to prevent deterioration of aquatic ecosystems and ensure reduction of pollution of ground water, and achieve levels of water quality that does not give rise to unacceptable impacts on, and risks to, human health and the environment.
- Coast and seas: It refers to the preservation of ecosystem services and functions provided by the marine-coastal and pelagic ecosystems (fishery, nutrient cycle, waste detoxification). The main threats to European coastal areas and seas are, water pollution and eutrophication, loss of biological diversity, beach loss and landscape deterioration, coastal erosion, over fishing etc. Sewage discharge, industrial and domestic, agricultural fertilizers and ship transport are mainly responsible for the pollution of ground water, rivers, coastal and marine waters, affecting the biodiversity of thousand of habitats and harming human health. Frequent and severe deviations of sea surface temperature could herald shifts in currents, upwelling, weather patterns and climate, and could negatively affects the resilience to other hazards (e.g. for water movements, the spread of and ability of ecosystem to attenuate pollution). Increase of nutrients in transitional coastal and marine waters can result in a chain of undesirable effects, starting from excessive growth of plankton algae, which can increase the risk of local oxygen depletion and reduce biodiversity and nurseries for fish, changing coastal ecosystems. Over-fishing can also have serious consequences for the entire marine environment. Certain fishing techniques, such as trawling, cause damage to the highly important seabed habitat and fish stocks. At the other end of the food chain, seabirds, seals, whales and other marine mammals are affected directly. Also under the Bathing Water Directive (76/160/EEC) Member States are required to designate coastal and inland bathing waters and to monitor the quality of the water throughout the

bathing season to protect the public from accidental and chronic pollution incidents.

- Biodiversity: *It concerns with the preservation of biodiversity and the habitats that sustain it. Biodiversity is crucial to 'ecosystem services', i.e. the services that nature supplies: climate regulation, water and air quality, soil fertility, and the production of food, fuel, fiber and medicines. Quality of life, economic competitiveness, employment and security all rely on this natural capital. Biodiversity embraces the variety of genes, species and ecosystems that constitute life on Earth. We are currently witnessing a steady loss of biodiversity, with profound consequences for the natural world and for human well-being. The main causes are changes in natural habitats. These are due to intensive agricultural production systems, construction, quarrying, overexploitation of forests, oceans, rivers, lakes and soils, alien species invasions, pollution and — increasingly — global climate change. The coverage of protected area, such as the NATURA-2000 network of protected areas, provides a uni-dimensional indicator of political commitment to biodiversity conservation but it doesn't provide information on its effectiveness. The measurement of species diversity on the other hand provides a high-level generic indicator that will show the state and trends of biodiversity in a specific habitat, ecosystem etc. The more endemic and endangered species a natural habitat has, the more vulnerable it is because localized extinction cannot be re-supplied from elsewhere by natural or augmented recolonization and losses of key species can affect ecosystem function. Habitat fragmentation into discontinuous pieces (e.g. from transport infrastructure or urban sprawl), can put pressures on the ecosystems, and relates to habitat disturbance and degradation. The introduction and establishment of alien species into a habitat can result to severe impacts on biodiversity and ecosystem integrity, at the levels of populations, genetics, species and ecosystems through complex ecological interactions.*
- Land use/ quality & Landscape quality: *It refers to the degree of alteration of the landscape from "alien" elements as infrastructures, buildings and other installations. Land cover and land use change rapidly today across Europe, leading to unprecedented changes in landscapes, ecosystems and the environment. Urban areas and related infrastructure are the fastest growing land consumers, mainly at the expense of productive agricultural land and/or forests. Rural landscapes are changing due to agriculture intensification, land abandonment and forest exploitation. The impacts can be direct, e.g. the destruction of natural habitats and landscapes, or indirect, e.g. soil-sealing and deforestation enhancing flood risks, desertification etc. The conversion of natural areas on the coast to artificial surfaces is growing at an even faster rate than population density. Housing*

(mostly secondary housing in many areas), services, recreation and transport infrastructure are the main causes.

- *Quality / Preservation of cultural capital: It refers to the quality of services provided by the cultural capital to the society. It is important to identify cultural landscapes, sites, monuments and cultural facilities, since these resources are usually the ones which help in defining the identity of a place, an area, an island, a region, etc. and they need protection, planning and management policies and actions in order to provide these services.*
- *Soil quantity and quality: It refers to the preservation of ecosystem services and functions coming from soil as supporting agriculture and human life in general, provide a number of very important ecosystem functions that include the storing of precipitation and its infiltration in underground aquifers; providing of water and minerals to plants and the support of vegetation in general; sustaining complex microbial communities that absorb greenhouse gases and transform into minerals waste from living organisms among other function. Soil quantity and quality is an environmental issue of great importance and is mostly related to cultivated soils that are in general under more pressures than the rest, but can also refer to soils that are used in urbanization processes. Apart from the type of land use, farming practices and management techniques are very important for determining the intensity of pressures on cultivated soils. Common threats include erosion and quality degradation that can result in desertification. Degraded soils are less productive and support less diverse ecosystems and this degradation is usually permanent (in human time scales). There are also soils affected from actions such as landfills and waste treatment in general, but also from industrial activities and urbanization. These soils may be severely degraded but on a relatively smaller scale compared to agricultural lands.*
- *Urban environment: It refers to the quality of services provided to and the level of satisfaction of the society. With 75 % of Europe's population living in cities, urban land-use issues are currently of key importance. As a result, the demand for land in and around cities is becoming acute; urban sprawl is re-shaping landscapes and affecting people's quality of life and the environment as never before. Especially coasts are being urbanized at an accelerating speed and population sizes along Europe's coasts are continuously increasing, sometimes even faster than in inland areas. Tourism appears to be the most important activity especially in southern countries and also those on the Baltic Sea, such as Poland and Finland. This activity has a very high spatial and seasonal impact. Urban planning and management have been placed high on the political agenda, with transport and housing as crucial challenges. Cities interact with and influence the surrounding land, thus*

affecting the environment of a much broader area. Urban development results in increased consumption of energy, resources, transport and land, thereby raising greenhouse gas emissions and air and noise pollution to levels that often exceed the legal or recommended human safety limits. Overall consumption, energy use, water use and waste generation go along with a growing number of urban households and industrial zones. The growth of residential areas has primarily occurred on former agricultural land, resulting in the loss of important ecosystem services, such as food production, flood protection and biological diversity.

- *Air quality/ pollution:* Air pollution remains a serious problem and continues to damage our health and the environment. From a human health perspective, the main outstanding air pollution problems are troposphere ozone and particulate matter, where acidification and ozone remain the main threats to ecosystems. Air pollution is a local but also a transboundary issue. Air pollutants released in an area may be transported in the atmosphere and harm human health and the environment elsewhere. Sources of air pollution are varied and may be anthropogenic (man-made) or natural. The pollution and quality of air is also responsible for atmospheric visibility.

b) Causes of existing problems

The second question within the proposed analysis concerns “the causes which have led to the current situation.” The overall context links the existing situation within the area (effect) with its level of attractiveness (cause); the content of this link is examined here. Generally speaking, the low attractiveness of the islands comes, on the one hand, from insularity characteristics whilst, on the other hand, it arises from their generally low economic development level (compared to that of mainland). To be sure, this low level of development is usually linked with some of the insularity characteristics, which cannot be easily modified, if at all (for example, isolation and accessibility). Concurrently, low levels of economic development can also be linked to various other factors, which arise both internally or externally (e.g., the overall state of the economy at the national level or the effects of globalization). Production on the islands became increasingly ineffective in pure economic terms, since imported products turned out to be cheaper and of higher quality, as a result, insular companies moved to the mainland or ceased to operate altogether. This, in turn, caused the loss of the most productive and innovative portion of the population (entrepreneurs, scientists and artists). To make matters worse, following their economic marginalization the islands also witnessed growing political and cultural peripherality as well, and this served to cause

divergent economic and demographic evolution than within the mainland. Therefore, islands became less attractive for economic activities and permanent residence, with some notable exceptions of islands with high degree of tourism development.

Since regional attractiveness has been explored in previous EU studies (mainly in Economic and Social Cohesion and ESPON 2006 reports) a lot of parameters have already been identified: Lisbon performance, labour market, accessibility and hazards are among the most important, even if some variables in these reports are not directly pertinent for the vast majority of islands (e.g., distance from a railway station). This means that certain other parameters have to be added in order to take into account "insularity".

Therefore, in the approach followed here, attractiveness is **separated into two dimensions: the first relates to enterprises and economic activities in general; the second concerns the population.** Attractiveness for enterprises depends upon factors such as economic motivation generated through policies, availability and quality of human resources (labour market, research and innovation actions, access to Information and Communication Technologies (Lisbon Performance), accessibility, access to economic and social infrastructures (public and private), the size of the local market, the quality of governance, the quality of the environment (in terms of providing abundant resources), hazards and security. Attractiveness for the population is related to the living standards the quality of life and livability and depends upon factors such as occupation opportunities, accessibility, access to different economic and social services (public and private), quality of life, naturalness, quality of governance, hazards and security. Table 1 provides a list of these factors.

Table 1. Issues that affect the Attractiveness of Islands for Companies and Population

Attractiveness for	
Companies	Population
Accessibility	Accessibility
Labor qualifications/ cost	Employment and career opportunities
Services & infrastructure in support of businesses /Reception facilities	Access at and quality of public interest services
Incentives for companies	Security
Agglomeration economies /Size of market	Urban dynamism (cultural and social life)
Value of land	Value of land / housing
Research and innovation	Cultural identity

Social capital	Social capital
Governance quality (vision, strategy, mobilization....)	Governance quality (vision, strategy, mobilization....)
Environmental and cultural heritage / capital	Environmental and cultural heritage / capital
Hazards	Hazards
ITC facilities and use	ITC facilities and use
Networking services	

A more thorough analysis of these factors follows, while variables and indicators assessing them are presented in the annex 7:

Attractiveness for Companies

- ***Accessibility***: It refers to the real time needed to access an island, in relation to the respective time necessary to cover the same distance in the mainland, taking under consideration and incorporating the index of cost (cost of sea trip/cost of land trip) (Annex 8)
- ***Labor qualifications / cost***: It refers to the quality of human capital (ex. level of education, training) which can be a criteria for businesses to operate in an area, but also a feature that characterises the performance of those that operate in an area. The labor cost is also an important parameter to a business operation and viability (ex. to bring and keep in a small island a specialist/ expert/ consultant/ scientist it could be very costly).
- ***Services & infrastructure in support of entrepreneurship/ Reception facilities***: It refers to the type of services and facilities/infrastructure which are available to support a new or an already operating business.
- ***Incentives for companies***: It refers to all kinds of direct and indirect subsidies, provisions, or cost reduction policies, which are aiming to reduce the cost, either for the setting up or the operation of an enterprise, as well as the households.
- ***Agglomeration economies/Size of market***: It refers to the size of the local market as a measure to attract enterprises and free lancers, who want to cover the local needs.
- ***Value of land***: It refers to the cost for buying land for enterprises and construction cost.
- ***Research and innovation***: It refers to the production of new knowledge/know how and its incorporation into the production lines and services, recorded in the form of research facilities (ex. research institutes and universities) and scientific employment.

- ***Social capital***: It refers to the degree of trust, cooperation and cohesion that exists between the businesses, the administration, the public and their representatives, as well as between themselves (ex. trust between businesses)
- ***Governance quality (vision, strategy, mobilization...)***: It refers to the effectiveness of the operation of local authorities and the procedures to involve stakeholders to participate in planning and decision making processes.
- ***Environmental and cultural heritage / capital***: It refers to the effective management and the valorisation of the environmental and cultural capital, which creates opportunities for businesses, as well as external economies for activities such as tourism. It is considered as an element of quality of everyday life for the local residents, offering them recreational opportunities.
- ***Hazards***: It refers to all types of danger (environmental, technological and political) that may affect an area, with respect to the risks for the companies and the population.
- ***ITC facilities and use***: It refers to the existence of broadband networks and the degree of their use from the enterprises, the households and the public services of the study area.
- ***Networking services***: It refers to the existence of "proper" services with respect to energy provision, local transportation, telecommunications, water and sewage networks, to support the operation of enterprises (ex. quality and cost of services) and the households.

Attractiveness for Population

- ***Accessibility***: (See *Attractiveness for Companies*)
- ***Employment and career opportunities***: It refers to the possibility of the local residence of an area to find a job relative to their qualifications and their ambitions
- ***Access at and quality of public interest services***: It refers to the existence, the quality and the cost of acquiring the public interest services such as, health, education, training and other administrative (ex. tax services, licences etc.), (transport, communication and energy provision have already being mentioned at *Networking Services*).
- ***Security***: It refers to the existence and the degree of local criminal activities and the sense of safety in an area.
- ***Urban dynamism (cultural and social life)***: It refers to the existence of cultural and social life in an area, something which is related and influenced by its population size.

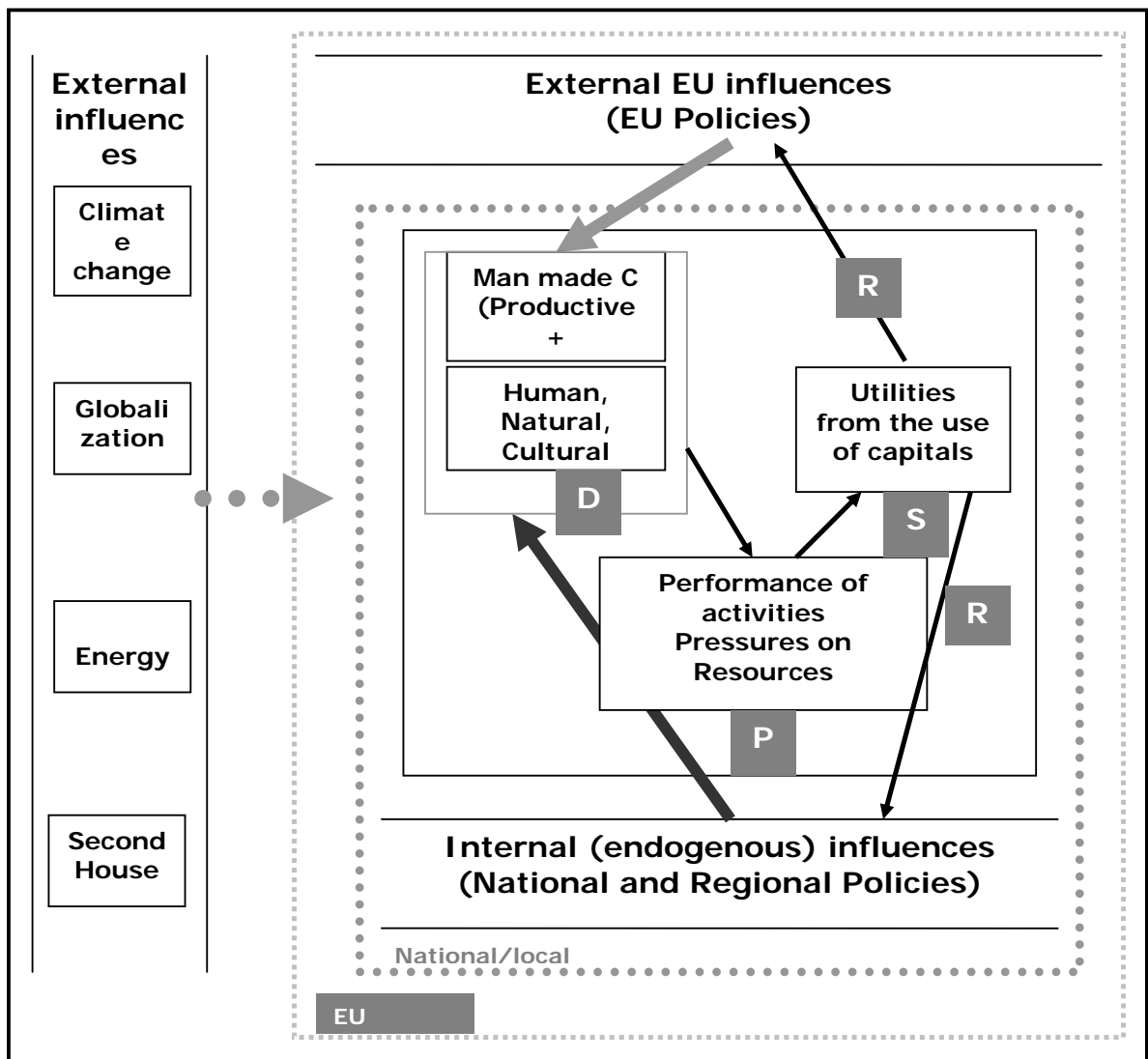
- **Value of land / housing:** It refers to the cost for buying land for housing and its construction.
- **Cultural identity:** It refers to the sense of “belonging” to an area with unique cultural characteristics which gives a distinct identity that can influence the intention to remain on that area or settle as a newcomer.
- **Social capital:** (See *Attractiveness for Companies*)
- **Governance quality (vision, strategy, mobilization...):** (See *Attractiveness for Companies*)
- **Environmental and cultural heritage / capital:** (See *Attractiveness for Companies*)
- **Hazards:** (See *Attractiveness for Companies*)
- **ITC facilities and use:** (See *Attractiveness for Companies*)

c) Policy Recommendation and Assessment

The conceptual framework that has to be used to answer **the third question (“What policies could be applied to increase the attractiveness of islands?”)** must link the internal and the external environment (Figure 2), in order to include some important external influences and demonstrate the complex inter-linkages involved.

It should be stressed at this point that even if the external influences that appear in Figure 2 are selected from a list of numerous global socio-economic and environmental forces because they are perceived to have the greatest impact on islands, the list will actually be finalized during the first part of the project.

Figure 2: Internal and external environment



External factors can influence to a varying degree the attractiveness of the different islands through the types of capital they have to offer. In turn, this would affect their respective state of sustainability. For a more extensive description of this approach is in Annex 9.

d) Data and Qualitative information collection from stakeholders and local surveys

The uniqueness and size of islands makes their analysis more problematic, mainly due to the lack of wide ranging and meaningful comparative quantitative data. The choice of utilizing case studies thus appears a natural consequence for researches in search of deep analytical information, especially regarding elusive concepts such as sustainability and attractiveness.

Case studies are often chosen as they present more opportunities for in-depth and intensive research projects, which tend to grapple with distinctive characteristics of the entity being examined. Nonetheless, this distinctiveness can also incorporate common denominators for other similar entities. Therefore, while each island may be inimitable, other islands can share specific attractive attributes. One of the aims of this study is to find these common denominators where they become evident to have contributed towards making specific islands more 'attractive'. One of the greatest benefits of cases studies is their possibility of offering outlets for both quantitative and qualitative research methodologies.

Case studies are thus able to provide a sharpened understanding of the islands' inherent characteristics, its strengths and weaknesses, and its potential to be an 'attractive' location for economic purposes, including investment, tourism and retirement.

This examination of our six case studies will be conducted in a systematic way by looking at: economic growth and development processes; strategies adopted by different stakeholders on the islands (be they local government, business communities, employers and self-employed entrepreneurs, worker representatives, educational authorities, and perhaps even religious entities if their role within the community is influential); and general cultural environment and attitudes of the key players on the islands.

The two main concepts this project will look at are 'sustainability' (subdivided into categories dealing with social cohesion, economic effectiveness and environmental preservation) and 'attractiveness' (including human resources capabilities, job opportunities, legal considerations and governance, accessibility for business and transport linkages).

The case studies will develop on similar lines:

- 1) Longitudinal analysis of the island's growth and development (supported by available statistical data)
- 2) The island's official development strategy (official documentation and interviews with local government officials) and the success of its implementation (interviews with main stakeholders)
- 3) Identification of strengths and weaknesses as assessed by the main stakeholders themselves (through one-on-one open-ended interviews)
- 4) Information on external linkages for the economy and support services offered (questionnaires for local business entities)
- 5) Stakeholders' views on the way forward. (as part of the one-on-one interviews and a survey among the younger generation as future leaders)

The first step in the process is to collect all possible hard data, such as statistics, documentation and possible local surveys conducted by various authorities. This will provide the official background and build a framework for the qualitative analysis.

The open-ended interviews with the main stakeholders will be structured round four or five main questions. These together with the business questionnaires and the survey among youths, should provide a basis for comparative analysis for all six case studies. Whilst similarities may become more evident, such a strategy will also bring out the distinctions between this particular group of islands.

It is important to encourage the participation of local stakeholders in the research project. This should be seen as their contribution towards their own development process. Their active participation must be solicited in order to guarantee a more successful representation of local knowledge and expertise.

2.2. Delphi Method for classification of Attractiveness parameters

The aim of the study is to conclude on the factors that will be used to measure the attractiveness of the island regions in Europe. A methodological framework has been developed with the following objectives:

- To ensure that all possible options have been put on the table for consideration
- To estimate the impact and consequences of any particular option
- To examine and estimate the acceptability of any particular option

The first step is constituted by the literature review and brainstorming sessions among the members of the research team. The aim is to conclude on a list of possible factors-indices that can be used in order to measure the attractiveness of insular areas. For that reason the literature review is focused on the examination of relevant topics such as spatial analysis and the development of insular areas as well as the ESPON's database.

After concluding on a list of factors, a brainstorming session comprises the second level of the methodological framework. The research team along with experts in insularity field examined the list of factors resulted from the 1st level in order to clear them up. The aim is to delete those that have the same or similar meaning-use and to add factors that have not been detected by the literature review.

The outcome of the first phase of the methodological framework is the indices that they are going to be accessed for their importance on the attractiveness of an island or an insular region.

The next step is the application of the Analytic Hierarchy Process (hereafter AHP). The aim is to evaluate the importance of the factors-indices that derived from the previous levels. The most important indices that are related mostly and formulate key indicators of attractiveness will be rated. AHP is the most appropriate method in examining the importance of various elements.

The Analytic Hierarchy Process

AHP is a multi-criteria method for decision making and priorities ranking developed by Saaty (1977; 1980; 1990). The most important characteristic of the method it can combine subjective and objective estimations (Saaty, 1980). Thus the elements included in the hierarchy can be qualitative or quantitative factors. Based on the hierarchy derived, a questionnaire is developed which contains the pair comparisons. Every element is compared with the other elements in the same hierarchical level. The judgments from the pair comparisons are usually made by experts or decision makers and in combination with the use of the AHP algorithm are the tools which produce the final outcome. This is the ranking of the priorities of each element or alternative regarding the ultimate goal according to their specific gravity, which is expressed in a percentile form.

Three processes are required in order to reach conclusions on the basis of the results from the AHP application (Wedley et al, 2001):

- a) The construction of a hierarchy. This stage is the selection of the elements, which will be used in the hierarchy, and can be derived from observation, the application of a Delphi method etc. At the upper level is the goal of the process. The middle level of the hierarchy are the criteria that will be used for the completion of the goal and at the lower level are the alternatives (if there exist) which are connected with the criteria and the goal.
- b) The completion of pair comparisons. The pair comparisons can be based on preference, probability or importance and usually are based on expert's estimations or opinions, according to a 9 point scale. The verbal meaning of the 9 point scale is presented in table 1. The number of comparison is: $n(n-1) / 2$, where n =number of criteria. The use of experts is preferable in the AHP as they can input valuable and qualitative primary data in the research. According to Julian, (1969: 274) the term 'expert opinion' means the: *"judgements and the estimations from people who have spend*

a lot of their time by dealing with a particular-specific issue and who have collected many general information's that have been filtrate through their thought and have been laid down in their memory". In order to have a holistic approach of the research issue, sometimes is useful to use experts in the pair comparisons that are belonging to sectors or scientific backgrounds that are directly related with the scientific or economic sector under examination.

- c) The synthesis of the priorities and the measurement of the alternatives (if there exist) which will give the outcome of the whole process. There are four ways for the calculation of priorities: a) the consensus, b) the vote of compromise, c) the geometric mean of the personal judgments and d) the weighted arithmetic mean (see Condon et al, 2003). In this research the priorities will be calculated with the use of the geometric mean of the personal judgments.

Table 2. The 9-point scale of AHP and verbal explanation

Numerical value	Verbal Explanation	Clarification
1	Equal importance of the two elements	The two elements are contributed equally in achieving the research goal
3	Moderate importance of the one element over the other	Experience and judgment favors the one element over the other
5	Strong importance of the one element over the other	An element is strongly favored comparing with the other
7	Extreme importance of the one element over the other	An element is extremely prevailed over the other
9	Absolute prevalence of the one element over the other	The prevalence of an element is so strongly so that the other element is practically ignored
2,4,6,8	Intermediate values	They are used as a compromise between the aforementioned values

AHP has four axioms which are of vital importance for its application and the extraction of reliable results. These are (Forman and Selly, 2002: 51-53):

- The reciprocal axiom. If $P_c(E_a, E_b)$ is a pair comparison of the sub-criteria a & b regarding the criterion c, then $P_c(E_b, E_a) = 1/ P_c(E_a, E_b)$.
- Homogeneity axiom. The importance-significance of the criteria or the sub-criteria is equal (for a review see Saaty, 1994a).

- Independence axiom. The elements in the hierarchy are not dependent from the elements in the lower levels of the hierarchy.
- The proper use of the AHP.

In order to have reliable results from the application of AHP, except from its proper use, the judgments in the pair comparisons must be consistent. In order to trace the inconsistency, there is an Inconsistency Ratio (IR) (for the calculation of the IR see Saaty, 1977). This ratio must be $IR < 0,1$ in order to have reliable judgements and outcomes (Saaty, 1980a). If inconsistency exist, then there where errors in the hierarchical model (the criteria doesn't have equal importance), or the judgments from the experts was inconsistent (abnormal) (for a thorough reference on the reasons of see Bodin and Gas, 2003; Forman and Selly, 2002: 47-48). But inconsistency in AHP is not an unusual, nor do they express low quality in the expert's judgments and for these reasons there exist some solution for the reduction of IR. First of all sometimes an $IR > 0,1$ can be acceptable if, according to the researchers point of view, the judgments are logical (Forman and Selly, 2002: 48). Another solution is a feedback from the experts in order to understand their mistakes and re-evaluate their judgments or the readjustment from the researcher of some single comparisons.

The outcome of the AHP application will be the gravity of every index according to the importance in influencing the attractiveness of insular areas. The gravity of the indexes will conclude on selecting the most importance of them, which will be used in the next step of the methodological framework, the application of the Delphi method.

The next level of the methodological framework is the use of the Delphi method for evaluating the gravity of every index in order to measure the percentile participation of every index in the overall attractiveness of an insular area and the related policies.

The Delphi Method

The Delphi method developed by RAND Corporation in the mid '50's and took her name from the ancient oracle of Delphi in Greece. According to Delbecq et al (1975; pp.10) *"The Delphi method is a method for the systematic solicitation and collection of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses"*. The method is consisted by a repeating process in which a questionnaire is distributed to the experts through a series of rounds. Before the beginning of the second round, the participants informed on the answers of the first round (this process is repeated in the remaining rounds) (Groom et al, 2007). The process is ended when a high

degree of consensus achieved between the participants or when the answers from round to round are not changing.

Delphi is an unstructured method, thus it allows to the supervisor research team to adopt and apply the basic rules according to the needs of the issue under examination (Groom et al, 2007). The method is mainly used for treating qualitative data in order to conclude in quantitative data (Wiersma and Jurs, 2005). The method is useful when:

- The research issue does not allow the application of analytical techniques, but it can be benefited from subjective judgments in a collective base.
- Individuals whose contribution is required for the examination of a problem, belongs to different backgrounds regarding experience and expertise (Linstone and Turoff, 1976).

The application of the Delphi method follows at least six steps.

- a) The development of the research issue and of the variables
- b) Selection of the participants. Usually the participants are experts with experience and expertise on the issue under examination. Moreover the use of experts with an interest on the research issue is an important factor affecting the response rate (May and Green, 1990).
- c) Conducting the first round
- d) Feedback of the trends and opinions as expressed in the first round. Usually some statistical data are used such as the mean, median and the frequency of the answers.
- e) Conducting the second round
- f) Repeating step 4. If the judgments are very different from the means of the first round, then the participants must justify their answers. The arguments must mention in the report of the second round.
- g) Conducting the third round
- h) Repeating step 4. If the judgments are very different from the means of the first round, then the participants must justify their answers. The arguments must mention in the report of the second round
- i) Analyzing the results of the final round.

Usually the consensus between the participants is achieved in the third round.

For the proper application of the method there are two basic principles to be accomplished (Groom et al, 2007):

- The experts interact only through the feedback mechanisms provided from the supervisor team, for avoiding the “group dynamic effects”, i.e. the effects of sovereign personalities or the effects of unwillingness to confute with experts of greater experience, knowledge or expertise)
- The anonymity of the answers in order to provide the experts with the greater degree of individuality and freedom (see also Lindqvist and Nordanger, 2008).

The advantages of the Delphi method according to Cone (1978) are:

- Every member of the panel can interfere in every step of the process
- No one is forced to defend his or her judgments.
- The method allows the formation of a trend or a consensus for a specific issue.

Moreover and despite the fact that the consensus is the ultimate goal, where consensus can not be achieved, the method can clarify the issue examined through the exploitation of different judgments (Buckly, 1995).

The main disadvantage of the method is its heavy reliance on experts (Keeney et al, 2001) and consequently on subjective judgments. The panel of experts is selected with any other method apart from random selection. Thus, there is a question how the results of the method can be the base for decision making in socially related issues (Groom et al, 2007).

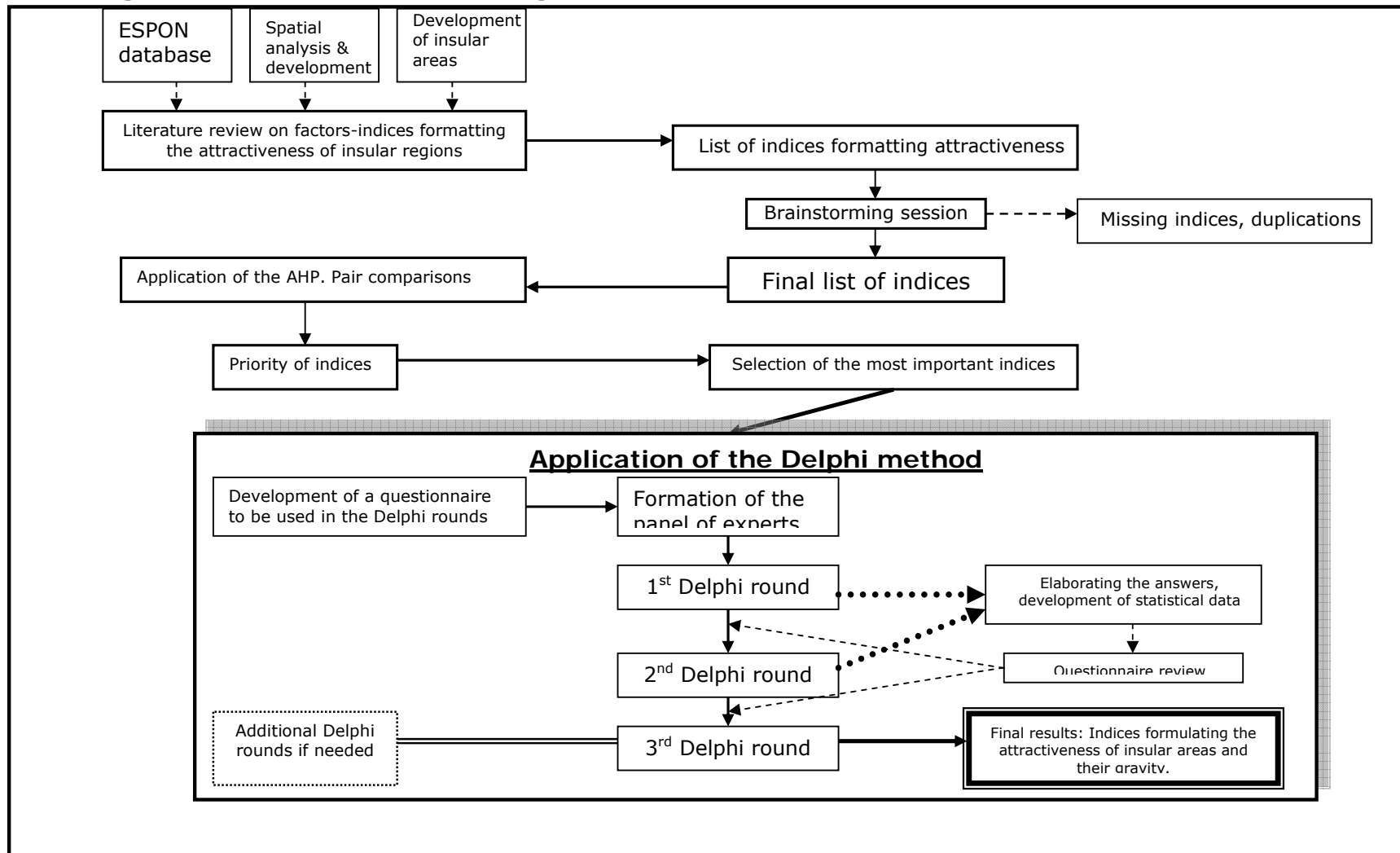
The Policy Delphi, is a method that handles this problem in a different way, it seeks to generate the strongest possible opposing views on the potential resolutions of a major policy issue. (Turrof, 1970). A policy issue is one for which there are no experts, only informed advocates and referees. An expert or analyst may contribute a quantifiable or analytical estimation of some effect resulting from a particular resolution of a policy issue, but it is unlikely that a clear-cut (to all concerned) resolution of a policy issue will result from such an analysis; in that case, the issue would cease to be one of policy. The expert becomes an advocate for effectiveness or efficiency and must compete with the advocates for concerned interest groups within the society or organization involved with the issue. The Policy Delphi also rests on the premise that the decision maker is not interested in having a group generate his decision; but rather, have an informed group present all the options and supporting evidence for his consideration. The Policy Delphi is therefore a tool for the analysis of policy issues and not a mechanism for making a decision. Generating a consensus is not the prime objective, and the structure of the communication process as well as the choice of the respondent group may be such as to make consensus on a particular resolution very unlikely.

There are six phases that can be identified in the communication process that is taking place in Policy Delphi. These are:

- (1) Formulation of the issues. What is the issue that really should be under consideration? How should it be stated?
- (2) Exposing the options. Given the issue, what are the policy options available?
- (3) Determining initial positions on the issues. Which are the ones everyone already agrees upon and which are the unimportant ones to be discarded? Which are the ones exhibiting disagreement among the respondents?
- (4) Exploring and obtaining the reasons for disagreements. What underlying assumptions, views, or facts are being used by the individuals to support their respective positions?
- (5) Evaluating the underlying reasons. How does the group view the separate arguments used to defend various positions and how do they compare to one another on a relative basis?
- (6) Re-evaluating the options. Re-evaluation is based upon the views of the underlying "evidence" and the assessment of its relevance to each position taken.

Concluding, the methodological framework for the identification and the evaluation of the key attractiveness indicators is presented in figure 1.

Figure 3. The methodological framework of the research



2.3. Cluster analysis for Islands' typology

“ESPON typologies provide a special view of the ESPON area allowing to identify regional characters and to analyse the causes of their differences. In addition to simple benchmarking the typologies show the regional setting with regard to the selected thematic orientation. They provide the conceptual analytical tool to describe territorial structures on the basis of indicators derived which could be used for further investigations with regard to other spatial structures and developments”. (ESPON, Monitoring Territorial Development, p.13)

The types of data that we need to statistically analyze in this project require the employment of multivariate methods. There are several motivations for this. We have to search for the pattern of relationships between many variables simultaneously. Complex interrelationships will not allow a useful analysis to be obtained by using each variable in isolation. The main motivations are:

- Classification – dividing variables or samples of islands into groups with shared properties.
- Identifying gradients, trends or other patterns in island multivariate data.
- Identifying which explanatory, independent or environmental (if any) variables are most influential in determining sample structure.
- Finally and perhaps most importantly, we will aim to distil the most important features from the sets of the complex island data, so that these can be presented clearly to policy makers and stakeholders. This often entails displaying the main features in a 2- or 3-dimensional plot.

Our data set will comprise a number of samples, cases or observations. For each sample there will be values for a number of variables.

The methods used in this analysis can be applied to the following types of variable record:

- Quantitative measures – e.g. population sizes
- Semi-quantitative measures – e.g. densities on a scale 1 to 5, or perceived attractiveness on a scale 1 to 10.
- Binary or presence/absence records – e.g. a facility or other object has a score of 1 if present in a sample and zero if not.

Data may be transformed if necessary to avoid high magnitude variables dominating the analysis. At the same time variables will be examined for their correlation between them. "Duplicated" (highly correlated) variables will be removed from the analysis to decrease the volume of data.

Particular multivariate methods to be used include but are not limited to:

- Principal Component Analysis

This is a standard method that can display the main features of a multivariate data set and may reveal hidden features within the data.

- Multidimensional Scaling

This method produces an ordination of only the samples (not the variables) in an n-dimensional space so that the most similar samples are placed closest together.

- Linear Discriminant Analysis

This is a standard method for testing the significance of previously defined groups, identifying and describing which variables distinguish between the groups, and producing a model to allocate new samples to a group. We envisage that this method will be especially useful in our analysis of island data. For instance we could pre-allocate our samples to groups that are characterised by the size of the island and check to see whether this classification holds.

- Cluster Analysis

It is used to show in a dendrogram, tree or branching diagram the relationships between objects or samples. This approach is useful when samples clearly fall into distinct groups. Dendrograms are a powerful representation method, which are easily understood.

2.4. SWOT analysis of islands clusters

SWOT analysis is the appropriate tool for summarizing the islands' actual situation before the elaboration of policy propositions.

From the previous stage of methodology, the islands have been grouped based on their concrete characteristics. The analysis of data regarding the existing situation of the islands and the causes explaining this situation will be used to arrive at a classification of islands, which is based on their level of attractiveness. This classification will be conducted in an operational way, using cluster analysis and composite indexes.

For every one of the group of islands will be investigated the strong and weak points; moreover success stories will be described and the reasons of this success. This step is essential so that the proposed policy is targeted on the one hand to boost the strong points of the examined islands and on the other hand to mitigate problems of different intensity. Analysis must be completed in order to recognize the opportunities and threats arising from the external environment:

- (a) From external factors, such as climate change, energy issues, globalisation, change of consumption patterns, migration flows, technology change, etc.),
- (b) From EU and national policies.

Especially the SWOT analysis is aiming at (European Commission 1999):

- The *reduction of uncertainty* concerning the application of a concrete developmental policy, action or program, in a geographic unit with particular characteristics.
- The *localisation the sovereign and critical defining factors* (internal and exterior), that influence the success of developmental policy, action or program.
- The validated *support of completed strategic* connection of developmental action, with the endogenous potential of the application region, as with the exterior environment.

In the cases of local or regional spatial and developmental planning, SWOT analysis includes schematically the following *stages*, which differ or are adjusted depending on the particularities of each case (European Commission 1999):

1. *Investigation of the developmental program's, intervention's, action's or policy's environment.* At this stage the more powerful tendencies and the problems that are expected to influence the case study are elected, with the help of basic social - demographic, economic, policies and spatial or other individual variables and indicators.
2. *Investigation of likely action.* At this stage it is investigated, in a preliminary level, the total likely actions, concerning the more basic problems that were realised at the previous stage.
3. *Exterior analysis of occasions and threats.* This stage includes in-depth validation and combined research and analysis of occasions that are offered by the exterior environment, and the threats that are emanated from this, particularly those that do not take place under the control of the local or regional administrative authorities, and that influence considerably the social - economic development.

4. *Internal analysis of strengths and weaknesses.* This stage includes in-depth validation and combined research and analysis of the internal advantages of the local or regional economy and society and the planning developmental action, as well as the more basic internal weaknesses, particularly those which can be faced with the complete exploitation of advantages and possibilities.
5. *Categorisation of likely action.* This stage, which results from the research and analysis of the previous stages, includes the "final " categorisation of action that aims in the enhancement of strengths, in the exploitation of opportunities, and in the attenuation or in the effacement of weaknesses and threats. This stage concerns in the process of *strategic planning* of developmental policy, action or program, in a way so that the objectives that initially had been placed are achieved, in the maximum level.

2.5. Islands' Impact Assessment for evaluation of Islands' policy. From TIA to IIA

In 2002 the Commission introduced a new Impact Assessment (IA) procedure, designed to contribute to a more coherent implementation of the Sustainable Development Strategy through the assessment of the potential impact of policy options (CEC, 2002), and subsequently applied to a number of Commission's proposals.

The aim of the project concerning the IIA is to outline a framework of policy impact assessment. The framework for IIA is supposed to provide an analytical tool for evaluating how policies affect the development of islands. The deliverables from this part of the project will be the following:

1. An overview over the central policy documents and important literature on (territorial) impact assessment.
2. A comprehensive discussion of the strengths and weaknesses of using impact assessment to evaluate the territorial dimension of policies influencing islands.
3. A checklist for reference to support the future use or implementation of IIA.
 - a. Lessons coming from impact assessments made in other ESPON projects on policies having a specific island's interest.
 - b. A collection of six cases of Island's Impact Assessment. These examples of Islands Impact Assessment will be carried out according to the framework in this report.

The main task in this part of the report is to connect on the one hand the (theoretical) framework from the European Commissions'

guidelines on Impact Assessment and the work in ESPON on Territorial Impact Assessment with on the other hand the theoretical work done in this project on insularity, attractiveness and sustainability.

From the analysis of the literature (3.3) the main points in the development from impact analysis to territorial impact assessment is discussed. Apart from the policy documents primarily from the policy processes in the EU, the concepts are discussed with reference to the emerging literature on regulatory impact assessment (better regulation) and the more established theoretical literature on evaluation.

The aim is to analyze the following important dimensions of impact assessment:

1. The **use** of IA
2. The **object** of IA
3. The **methodological** basis of IA
4. The **criteria** of the valuation in IA

These dimensions will be described thoroughly and be the analytical framework of the discussion of the territorial impact assessment as presented in the documents related to ESPON. With special attention to the aspect of use of impact assessment in the policy process a concept of Islands Impact Assessment is developed. This integrates the key elements of the projects insights on insularity, attractiveness and sustainability.

The strength and weaknesses of the concept is discussed with consideration to the different sorts for policy processes affecting islands. The central question is: When is it useful to use IIA – and for whom?

The main point in developing first a **Territorial** Impact Assessment and later an **Islands** Impact Assessment is to focus attention on aspects of policy impacts which otherwise will not be developed in a more general impact assessment. This highlights one key problem for impact assessment: It is impossible to chart an analysis independent of the policy context and the criteria the policies are evaluated according to. In other words the knowledge derived from the impact assessment is contingent on the context of the policy. The consequence is not (necessarily) that impact assessment is irrational or a simple reflection of power distribution in the policy process. On the contrary the principle of rational policy making can empower normally marginal groups to have more influence in the policy process.

Often a bottom-up approach to policy making is recommended for regional and local development policies because the approach should

strengthen local ownership and policy innovation. A central question is whether impact assessment is at odds with these intentions. Impact assessment with its legacy of evidence-based policymaking does have a tendency to lean on proven policy measures. A new method will be harder to have accepted because it can't present sufficient supporting evidence.

The case studies

The test how the theoretical developed concept of IIA will apply to islands in EU six case studies are discussed on the basis of the IIA-checklist, which is planned to serve as a reference to support the future use or implementation of IIA.

First an analysis of three impact assessments made in other ESPON projects will highlight how the IIA-concept correspond to examples of territorial impact assessment. The idea is to test the how feasible the concept is when used on empirical cases and on which points the IIA will differ from other TIA-approaches. While the studies are on other geographical entities than island they will still offer a trial for the concepts used in IIA. Following examples will be examined:

1. The territorial effects of the structural and cohesion funds (Sweden), Annex report A in a study prepared by Nordregio (2006) under the framework of ESPON 2.2.1.
2. Territorial impact of CAP and Rural Development Policy, Final report, Arkleton Institute for Rural Development Research, University of Aberdeen, 2004, ESPON project 2.1.3.
3. Territorial Impact of EU Transport and TEN Policies, Christian Albrecht University of Kiel, Institute of Regional Research, 2005, ESPON 2.1.1.

If results from the ESPON project 2013/1/6 on a territorial impact package for transport and agricultural policies emerge during the coming months one of the above mentioned cases can be replaced with this newer study on agriculture.

Six case studies on islands are carried out according to the framework of Islands Impact Assessment as described in this report. The case studies will not be full impact assessments with detailed evidence, but the analysis has to cover all significant problems in the proposed framework for IIA. The policies that are going to be examined have to be of particular importance for the islands; the islands for the case studies will be chosen from different classes that will be constructed within Islands Typology.

1.

The important aspect in these case studies is that they all are examples of clear policy priorities and they therefore give excellent opportunities for testing the concept of IIA. For the same reason the selection of cases do not claim to be representative for all conceivable policies. The important point is that they show in practice the strength and weaknesses of IIA. Together with the case studies on territorial impact assessment and the theoretical analysis these case studies will give a clear indication of the usefulness of the concept of IIA.

3 Analysis of the relevant Literature

3.1 *Insularity*

Islands are now, unwittingly, the objects of what may be the most lavish, global and consistent branding exercise in human history. They find themselves presented as locales of desire, as platforms of paradise, as habitual sites of fascination, emotional offloading or religious pilgrimage. The metaphoric deployment of 'island', with the associated attributes of small physical size and warm water, is possibly *the* central gripping metaphor within Western discourse (Connell 2003; Hay 2006: 26, *emphasis in original*). Tuan (1990: 247) claims that four natural environments have figured prominently in humanity's (including non-Western) enduring and endearing dreams of the ideal world. They are: the forest, the shore, the valley ... and the island.

A layering of mutually reinforcing influences can be proposed to explain this condition. First, there is an enduring western tradition – dating back at least to the *Odyssey* – which has held islands in high esteem, assigning them a key role in the economic, political, and social dimensions of the Mediterranean and then Atlantic worlds, given the way that myth, icon and narratives of/from islands have functioned for mainland cultures (*e.g.* Gillis 2004). Second, building on the first, but starting at around the European age of discovery, is the construction of islands as outposts of aberrant exoticism, peopled by innocent and exuberant natives (*e.g.* Lowenthal 1972: 14; Gillis and Lowenthal 2007). Third, and still later, is the island as background for the enactment of a male and heroic paean to colonialism, the subject of Robinsonnades that extend up to the present in the likes of Tom Hanks' movie *Castaway* or the TVB blockbuster series *Lost* (*e.g.* Loxley, 1990). Fourth, is the development of the notion of going on vacation as a regular activity by the world's burgeoning middle classes: whether for relaxation, adventure or self-discovery, islands project themselves as ideal destinations (*e.g.* Butler 1993). Fifth, is the realization by many developing island states and territories that they can 'sell' their sea, sun and sand (and perhaps sex, but more hopefully their salt) to such visitors, by appealing to their constructed modern need for travel, and thus carve out for themselves an easy route to development (*e.g.* Apostolopoulos and Gayle 2002). Other attractive, physical and psychological characteristics can be added to the mix: physical separation, jurisdictional specificity, cultural difference, 'getting away from it all', the possibility of claiming an understanding of the totality of the locale as trophy (Baum 1997: 21; Baum and collaborators 2000).

There have been two main scholarly streams of thought in the literature of recent decades that can help to frame an informed understanding of the challenges of islandness – often represented as insularity.

The first stream, with a largely economic pedigree, is concerned mainly with matters of small size and scale. This is by far the oldest body of relevant literature, going back to the works of Robinson (1960), Jalan (1982), Kaminarides et al. (1989), Streeten (1993) and up to more contemporary work by Briguglio and associates (*e.g.* Briguglio 1995; Briguglio et al. 2006). The basic contentions here are that small markets, small pools of human resources, limited capital, etc., constitute real bottlenecks for effective public administration, good governance and development. This body of scholarship has been mainly addressed at small (often island states), but the analysis can also be applied to other territories (*e.g.* Armstrong and Read 2006, Baker 1992). The main international recognition of the particular circumstances facing small island developing states (SIDS) – (often subsumed under the term ‘vulnerability’) – has been forthcoming from the United Nations, especially at and after the SIDS International Conference held in Barbados in 1994. The European Union is not that closely involved with these arguments since none of its sovereign island jurisdictions are considered to be SIDS: instead, the EU is mainly involved in such matters through its dealings with the ultra-peripheral sub-national regions of the EU (all islands, bar French Guyana); and with third countries, such as the so-called ‘APC countries’ in the context of World Trade Organization negotiations, many of which are SIDS.

The second stream, inspired much more from regional and economic geography, is sensitive to the challenges of geographical location. This in turn generates a critical interest in the marginalisation (or peripherality), isolation and remoteness of islands, possibly compounded by the fragmentation of archipelagos (*e.g.* Armstrong and Read 2004). In such considerations, some of the policy measures contemplated typically include: information technology (IT) infrastructure and air/sea/land transportation network upgrades, as well as fiscal support to investment capital. The European Union has been largely sympathetic to these challenges – for example, by supporting the construction of fixed links (bridges, tunnels, causeways) which connect islands to mainlands – and recognizes in principle that the infrastructure gaps can constitute checks on development which can be mitigated by suitable regional development and governance strategies (*e.g.* CPMR 2002, Hache 2007, Royle and Scott 1996 on Irish islands).

These two approaches help one appreciate why islandness (as a neutral term) is often construed as insularity (as a negative term). The geographic location and nature of islands, compounded by smallness and environmental fragility and vulnerability, is seen essentially as a handicap which thwarts the ability of such spaces from reaching the same quality of life standards and from providing the same, or similar, level of services (education, health, recreation, employment) that are offered on contiguous mainlands, and which are often expected by impacted citizens (*e.g.* Royle 2001). As a result, one witnesses an outmigration of island populations, a variant of the more common rural to urban drift, with the result that some islands are faced by the real prospects of depopulation (*e.g.* Royle 2007). Addressing these shortfalls is of course a key platform of the EU's territorial cohesion policy.

The literature has, more recently, taken a decidedly less pessimistic direction. This is largely fuelled by the promises of tourism development for small island regions, especially for those have presented themselves as attractive, affordable and suitable 'sun, sand and sea' destinations. The multiple economic linkages that tourism affords, its ability to diversify its economic benefits to wide segments of local island populations, and its beguiling link with naturally available assets, have all had a tendency of transforming this one industry into a naive panacea for small island development. Such optimism underestimates the economic leakages, social tensions, property price inflation, gentrification and environmental erosion that tourism, especially mass tourism, can bring to small island locations (*e.g.* Clark et al. 2007 on Sweden); but perhaps best typified by many Mediterranean island destinations (*e.g.* Conlin and Baum 1995; De Kadt 1979, Briguglio 1996a, 1996b; Apostolopoulos and Gayle 2002, Lockhart and Drakakis-Smith, 1997). Moreover, even cold water islands can also deploy their own specific sets of characteristics – ice, isolation, military tourism, indigenous people, endemic flora and fauna – to attract a significant, but much more sustainable, tourism presence (*e.g.* Baldacchino 2006a). Long haul island tourism also goes against the common understanding of distance as handicap, but has a significant carbon footprint (*e.g.* Gosling 2003).

In recognition of these diverse trends, three distinct, island specific, development paradigms, each sustainable in its own way, have been proposed, and sustained, in the literature over the past three decades. The oldest is the MIRAB model, which postulates how islands, small islands in particular, thrive by exporting people (**M**igration) who in turn send back **R**emittances; and by attracting bilateral or multilateral **A**id, which in turn allows them to support the employment of their

public sector **B**ureaucracy – spelling the acronym MIRAB (Bertram and Watters 1985; Bertram 2006). The second model postulates the emergence of island economies driven significantly by a large tourism sector: these are called **S**mall **I**sland **T**ourism **E**conomies (or the acronym SITEs) (McElroy 2006; Parry and McElroy 2009; *also* Lockhart et al. 1993). A third model postulates that various islands have done well by using their governance, legislative and regulatory powers (their jurisdiction) to develop a favourable **P**eople (or human resource) strategy, **R**esource management, **O**verseas representation, **F**inance sectors and air/sea **T**ransportation networks (for the acronym PROFIT) (Baldacchino 2006b). These three approaches postulate different forms of attractiveness for islands: shored up by both individual/household and public subsidies and transfers; boosted by tourism revenue; or resulting from exploiting diplomatic skills, citizenship rights and service sector activities by using `jurisdiction as a resource` (Baldacchino and Milne 2000). All these models depart from a traditional view of islands as mere platforms for the growing of cash crops or raw material production with low local value added, high transport costs and high diseconomies of scale: a model that has been strongly criticized, especially for generating vulnerable mono-crop economies which remain heavily dependent on overseas markets and their prices (*e.g.* Shand 1980, Connell 1988). Bertram and Poirine (2007) postulate that those island jurisdictions with the highest gross national income per capita have a combination of healthy tourism and finance service provision. Hampton (1994), however, is more critical of the principles on which the offshore finance industry is predicated.

It is such an analysis that allows one to come up with a somewhat suitable answer to the nagging question posed by Dommen already back in 1980: Islands are:

“... particularly fortunate places, where life is longer and nature is bountiful, even though the menu may be short. Politics are friendlier. Hurricanes are more dangerous than social unrest. The question is, why then do so many people emigrate?” (Dommen 1980: 931)

3.2. The Attractiveness Concept

Some places are more attractive to live, work or visit than others. The reasons and the driving forces behind such decisions to live in a place or visit it may not always be clear. In the economic and development planning sciences various approaches have been developed on attractiveness for different kinds of economic actors (enterprises, people, infrastructures, services). Literature on attractiveness for enterprises (industry, services, and retailers) proposes a series of

factors, namely location in terms of raw materials availability and remoteness from markets, population size of the area, infrastructure availability, human resources availability and quality, and administrative – tax framework (Walker & Chapman 1987; Spilanis 1996; Lambrianidis 2000; Polyzos & Petrakos 2001; Mazzarol & Choo 2003). Although these approaches differ significantly conceptually and operationally from each other, they all regard attractiveness as a concept that can be estimated through experts' opinions and indicators, leaving people's opinions out of the estimation process. For example, planning for economic and social development in the EU is realized in NUTS II level with the use of common indicators and methods (European Commission 2002). The issue of attractiveness for people and why they choose to live in an area has received less academic attention until recently. Different approaches include diverse topics and methods such as migration studies and population movements (UNHCR 1995), population mobility (Tapeinos 1993; Tsaousi 1997) internal migration (see e.g. Portnov et al. 2000; Stockdale 2002, Fischer et al., 2000; Wikhall, 2002 for more references) and landscape attractiveness (see e.g. Daniel 2001; Palang et al. 2003).

Existing definitions regard attractiveness as the image that population groups have for an area (Maillet 1998). This definition is realized with the use of methodologies that measure and estimate qualities and characteristics of the areas and their populations, such as accessibility, remoteness, dynamism, competitiveness, research and development, human resources, infrastructures, services available and more. For example, the EURISLES (1997, 2002) method measures accessibility and remoteness of areas (European island Regions), as time-distance from a set point in space. Similar is the approach of Cross and Nutley (1999) that measure remoteness and services availability for the small islands of Western Ireland. Copus and Crabtree (1996) employ a services availability and economy approach for remote rural Scotland. Portnov et al (2000) on the other hand, use a method that estimates urban centers attractiveness and is based on a statistical approach (correlating socioeconomic variables and developing an equation). OECD's (1994) approach is more abstract conceptually, as it aims at a variety of areas, countries and situations and thus uses relatively simple population and economic indicators. European Union's and EUROSTAT method (CEC 1987, 1991, 1994, 1999, 2002, 2004) is more elaborate with the use of concepts such as dynamism, competitiveness, research and development, human resources and infrastructures for European Regions (NUTS II), as part of a statistical approach that correlates existing empirical data with theoretical notions of attractiveness and development. The basic assumptions of

these methodologies are that: 1) the values of the indicators used are linked to the attractiveness beliefs that societies hold and that people construct these beliefs and choose their place of residence and/or occupation according to a model based on a series of factors, on a more or less rational basis (Portnov et al., 2000), 2) the values of the indicators used reflect the attractiveness 'status' of the areas they refer to. The two assumptions are linked, as attractiveness is a 'state' of an area, but it is also a 'state of mind' for people. This approach is used in planning procedures at national and international levels, as methodologies of organizations such as EUROSTAT, OECD, EURISLES; national planning procedures (eg. Gilg, 1996; Portnov et al., 2000) and academic methodologies (Maillet, 1998; Cross and Nutley, 1999; Spilanis et al., 2002; Engelen et al., 2002) prove.

A similar theoretical approach and scientific field of study, behavioral and environmental geography, examines the reasons and the factors that influence the preference of environments and landscapes. Different approaches include behavioral research (Walmsley and Lewis, 1993), landscape aesthetics and preferences (Appleton, 1996; Lothian, 1999; Parsons and Daniel, 2002) and environmental psychology (Nasar, 1988; Berleant, 1997) among others. Some of these approaches are similar conceptually to attractiveness as developed here, although they more often than not examine aesthetic and symbolic dimensions of preferences, attitudes and decisions towards places and spaces for groups of people, while here we use less aesthetic and symbolic and more economic and social dimensions. Nevertheless, we feel that a complete and thorough examination of attractiveness should attempt to include such fields of analysis.

The approach followed here acknowledges that attractiveness can indeed be estimated with the use of indicators. Yet, the notions, attitudes and beliefs of social groups that are connected with the areas should first be addressed. As many different social approaches have demonstrated, notions, attitudes and beliefs of social groups form attractiveness images (Halfacree, 1995; Hoggart et al., 1995; Jones, 1995; Copus and Crabtree, 1996; Harrington and O' Donogue, 1998; Van Dam et al., 2002; Haartsen et al., 2003). These images influence the decisions that group members make, which involve residence and/or employment. The first issue that this approach brings forward is that attractiveness is a relative term and can only be defined when compared to 'unattractiveness': when an area is attractive, another has to be unattractive and vice versa. Therefore, attractiveness can be used to understand differences between areas as they are expressed through attitudes and beliefs of social groups and measured through indicators that are based on these beliefs.

The second issue of this approach proposes a slightly different definition, which defines attractiveness as the image of a specific place or space that a group of individuals, linked in some way to this space or place, holds at a specific spatio-temporal context. Therefore, before answering the question 'how is attractiveness estimated?' we have to answer the question first 'attractiveness for whom?' that refers to the social construction of attractiveness and thus to the need to define the social group for which attractiveness is estimated, as different groups hold very different views on attractiveness and how it is constructed. The groups can be distinguished on a wide variety of criteria that refer to age (van Dam et al., 2002), sex (Cloke and Little, 1996), class (Halfacree, 1995), race (Cloke and Little, 1996) etc.

The concept of attractiveness can be used for understanding temporal, spatial and even seasonal changes in population, products and services' flows between places. Its explanatory power lies on that it includes the major driving forces between such flows in its definitions, namely the different attractiveness images different populations or groups of people attach to places. At the same time, it can also describe the results of these driving forces, which are exactly the spatial and temporal changes in these flows. So, attractiveness can link the existing situation within an area (effect) with its level of attractiveness (cause). The case of islands is in many ways typical of the changing beliefs and opinions on attractiveness over time.

Despite the advantages of 'lending an ear' to what people have to say and defining clearly the issues and the methods that this approach presents, it is also laden with some disadvantages. The social construction and relativity of attractiveness 'for population groups' and the fact that people should be asked about their opinions and beliefs, brings forward mobility issues and the question of how to include all or at least many different groups and many different opinions and beliefs into the estimation of a series of attractiveness indexes. This is important especially when policy issues are raised, and many different attractiveness images should be considered in order to satisfy most of the unattractive points. A typical example refers to the people who have already moved from an area due to its low attractiveness. Their opinions and beliefs are important when policy issues of keeping the population are raised, as the unattractive points that have driven them away are strong and are exactly what policies want to address. Such issues call for cautious and complicated research strategies when using attractiveness for policy formulation (an example of the diverse research strategies required is offered by Stockdale, 2002).

Another issue raised here, is that when discussing attractiveness both driving forces and results should be considered. Driving forces are the

causes of changing attractiveness opinions and beliefs. The *results* of the driving forces are socioeconomic changes in the area examined (e.g. population and economic changes over time).

3.3. Island Impact Assessment

The analysis of the literature concentrate on in the development from impact analysis to territorial impact assessment is discussed. This part of the literature consists primarily of policy documents concerned with the policy processes in the EU. Furthermore the analysis will refer to the still small theoretical literature on regulatory impact assessment (better regulation) and the more established theoretical literature on evaluation.

As set out in 2.5 the aim with the analysis of the literature is to underpin the discussion and development of the concept of Islands Impact Assessment. Therefore the analysis of the literature is focused on the four dimensions of impact assessment: The aim is to analyze the following important dimensions of impact assessment:

1. The **use** of IA
2. The **object** of IA
3. The **methodological** basis of IA
4. The **criteria** of the valuation in IA

Special attention will be given to the discussion of how the IA as an policy analysis is used in the policy process.

The basis for the literature review is included in the Annex 11.

4 Use of existing ESPON results relevant for this project

As anybody can easily realize from the above analysis the existing ESPON work it is extensively exploited within EUROISLANDS project. The processing of the data and other information methodological tools and analysis will make extensive use of existing approaches, already in use within ESPON as well as within other European Institutions (European Commission, EUROSTAT, and European Environmental Agency). Indicatively we can mention:

- a) The Island Impact Assessment tool proposed within this project for the ex ante evaluation of policies for islands is based on the principles of Territorial Impact Assessment
- b) Classification and ranking of islands and their comparison with national and European average will be based upon the thematic categories presumed as pertinent to situate a region used in ESPON studies.
- c) Many of the variables, indicators and indexes proposed to measure the situation and the attractiveness of islands are already used in previous ESPON studies.
- d) Espon's Atlas will be used as a model for Islands' Atlas
- e) Conclusions of ESPON Synthesis Report III (e.g liveability concept) are used for islands' analysis.

5 Project organisation, expected deliverables and dissemination plan

The project is organised in 3 Phases and 3 Work Packages (figure 1):

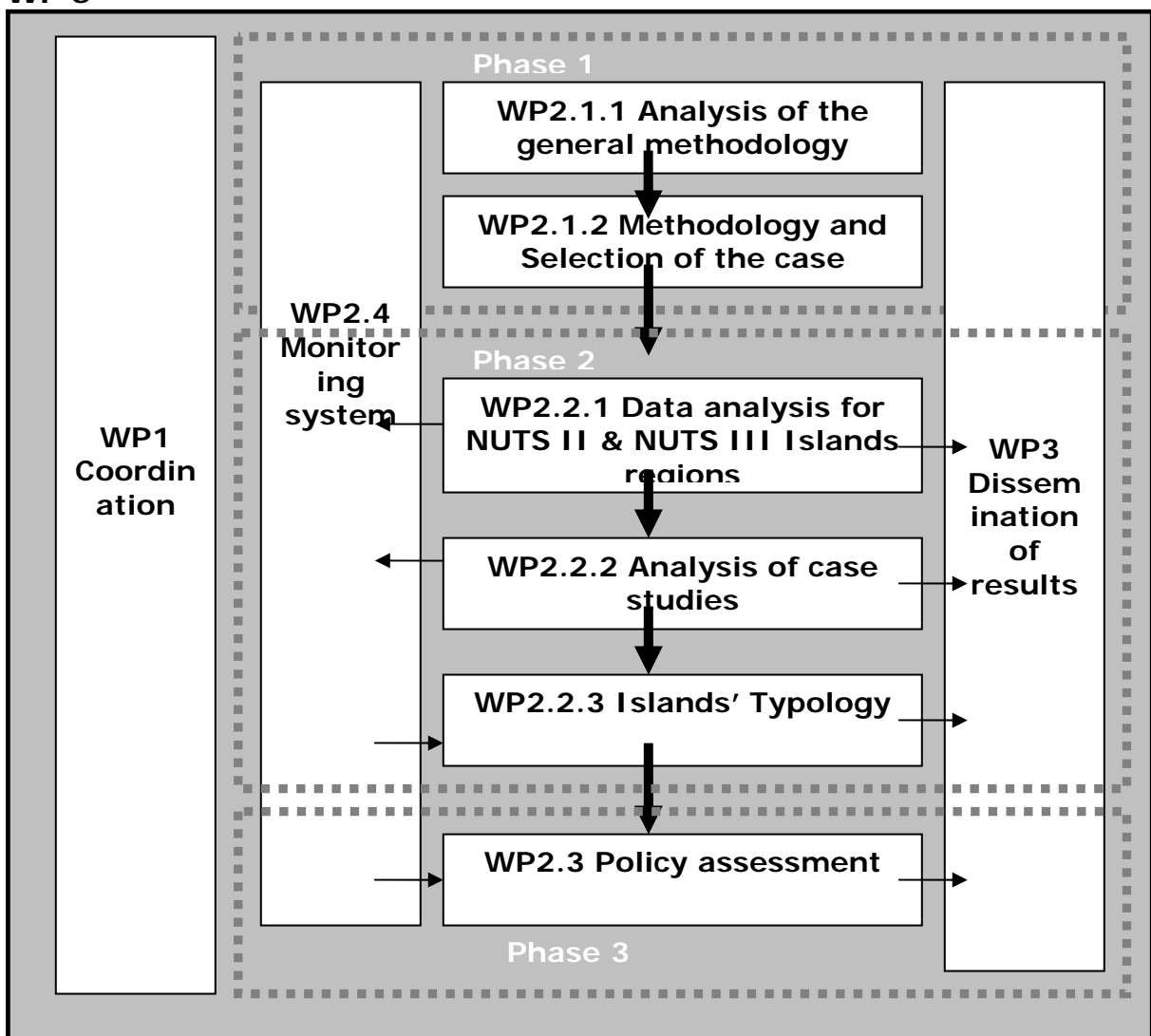
WP1 Coordination

WP2 Activities

WP3 Dissemination

The analysis of the Work Packages is presented in Annex 10

Figure 1. Break down of the project into phases and WP's



6 Project specific part

The specific points mentioned in the Annex III are directly addressed within the different parts of the report. More specifically:

- a) In the paragraph 1 and particularly in the paragraph 1.1 it is stressed that the overall goal of the project is to link islands' development with territorial cohesion and sustainability. Sustainability issues for islands are analytically covered in 2.1.a) paragraph, where it is analysed how economic effectiveness, social equity and environmental conservation will be measured and assessed. In the annex 5 there is the list of variables and indicators that are going to be used for this purpose.
- b) The concept of attractiveness is presented in the paragraphs 1.2. - 1.4 and the way that will be measured in paragraphs 2.1 b and 2.2. The variables and indicators that are going to be used are included in the annex 7. In the annex 8 the way that island's accessibility will be measured is presented analytically.
- c) The IIA Assessment tool is presented in paragraphs 2.5. and 3.3. As this tool will be used in the 3rd phase of the project and another ESPON project is working on the same topic (TIPTAP), more details on the methodology will be developed later on.
- d) European Islands are treated all along this project as are recognised in different EU documents: as regions with specific geographical features facing particular development challenges together with mountain and sparsely populated regions.
- e) The methodology of the selection of case studies is presented in the annex 4
- f) As it is expressed in paragraph 7, there is a need for direct interrelation between TPG and Stakeholders. The system applied till now where communication goes through ESPON CU and Stakeholders Leader seems to be time-consuming and ineffective, as reactions are arriving very slowly and not in time. The activation of the Internet Platform will be a solution.
- g) The TPG is aware about dissemination issue. In the proposal it was specifically mentioned actions for internal and external dissemination. TPG will participate in ESPON meetings organised every 6 months (reservations are made for June's meeting in Prague) and in meetings organized by the Stakeholders (TPG has participated in the CPMR Islands' Commission annual meeting on 7-8 of May). Three more dissemination activities are already planned

during 2009. Due to financial constraints participations has to be limited in activities with a broad participation of stakeholders.

7 Overview of more detailed deliveries and outputs envisaged by the project and envisaged dialogue with stakeholders in that respect

The deliveries of the project can be divided into:

- a) the “hard” outputs, as the Islands’ Atlas, the Islands’ Situation and Attractiveness (Interim report) and Policy Recommendations and Assessment (Final report) as well as the Islands’ Database
- b) the “soft” outputs as the Website, the Islands’ forum and the Presentations

The **Islands’ Atlas** is going to map the structure of the European Islands in comparison with the European Territory. It will provide an overview of findings from the analysis of data and other information about islands. It will compile information organized thematically accompanied by maps giving to stakeholders new insights into islands’ situation. Insisting in islands particular features, it will provide trends and possible policy interventions.

The Islands’ Situation and Attractiveness report’s goal is to provide an **Islands’ Typology** highlighting common characteristics and disparities by using clustering methodology. This typology, based on differences of attractiveness between islands, will serve as a basis for Policy proposals.

Policy Recommendations and Assessment Report will assess the effect of existing and proposed sectoral policies (e.g on transport, energy, environment, agriculture, rural areas, maritime) on the attractiveness of islands, as well as the impact of external factors (climate change, energy prices, globalization, second houses).

The **Islands’ Database** will serve to feed the ESPON Database and also it will constitute the inaugural point for the implementation of a permanent Islands’ Monitoring System.

The “soft” outputs of the project as the **Website**, the **Islands’ forum** and the **Presentations** in different forum will be used for a close and direct dialogue with the Stakeholders. As one of the characteristics of the Islands is the remoteness and the low accessibility it is rather difficult and expensive to organise consultations and exchange of views. So the use of new technologies of communication is going to be used to overcome this handicap. For all that, every opportunity for

direct dialogue is going to be exploited as the TPG will participate in a significant number of manifestations grouping an important number of stakeholders.

8 Indication of likely barriers that the project implementation might face: Data availability

In order to address all the questions that stakeholders have placed within the project's specification a substantial amount of information is needed, especially because the scope of the analysis is not at the regional level but rather **the individual island level**. The study must reveal not only disparities between islands and Europe their mainland counterparts but also demonstrate key differences among islands themselves (especially the intra regional disparities). As explained earlier two more questions have to be addressed: (a) why do islands have problems (and why does the degree of these problems vary from island to island) and; (b) how could these problems been addressed through policy measures?

The experience from previous studies¹⁰ has proved that:

- Compilation of statistical data for all domains is practically impossible since a lot of information does not exist on the island level and when it does exist, it is impossible to be collected for all the islands within the short time constraints of a project¹¹. Because stakeholders are obviously aware about this issue, they have asked for "an integrated system for monitoring islands' evolution" over the long-term. The experience provided by the *EURISLES* project has to be taken into account.
- Placing an emphasis on complete data collection, whilst a worthwhile exercise in some instances, can deprive the research team of the valuable time necessary for meeting the main objective of this study, namely: the construction of the methodological and analytical support, which is necessary for the accomplishment of situation analysis, the exploration of future development potential, the elaboration and the ex-ante evaluation of policy options. It has to be mentioned here that the present study should not to be considered a statistical exercise, even if quantitative data are always more than welcome.
- Qualitative information and results from previous studies, reports, and so on are of extreme importance in terms of their

¹⁰ We refer to 2 projects commanded by European Commission: "Planistat Europe & Bradley Dunbar Associates Ltd, 2003, Analyse des régions insulaires et des régions ultrapériphériques de l'UE," and « Ernst & Young, 1989, The socio-economic consequences of completing the internal market for the island regions of the European Community". The two major projects of interregional cooperation accomplished by CPMR's Island Commission (*EURISLES* and *GEDERI*)

¹¹ The difficulty is much more important for coastal islands than islands regions.

usefulness. ESPON's documents, reports on Cohesion Policy and reports on islands prepared by or for EU institutions and bodies like INSULEUR and CPMR's Island Commission (namely *Off the coast of Europe*, 2002) are valuable for the needs of the proposed study.

Data availability will be addressed in various ways:

- Directly through available data that have been used already for previous ESPON studies and the existing database for the 24 islands NUTS II and III areas for classification and basic comparison with European and national averages;
- Directly with available quantitative and qualitative data coming either from European Institutions and sources (mainly Commission, Eurostat, Corine, EEA), from ESPON's national focal points, from national bodies (National Statistical Offices), from regional / local bodies and stakeholders, and from other sources (e.g., previous studies, reports, and international bodies);
- Indirectly using substitute (proxy) variables, especially for the environment, for which direct data are limited (e.g. naturalness, population density, density of tourist beds);
- Indirectly using qualitative methods and expert/local opinion;
- Directly through field research in selected case study areas (e.g., using remote sensing for acquiring environmental data).

Having in mind the extremely difficult and time-consuming task of data and other information collection, we consider that there are two key-points for this project to be accomplished:

- The first involves the cooperation of ESPON's Coordination Unit and Monitoring Committee in order to facilitate the access to information possessed by different European institutions. It concerns also the Stakeholders who can facilitate TPG's task by providing the appropriate information (data, qualitative information and best practices dealing with attractiveness problems) coming from national, regional or local sources to complete the existing information namely for the 22 State, NUTS II & III islands. Stakeholders have also to collaborate for the classification of attractiveness parameters.
- The second involves the 6 cases studies; for these islands where published information not exists on the European level, the active implication of the Stakeholders is more than necessary.

Environmental information consist a particular problem within the project as the existing quantitative information is extremely limited

even at the NUTS II level. But it is necessary a good knowledge of the environmental situation before proposing policy measures as environmental resources are limited due to the small size of the islands and islands are receiving a lot of pressure either from local economic activities either external parameters as climate change. In the same time environment components as beaches, fauna, flora, landscape etc are valuable for their development and for the quality of life of their inhabitants. So a special effort has to be done for the amelioration of environmental information for islands, using the case studies as a beginning.

9 Orientation of the project previewed towards the Interim report

After the submission of the Inception Report, the following steps are foreseen until submitting the Interim Report in 28 weeks:

- **Development of the Data Base** of the project that will be based upon the list of indicators that is presented here as necessary for an Island Monitoring System.
- **Compilation of the Data** (routine and proxy variables) and other information existing on different data bases, reports and other publications of EU organisms for all the islands and particularly the State, NUTS II & III areas
- **Collection of missing data** (wish list variables) and information for the 22 State, NUTS II & III islands with the assistance of the Stakeholders
- **Collection of information about best policy practices** addressing island's attractiveness and development problems from all the stakeholders
- **Classification of Attractiveness parameters** based on stakeholders opinion as well as **Research and analysis of the data for attractiveness**
- **Set up and realization of the empirical research in the case study islands.** This field research has different goals: (i) collection or creation of the data that are already available in islands that are characterised as NUTS areas; (ii) research or creation of data (wish list variables) and information missing; (iii) Realisation of a survey in order to classify attractiveness parameters; (iv) collection of information about best practices.
- **Analysis of the data** for NUTS II & NUTS III Islands regions and the analysis of the data of the rest of the case studies. The output of this analysis will be the **Islands typology** and a **SWOT analysis** for each cluster according to the findings of the analysis.
- **Creation of Islands' Atlas**
- **Elaboration of the principles for a European Islands' Policy**
- **Development of the web site** of the project that has already been set up for the use of the TPG members and the stakeholders of the project.

A more thorough analysis of all these steps is presented in the relevant parts of the present report.

Annexes

- Annex 1: Islands characteristics – the “insularity” concept
- Annex 2: Islands’ challenges
- Annex 3: List of very small islands
- Annex 4: Islands’ case studies. Selection methodology
- Annex 5: Information System
- Annex 6: Sustainability Variables and Indicators
- Annex 7: Attractiveness variables and indicators
- Annex 8: Accessibility
- Annex 9: Policy Recommendations and Assessment
- Annex 10: Analysis of the work packages
- Annex 11: References

Annex 1: Islands characteristics – the “insularity” concept

The concept of insularity is the connecting link, the common characteristic of all islands regardless of their size, population and development level. Insularity expresses ‘objective’ and measurable characteristics, including small areal size, isolation, as well as unique natural and cultural environments. However, it also involves a distinctive ‘experiential identity’, which is a non-measurable quality expressing the various symbols that islands are connected to. More specifically, islands are spaces which are shaped by but also which shape the experiences of the people who live there, whether these are local inhabitants who have been there all their lives, returning islanders, visiting mainlanders, or retirees from other countries (see Lefevre 1991). Finally, within islands there is also a conceived or representational reality arising from their place in myth, folklore, literature, and history as places of escape, allure, paradise, refuge, but also incarceration. Thus, islands can be thought of as objects ‘of the mind’ as well as ‘physical’ objects.

Overall, “insularity” is composed of four characteristics:

- a. *Small Size*:** More often than not, islands are small both in terms of areal size and population compared to mainland. Their small population results in a limited internal market and constrained local demand for commodities and services, as well as limited workforce. This, in its turn, limits scale and concentration economies. Concurrently, small size means that islands tend to have precious few -if any- land resources for extensive agriculture, whilst they also regularly lack key natural resources, including adequate water supplies, fossil fuels but also non-fuel minerals. In cases where raw materials may have been available earlier in history, these have now often been exhausted. The islands’ small size has meant their environmental balance is regularly seriously endangered and this trait, in turn, makes environmental management a necessity.

In greater detail, the manner in which these characteristics negatively affect islands’ attractiveness is described below:

- ***a.1. The limited variety and quantity of natural resources*** places constraints on the possibility of developing production activities, especially on a large scale. The scarcity of natural resources refers to a number of issues, including:
 - (a) The distribution of land uses, as the lack of space creates land use conflicts (e.g., between agriculture and tourist activities and/or second houses);

(b) The shortage of water, especially within the Mediterranean Basin, where chronic droughts combined with over-pumping of underground aquifers and wells have often resulted in severe – and in some instances irreversible degradation of resources. On many of the semi-arid islands of the Mediterranean, water shortages are further intensified given the proliferation of various highly unsustainable practices (e.g., golf courses) and also because most tourists arrive during the dry season (summer).

Phenomena such as these can create adverse conditions for production, particularly within the primary, but also within the secondary sector.

- *a.2. Small market:* the existence of a small local (internal) market, dispersed over many tiny communities and isolated from neighbouring markets, has meant the development of large-scale activities is rarely, if ever, viable. Moreover, because of globalization and wide-scale economic restructuring certain islands, which once had fairly dynamic sectors (e.g., shipbuilding – especially the construction of smaller vessels -, food processing, tanning, and textile manufacturing) have experienced severe marginalization as these activities have increasingly moved firstly to the mainland and later on to low-cost regions and countries.

In the past, when transportation systems –based mainly on marine transport– were less advanced and organized quite differently, islands actually composed vital nodal points within regional transportation networks. Trade between neighbouring islands as well as between islands and nearby mainland territories was quite extensive. Unfortunately, today, markets have shifted towards mass and large-scale production and specialization within an increasingly liberated and competitive context. As a result, productivity on islands (especially smaller ones) is usually far lower compared to continental areas.

a.3. Limited natural, economic and social carrying capacity: Island ecosystems are rarely able to support large-scale activities without experiencing severe adverse impacts on their societal, ecological, and economic environments. In previous periods when transportation possibilities were limited, local populations often adopted survival and self-sufficiency strategies with a multitude of small-scale activities for the local market keeping equilibrium.

Specialisation and intensification in order to achieve productivity and competitiveness in the global market combined with a limited carrying capacity significantly enhances the islands' vulnerability, a vulnerability which historically has been an important handicap due to the islands' tendency to depend on a narrow range of exporting activities (e.g., fishing, shipping, extraction and, nowadays, increasingly tourism). Dependency on a monoculture, such as the one that has resulted from tourism on numerous islands, disrupts the economic or environmental balance of an area. Furthermore, such islands are exceedingly vulnerable to external factors, which can instantly lead to collapse of their narrow economy which relies on one dominant activity (e.g., the threat of war and terrorism to tourism).

b. Remoteness and isolation: These characteristics imply high installation and operating costs for companies, households and the state. These costs include:

1. *Time costs:* Almost all islands depend on public forms of transportation (e.g., ferry connections and air connections) and, as such, accessibility, to and from the islands, is constrained both by the frequency of connections but also the distance from mainland areas and other islands. Links to metropolitan regions can often be extremely time-consuming and cumbersome. Additionally, on certain islands internal connections are poor, oftentimes because of their exceptionally rugged terrain. This means that in certain instances the only viable alternative for connections between two or more communities on the same island can be by sea, which again makes travel times long.
2. *Money costs:* All transported goods and services depend heavily on limited connections (both by sea and sometimes by air) normally dominated either by a single company or a narrow range of companies. The highly monopolistic or oligopolistic environment that characterizes transportation to and from the islands (and sometimes within islands) means that prices are often very high.
3. *Infrastructure and operation costs* of basic public services: Infrastructure and services have to be provided to each island separately, making them very expensive to install and operate. At the same time, the costs of providing administration services, education, health care, energy, internal transportation, communication, water supply, waste treatment, and so on can be exceedingly high on islands,

especially when they lack sufficient population to make such services viable.

4. Costs relating to the absence of choices: On many islands the lack or shortage of adequate infrastructure and services combined with a small and fragmented market mean that inhabitants are burdened with additional expenses both in monetary but also temporal terms.
5. Access to information costs: Information -before the Internet era- used to have a very hierarchical pattern of diffusion. This meant that receiving all types of information on an island was difficult, not to mention it was subject to great delays and cost far more than in mainland areas.

c. Special experiential identity: The particularities of insular space affect perceptions, behaviors and actions. As has already been mentioned, islands are 'objects of the mind' in addition to being physical objects and they are viewed in different ways by visitors – tourists and mainlanders – compared to long-term local inhabitants. While for the visitor, islands can be places to 'escape' from everyday life and live 'utopias', local inhabitants may have highly different views. For instance, they will be more aware of the hardships related to island life and, in some instances, at least some of them (especially younger people) may long for escape themselves if the chance arises. Also, previous violent fluctuations in economic prosperity and migration fluxes have marked islanders' way of decision making. Understanding the state of mind of local inhabitants concerning the islands they live on is of paramount importance given that the context of this study involves a detailed understanding of the factors that determine their degree of attractiveness (see discussion further down).

d. Particular, rich and vulnerable natural and cultural environment: Because of their small size and their isolation many islands have witnessed the evolution of unique endemic species and, as a result, have valuable terrestrial and marine ecosystems. Additionally, numerous islands have a rich historic past, which is presently highlighted through monuments, settlements and landscapes; many of these have been classified as national, European, or even world cultural heritage sites. This unique natural and cultural capital has for the moment being used mostly for the development of tourism - and in the case of the majority of Mediterranean islands mass tourism -. Ironically, in a number of cases, efforts to preserve such cultural and natural amenities have been considered by some local stakeholders to be an obstacle to economic growth. Indeed, there

exists an increasing tension on many islands between those who advocate the need to conserve these highly vulnerable resources and those who see these as the *only* realistic hope for generating economic well-being for the local inhabitants.

The aforementioned discussion has served to highlight some of the permanent physical and social features of islands in general and their disadvantaged state during the last decades within the global economic and social system that has, in turn, resulted in their economic, social, political and cultural marginalization. It is exceedingly obvious that the dominant development model, which sees the necessary ingredients of high population concentrations, specialisation, large-scale production, and so on does not directly apply to most of the islands, especially the smaller and medium-sized ones. The extra costs, both direct and indirect, are also a permanent factor that burdens all actors of islands (companies, households and the public sector). Therefore, development options and policies, which are based on models of low production costs, cannot apply to most islands. Instead, other alternatives which rely of characteristics such as quality and diversification with the specific aim of targeting niche markets are far more preferable.

Annex 2: Islands' challenges

The challenge for insular space is to exploit the constantly changing global environment, and make use of the characteristics of insularity as advantages rather than disadvantages. From the broader changes which affect the new international context and the new perspectives for the insular space, we stress particularly:

- **Technological advancements, which could allow the re-appreciation of the importance of principles like those of economic scale and economies of concentration, in regard to the formation of space and the productive process.** The application of new technologies in the fields of communication and information may mean that the physical presence of large groups of people may not be necessary, although interaction between human beings remains essential. New technologies also can benefit small and medium sized companies and services such as education and research, sanitation, information, cultural and other creative activities and so on.
- **Other technological changes** (development of new forms of energy, technologies of partial substitution of natural resources, progress in the transportation field, etc.) can have a **moderating effect on the limitations caused by the islands' small size and isolation.**
- **The emergence of services as the dominant sector in current economies** relieves the islands not only from the restrictions imposed by the lack of sufficient natural resources and their limited carrying capacity, but also from the effects of small local markets (since the production of services is less affected by the added transfer cost).
- **The shift of human aspirations towards quality**, including the growing demand for environmental preservation, the preference for "healthy" non-massive production and high quality products, and a preference for small scales and better quality of life. Such conditions are prominent on small insular societies and they may comprise these places' competitive advantage. The development of new forms of tourism (non mass-oriented), observed since the end of the previous decade is a consequence of this evolution.
- **The increasing demand expressed by "white collar" workers (researchers, high position entrepreneurs etc.), artists, individuals of economic potential and other categories of the population, to be installed in areas with high quality natural**

and man-made environments; in this case the provision of a broad range of facilities (economic and social services as well as various amenities) appears **to be** a prerequisite.

- **The increasing importance of free time activities. Again, islands that offer plenty of opportunities for leisure-oriented activities can turn themselves into attractive locales.**
- **The growing importance of the regional and the local level in decision making.** The governance approach is more suitable for small societies than for big cities.

From the facts listed above, **it appears that certain characteristics of the islands, which until now have been perceived as naturally irreversible disadvantages and thus, barriers to development, may be converted into advantages or, at very least, become "neutralized"**. Many islands seem to possess an abundance of most of those "resources", which creates some 'new' comparative advantages.

The existence of resources and new potentials for development comprise a necessary but not sufficient precondition for the exit from underdevelopment. Development planning is required, aiming towards the enhancement of insular attractiveness. The objective is to maximize the benefits that will result for the islands through the development of complementary activities for the minimization of the economic leakages, the mobilization of the mechanisms for the in-situ re-investment of profits, and so on. This planning should be based on principles adjusted to the particularities of the islands. It is, thus, essential to **exploit their comparative advantages**, based on a twofold rationale:

- (a) The comparative advantage is not necessarily natural, meaning permanent and constant, but fluctuates through the course of time and with the alteration of external conditions. In this regard, the economy should not be structured around the exploitation of the one specific advantage, in order to avoid a situation leading to a fragile mono-culture.
- (b) It is essential to follow the developments of the external environment, in order to "reveal" or "create" new comparative advantages.

An equally strong challenge for the 21st century is the application on the islands of the concept of *sustainability*, meaning the constant developing progress which simultaneously allows the preservation of both the islands' physiognomy (diversity) and their characteristics (small scale)

in depth of time. Such a situation can make the islands increasingly attractive as places to live and, thus, encourage a high degree of permanence for the population. This objective can be achieved if the islands' characteristics are exploited appropriately and are not converted into disadvantages, as has often been the case with more conventional developmental approaches. For instance:

- The inability to produce high input mass agricultural products on most islands, allows these to turn their attention towards a continuously increasing clientele, which may be interested **in authentic high-quality and safe food products.**
- The **small-scale societies and the rhythms of life** that do not resemble in any way those of the urban centres from which the tourist originates, comprise an undoubted advantage for the islands.
- The **rich environment, especially on the islands which display a low human footprint** in combination with a wealth of cultural elements offer a unique quality of life.
- The lack of dynamic activities, which characterises most of the islands, may be exploited as an opportunity for the development of new, innovative actions aiming towards the **creation of poles of excellence** in education, research, cultural creation and production of special products.
- The **use of the cultural and natural heritage**, not as a "consumable resource" for mass tourism, but as a valuable element may comprise a source of artistic, scientific, and technological creation with high added value.

Based on new evidence due to described global changes, it should become clear that the goal of the insular policy framework should not be the "equalization" of the islands with the metropolises of the European continent. Moreover, previous ESPON studies have document that areas with "low urban influence and low human footprint" display very good socio-economic performances and that regional competitiveness can be achieved through "soft infrastructure" in order to exploit local assets as quality of life, natural and cultural heritage.

The road from theoretical possibilities to reality passes through two preconditions:

- **The elaboration of a specific development strategy and a complete action plan with clearly defined, but also innovative goals;**

- **The mobilization of local and other appropriate human resources for the realisation and implementation of the strategy and actions.**

The islands need to **improve their attractiveness**, in order to attract «new blood» in terms of people and activities, so as to replace what they lost during their period of marginalization. However, the “new” policies have to take under consideration the opportunities emerging during the 21st century.

Annex 3: List of very small islands

In the European Union there is a great number of small islands (less than 50 inhabitants), that this project is not going to deal directly with. Thus, for the sake of complement, those islands are presented in the following table.

Annex 3 Table 1. Very small islands

No	NAME	SURFACE AREA (in Km ²)	POPULATION	COUNTRY
1	BARSO	2,5	23	DK
2	BIRKHOLM	1	10	DK
3	BJORNO	1,5	36	DK
4	BAAGO	6,23	36	DK
5	HJORTO	0,9	12	DK
6	NEKSELO	2,2	21	DK
7	SKARO	2	40	DK
8	KOINASTU	2,6	5	EST
9	MANIJA	1,9	43	EST
10	KESSULAID	1,7	2	EST
11	AEGNA	2,9	10	EST
12	NAISSAAR	18,6	9	EST
13	PAKRI	12	2	EST
14	CHAUSEY	0,65	12	FR
15	KORONIS	0,235	4	GR
16	PLATEIA	1,575	7	GR
17	ALKIONIDES	0,911	9	GR
18	PROTI	3,107	4	GR
19	SAPIENTZA	9,018	7	GR
20	SXIZA	12,13	2	GR
21	SKORPIOS	0,878	2	GR
22	ADELFOI	1,032	11	GR
23	ALATAS	0,566	5	GR
24	KYRA PANAGIA	24,973	10	GR
25	PERISTERA	14,513	5	GR
26	PIPERION	4,166	2	GR
27	KOINIRA	0,356	4	GR
28	GYALI	4,558	10	GR
29	KALOLIMNOS	1,912	20	GR
30	KINAROS	4,577	2	GR
31	MARATHOS	0,355	6	GR
32	LEVITHA	9,121	8	GR
33	PLATI	0,205	2	GR
34	RO	1,476	15	GR
35	SARIA	20,429	22	GR
36	STROGGILI	0,174	9	GR
37	DHLOS	3,536	14	GR
38	KATO ANTIKERI	1,05	1	GR
39	MAKRONISOS	18,427	5	GR
40	AGIOS GEORGIOS	0,052	1	GR
41	AGIOS MINAS	2,343	3	GR
42	SAMIOPOULA	1,018	5	GR
43	CHRISI	4,743	3	GR
44	GAUDOPOULA	2,813	3	GR
45	DOKOS	13,537	43	GR
46	STEPSOPOULA	1,956	8	GR
47	TRIKERI	0,923	4	GR
48	INIS BO FINNE	2	36	IE
49	INIS FRAOIGH	1,6	9	IE
50	AN TOILEAN RUA	0,65	13	IE
51	GABHLA	3,28	4	IE
52	CONY	2	6	IE
53	DERNISH	2	1	IE
54	INIS BIGIL		24	IE
55	INISHCUTTLE	0,07	3	IE
56	INISHLYRE	<1	7	IE
57	CLYNISH	<1	5	IE

58	INISGORT	<1	3	IE
59	INISHNAKILLEW	<1	3	IE
60	ISLANDMORE	<1	1	IE
61	CLAGGAN	<1	4	IE
62	INIS TRA MHOR	2	1	IE
63	HEIR	3,75	24	IE
64	LONG	3,84	5	IE
65	WHIDDY	7,68	22	IE
66	DURSEY	9,9	6	IE
67	FALESON	0,63	5	SE
68	LANGOREN	1,66	7	SE
69	HINDERSON	14,16	24	SE
70	JUNKON	13,06	10	SE
71	KALLAXON	3,8	16	SE
72	KALKHOLMEN	0,62	6	SE
73	LANGON	5,99	5	SE
74	STORBRÄNDÖN	10,06	8	SE
75	YTTERSTHOLMEN (pitea)	0,07	10	SE
76	LILL-SANDSKÄR	0,22	5	SE
77	STOR-SANDSKÄR	0,68	19	SE
78	MALMÖN	2,83	6	SE
79	N ULVÖN	16,21	44	SE
80	LUNGÖN	9,31	9	SE
81	FÄLÖN	2,78	8	SE
82	LÄNSÖ	1,66	10	SE
83	ORMÖN	3,03	15	SE
84	ST RISTEN	1,83	12	SE
85	ASKOLMEN	0,42	5	SE
86	EDSGARN	1	6	SE
87	FEJAN	0,79	6	SE
88	GRÄSKÖ	1,18	21	SE
89	HÖGMARSÖ	1,92	33	SE
90	KROKHOLMEN	0,37	7	SE
91	L GRÄSKÖ	0,08	8	SE
92	LÖPARÖ	1,94	17	SE
93	NORRÖRA	2	9	SE
94	RÄKNÖ	0,76	6	SE
95	RÖRSKÄRET	0,34	5	SE
96	SJÄLBOTTNA	1,61	8	SE
97	ST ENSKÄR	0,15	9	SE
98	ST KLYPPINGEN	0,77	5	SE
99	STOMNARÖ	1,07	18	SE
100	SUNDHOLMEN	0,59	7	SE
101	SV. HÖGARNA	0,56	7	SE
102	SÖDERÖRA	1,27	24	SE
103	BETSÖ	0,55	8	SE
104	HUSARÖ	1,58	21	SE
105	MJÖLKÖ	0,74	7	SE
106	ST JOLPAN	0,89	6	SE
107	ALÖN	0,46	13	SE
108	ÄNGSHOLMEN	0,22	5	SE
109	ÄPPLARÖ	1,08	5	SE
110	Ö LAGNÖ	4,49	29	SE
111	ÖRSÖ	1,21	21	SE
112	BISKOPSÖN	0,76	5	SE
113	BOHOLMEN	0,11	5	SE
114	BOSKAPSÖN	0,29	5	SE
115	EKHOLMEN	0,43	6	SE
116	GILLINGE	0,7	12	SE
117	GRANHOLMEN	0,89	11	SE
118	GRINDA	1,67	6	SE
119	GÄLLNÖ	5,28	30	SE
120	HARÖ	2,76	18	SE
121	HJÄLMÖ	1,05	22	SE
122	IDÖBORG	0,07	5	SE
123	JUNGRUSKÄR	1,01	8	SE
124	KORSÖ	0,97	5	SE
125	LADHOLMEN	0,49	5	SE
126	MÖRTÖ	1,87	9	SE
127	N STAVSUDDA	0,49	15	SE
128	NÄMDÖ	10,44	35	SE

129	ORRÖN	1,3	5	SE
130	RISHOLMEN	0,16	10	SE
131	RUNÖ	0,28	5	SE
132	S LAGNÖ	1,07	10	SE
133	S STAVSUDDA	1,69	11	SE
134	SAXAREN	0,42	7	SE
135	ST TORNÖ	0,44	5	SE
136	STORÖ	2,74	11	SE
137	SÖDERMÖJA	2,95	24	SE
138	TRANGHOLMEN	0,39	10	SE
139	TRÄSKÖ	0,86	6	SE
140	UVÖN	1,92	10	SE
141	VANÖ	0,38	5	SE
142	VARHOLMA	0,79	10	SE
143	VÄSTERÖ	0,66	5	SE
144	EDHOLMA	0,57	8	SE
145	GRANHOLMEN	0,12	6	SE
146	HÄSTHOLMEN	0,58	28	SE
147	TISTELN	0,01	6	SE
148	Ö GRANHOLMEN	0,28	8	SE
149	BASTUHOLMEN	0,1	11	SE
150	ST SKRAGGEN	0,1	5	SE
151	GASÖN	0,96	12	SE
152	KORSHOLMEN	0,05	11	SE
153	TEGELÖN	0,5	21	SE
154	DUVHOLMEN	0,04	16	SE
155	FJÄRDERHOLMARN	0,07	5	SE
156	ASPÖN	0,42	6	SE
157	BJÖRKÖ	1,39	6	SE
158	FIVERSÄTTAÖN	0,75	5	SE
159	JUTHOLMEN	0,03	7	SE
160	KYMMENDÖ	1,74	27	SE
161	LANGGARN	1,13	23	SE
162	RANÖ	5,2	11	SE
163	STENHOLMEN	0,25	9	SE
164	VITSGARN	2,66	6	SE
165	ALÖ	5,4	7	SE
166	ÄNGSHOLMARN	0,27	7	SE
167	BEDARÖN	1,8	9	SE
168	BERGHOLMEN	0,21	5	SE
169	DEGERHOLMEN	0,24	5	SE
170	KROKSKÄR	0,14	8	SE
171	LANDSORT	1,64	26	SE
172	ASKÖ	6,31	8	SE
173	HARTSÖN	3,29	7	SE
174	LANGÖN	4,73	5	SE
175	RINGSÖN	7,48	5	SE
176	SÄVÖ	0,92	5	SE
177	ARKÖ	3,73	17	SE
178	GRÄNSÖ	4,7	11	SE
179	HÄSTÖ	0,32	10	SE
180	L RIMMÖ	0,74	28	SE
181	ASPÖJA	1,74	28	SE
182	BIRKÖ	0,24	7	SE
183	KALLSÖ	1,16	5	SE
184	KORSHOLMEN	0,1	6	SE
185	LAMMSKÄR	0,14	5	SE
186	MISSJÖ	0,88	15	SE
187	ST RIMMÖ	1,38	10	SE
188	TRÄNNÖ	0,98	6	SE
189	VÄNSÖ	1,81	9	SE
190	ÄSPHOLM	1,07	7	SE
191	AXELSÖ	0,98	5	SE
192	BONDERKROK	1,13	7	SE
193	GRÄSMARÖ	0,78	5	SE
194	HARTSENA	1,78	19	SE
195	HASKÖ	1,98	8	SE
196	KÄTTILÖ	1,36	6	SE
197	ST ALÖ-BOKÖ	6,59	15	SE
198	BJÖRKÖ	2,86	11	SE
199	EKNÖ	10,46	18	SE

200	FLATHOLMEN	0,11	5	SE
201	GÅRDSHOLMEN	0,24	5	SE
202	HASSELÖ-SLADÖ	8,05	35	SE
203	ORONSAY	5,76	5	UK
204	LUNGA	2,59	7	UK
205	SHUNA	4,98	1	UK
206	ERRAID	2,29	8	UK
207	GOMETRA	4,9	5	UK
208	ULVA	18,88	16	UK
209	FLODDA	1,45	11	UK
210	GRIMSAY	1,17	19	UK
211	BALESHARE	10,15	49	UK
212	INCHCOLM	85	2	UK
213	CANNA	157,35	6	UK
214	MUCK	5,41	30	UK
215	RHUM	108,26	22	UK
216	SANDAY	2,03	6	UK
217	RONA	10,47	2	UK
218	EILEAN BAN	0,1	2	UK
219	SCALPAY	24,99	10	UK
220	SOAY	10,4	7	UK
221	HOLY ISLAND	26,4	13	UK
222	GAIRSAY	2,57	3	UK
223	GRAEMSAY	3,93	21	UK
224	WYRE	2,78	18	UK
225	AUSKERRY	0,55	5	UK
226	BRURAY	0,52	26	UK
227	PAPA STOUR	8,83	23	UK
228	VAILA	2,95	2	UK

Annex 4: Islands' case studies. Selection methodology

The islands are classified hereunder with a view to select the case studies, using the criteria analysed in the research proposal. This will serve to group islands within various categories where different islands may nevertheless exhibit similar characteristics. Representative islands will be selected for different categories, each of which will cover a large number and variety of island candidates. The selected islands for the case studies will be six.

There are several selection criteria as seen below:

1. The first criterion is the resident population. The islands are classified in three categories.
 - Large islands: >50,000 permanent inhabitants
 - Medium-sized islands: between 5,000-50,000 permanent inhabitants
 - Small islands: <5,000 permanent inhabitants.
2. The second criterion involves administrative status (or jurisdiction) as an indication of autonomy and power for the promotion of policies tailored to the islands' characteristics. At the levels of the independent state, NUTS II and NUTS III regions, data is readily available and thus an analysis is possible, as already mentioned. The problem rests on the fact that, generally, data is not available at a lower statistical level. Since the aim of this study is to take into account the specific island level proceeding to a further level of analysis about how one can use existing data and from which islands data must be collected is a necessary step forward.
 - State: these are the insular countries. On the one hand there is Cyprus that consists of only one island. On the other hand, Malta consists of 3 islands. However, more than 90% of the country's population lives on the main island, so State data fits also for the main island of Malta, which is also a NUTS III region. The second island of Malta, Gozo, is also a NUTS III region, which means that data is available for the two main Maltese islands. Comino, part of Gozo NUTS III area, is an island with very few (less than 10) permanent inhabitants; so data of Gozo NUTS III area is good enough to incorporate Comino.
 - In a NUTS II or III island region either with one (for example Isle of Wight, Kriti) or with more than one island, when the main island supports the largest part of the region's population (>70% of the total population), that main island is classified as a "NUTS II region" or a "NUTS III region". Examples include Sicily, Sardinia, Aland Mainland, and

Kerkyra. This is because when there is one such large island, the available NUTS II or III data for the whole region fits quite well also for this island in some thematic areas.

- Island: This category encompasses all other islands that are not included in the above categories but are: **coastal** (for example, Samsø,), **islands of an archipelagos**, where no more than 70% of the population lives on just one island (as is the case of Dodecanese and Cyclades archipelagos) or **small islands of an insular region** (such as Lipari of Sicily, Kokar of Aland, Erikoussa of Kerkyra).
3. The third criterion concerns the geographical distribution and location of the islands, which can be neatly separated between the islands of the North (Baltic/ North Atlantic, with colder climate, seasonally strong domestic tourism, higher per capita GDP) and those of the South (Mediterranean, warmer climate, mass international tourism, lower per capita GDP, frontier zones with North Africa and targets of illegal immigration into the EU).
4. The fourth criterion concerns the island's development status. There are 4 identified status levels, according to the EU-objectives that determine the European financial aid:
- Convergence Regions: (NUTS 2 regions with GDP per capita of less than 75% of EU average);
 - Phasing-out Regions: (Regions which would still be eligible as Convergence regions if the threshold was estimated for EU15 and not EU25);
 - Phasing-in Regions: (Regions formerly Objective I, but presently with GDP per capita over 75% of EU15); and
 - Competitiveness and Employment Regions: (All remaining regions not covered by the three types above).

Coastal and Nuts III islands are classified with the mainland region within which they are administratively attached (for example, Orkney with the Highlands and Islands Region of Scotland; Hydra with the Attiki Region of Greece; and Ouessant with the Bretagne Region of France).

According to these criteria, the categorization of the islands for the purposes of our study is presented as Table 1 below (Mean population counts are drawn from census data). Apart from the islands that appear on Table 1, there are also many (more than 200) other smaller European islands (less than 50 inhabitants), that we are not going to deal directly with in this project.

Annex 4 Table 1. Islands Categorization

	SIZE	DEVELOPMENT STATUS	STATE (0)	NUTS II (1)	NUTS III (6)	ISLAND (224)	
NORTH (231)	LARGE (2)	Convergence					
		Phasing-out					
		Phasing-in					
		Comp. & Empl.			GOTLAND-SE WIGHT-UK		
	MEDIUM (14)	Convergence					HIIUMAA-EST, SAAREMAA-EST
		Phasing-out			LEWIS & HARRIS-UK, MAINLAND ORKNEY-UK, MAINLAND SHETLAND-UK		UIST-UK, BUTE-UK, SKYE-UK
		Phasing-in					
		Comp. & Empl.		ALAND-FI	BORNHOLM-DK		TEXEL-NL, FOHR-DE, BORKUM-DE, NORDERNEY-DE
	SMALL (215)	Convergence					HIDDENSEE-DE, OSMUSSAAR-EST, ABRUKA-EST, MANILAI-EST, RUHNU-EST, KASSARI-EST, VORMSI-EST, KIHNU-EST, MUHU-EST, VILSANDI-EST, PIIRISSAAR-EST, PRANGLI-EST BARDSEY-UK, SAINT MARTIN'S-UK, SAINT MARY'S-UK, TRESKO-UK
		Phasing-out					FOULA-UK, EGILSAY-UK, HOUSAY-UK, COLONSAY-UK, FAIR-UK, EIGG-UK, EASTBURRA-UK, PAPA WESTRAY-UK, UNST-UK, NORTH RONALDSAY-UK, WHALSEY-UK, TRONDRA-UK, FLOTTA-UK, IONA-UK, GIGHA-UK, RAASAY-UK, EDAY-UK, COLL-UK, LUING-UK, JURA-UK, ROUSAY-UK, SHAPINSAY-UK, FETLAIR-UK, STRONSAY-UK, HOY-UK, SANDAY-UK, WESTRAY-UK, TIREE-UK, WESTBURRA-UK, BRESSAY-UK, YELL-UK, BARRA-VATERSAY-UK, MULL-UK, ISLAY-UK, ARRAN-UK, EASDALE-UK, LISMORE-UK, SEIL-UK, TIREE-UK, BENBECULA-UK, BERNERAY-UK, ERISKAY-UK, GREAT BERNERA-UK, GRIMSAY-UK, NORTH UIST, UK, SCALPAY-UK, SOUTH UIST-UK, VATERSAY-UK, GREAT CUMBRAE-UK, BURRAY-UK, SOUTH RONALDSAY-UK, PAPA STRONSAY-UK, STRONSAY-UK, MUCKLE ROE-UK, TRONDRA-UK, WHASLAY-UK
		Phasing-in					TORY-IE, CLARE-IE, INISHBOFIN-IE, INISHMAAN-IE, INISHEER-IE, ARANMORE-IE, INISHMORE-IE, TORAIGH-IE, INISHTURK-IE, SHERKIN-IE, BERE ISLAND-IE
		Comp. & Empl.					GRODE-DE, HOOGE-DE, BALTRUM-DE, SPIEKEROOG-DE, WANGEROOG-DE, PELLWORM-DE, JUIST-DE, HELGOLAND-DE, LANGEBOOG-DE, AMRUM-DE, NORDSTRANDISCHMOOR-DE, ENDELAVE-DK, ASKO-DK, MANDO-DK, TUNO-DK, AVERNAKO-DK, DREJO-DK, LYO-DK, ANHOLT-DK, OMO-DK, FEMO-DK, STRYNO-DK, AGERSO-DK, SEJERO- DK, FEJO-DK, LAESO-DK, FANO-DK, ERO-DK, SAMSO-DK, EGHOLM- DK, FUR-

						DK, HJARNO-DK, ORO-DK, VENO-DK, AARO-DK AASLA-FI, ATTU-FI, KEISTIO-FI, MIELISHOLM-FI, UTO-FI, JURMO-FI, SEGLINGE-FI, SAVERKEIT-FI, KASNAN-FI, LAPPO-FI, HITIS-FI, ENKLINGE-FI, MOSSALA-FI, NORRSKATA-FI, VARTSALA-FI, SOTTUNGA-FI, BJORKO-KIVIMO-FI, INIO-FI, SKALDO-FI, BAROSUND-FI, ROSALA-FI, KUMLINGE-FI, PELLINKI-FI, KOKAR-FI, BRANDO-FI, HOUTSKAR-FI, VARDON-FI, BERGO-FI, FOGLO-FI, SUOMENLINNA-FI, HAILUOTO-FI, KORPO-FI, NAGU MAIN ISL-FI, HOEDIC-FR, AIX-FR, ARZ-FR, HOUAT-FR, MOLENE-FR BREHAT-FR, BATZ-FR, OUESSANT-FR, GROIX-FR, BELLE-ILE-FR, YEU-FR, MOLENE-FR, SEIN-FR, ILE AUX MOINES-FR CLEAR-IE, SCHIERMONNIKOOG-NL, VLIELAND-NL, AMELAND-NL, TERSCHELLING-NL, ARHOLMA-SE, RAMSO-SE, HOLMON-SE, SVARTSO-SE, KOPSTADSO-SE, SANDON-SE, NORD KOSTER-SE, INGMARSO-SE, HERMANO-SE, LYRON-SE, ORNO-SE, UTO-SE, MOJA-SE, SYD KOSTER-SE, RUNMARO-SE, STORA DYRON-SE, RORO-SE, TYNNINGO-SE, VEN-SE, VRANGO-SE, YXLAN-SE, ASPO-SE, MARSTRAND-SE, BLIDO-SE, FARO-SE, HALSO-SE, BRANNO-SE, LJUSTERO-SE, DONSO-SE, STYRSO-SE, OCKERO-SE, HONO-SE, TYNNINGÖ-SE, HEMSÖN-SE, GRÄSÖ-SE, TJOCKÖ-SE, VÄRINGSÖ-SE, LADNA-SE, SANDHAMN-SE, RINDÖ-SE, SKARPÖ-SE, STORHOLMEN-SE, TRANHOLMEN-SE, ORNÖ-SE, OAXEN-SE RATHLIN-UK
	SIZE	DEVELOPMENT STATUS	STATE (1)	NUTS II (5)	NUTS III (8)	ISLAND (117)
SOUTH (131)	LARGE (13)	Convergence		SICILIA-IT, KRITI-GR	KERKYRA-GR, LESVOS-GR, MALTA-MLT	ISCHIA-IT
		Phasing-out				
		Phasing-in		SARDEGNA-IT		RODOS-GR
		Comp. & Empl.	CYPRUS-CYP	MALLORCA-ES, CORSE-FR		MENORCA-ES, IBIZA-ES
	MEDIUM (30)	Convergence			ZAKYNTHOS-GR, KEPHALONIA-GR, SAMOS-GR, CHIOS-GR, GOZO-MLT	SKOPELOS-GR, SKIATHOS-GR, IKARIA-GR, LIMNOS-GR, THASSOS-GR, PROCIDA-IT, CAPRI-IT, LIPARI-IT, PANTELLERIA-IT
		Phasing-out				AEGINA-GR
		Phasing-in				KARPATOS-GR, LEROS-GR, KALYMNOS-GR, KOS-GR, MYKONOS-GR, TINOS-GR, ANDROS-GR, THIRA-GR, PAROS-GR, NAXOS-GR, SYROS-GR, MADDALENA-CAPRERA-IT, SAN PIETRO-IT
		Comp. & Empl.				FORMENTERA-ES, ELBA-IT
	SMALL (88)	Convergence				KASTOS-GR, ANTIPAXOS-GR, OTHONI-GR, MATHRAKI-GR, ERIKOUSSA-GR, KALAMOS-GR, MAGANISSION-GR, PAXI-GR, ITHAKI-GR, GAVDOS-GR,

				ALONISSOS-GR, THYMAINA-GR, EFSTRATIOS-GR, PSARA-GR, OINOUSSAI-GR, FOURNI-GR, SAMOTHRAKI-GR, TOURLIS-GR, STEFANION-GR, NISOS-GR, LEVANZO-IT, MARETTIMO-IT, FAVIGNANA-IT, ALICUDI-IT, FILICUDI-IT, PANAREA-IT, STROMBOLI-IT, VULCANO-IT, SALINA-IT, LINOSA-IT, LAMPEDUSA-IT, SAN DOMINO-IT, USTICA-IT, COMINO-MLT
	Phasing-out			ANTI-KYTHIRA-GR, AGISTRI-GR, AMOULIANI-GR, YDRA-GR, KYTHIRA-GR, POROS-GR, SPETSES-GR, PALAION TRIKERION-GR
	Phasing-in			ARKI-GR, PSERIMOS-GR, TELENDOS-GR, AGATHONISSI-GR, TILOS-GR, MEGISTI-GR, CHALKI-GR, LIPSI-GR, ASTYPALAIA-GR, KASSOS-GR, NISYROS-GR, SYMI-GR, PATMOS-GR, DONOUSSA-GR, IRAKLIA-GR, SCHINOUSSA-GR, THIRASSIA-GR, SIKINOS-GR, ANAFI-GR, KOUFONISSI-GR, FOLEGANDROS-GR, KIMOLOS-GR, ANTIPAROS-GR, SERIFOS-GR, KYTHNOS-GR, AMORGOS-GR, IOS-GR, KEA-GR, SIFNOS-GR, MILOS-GR, SKYROS-GR, TRIZONIA-GR, FARMAKONISI-GR, ASINARA-IT, QUIRRA-IT,
	Comp. & Empl.			PORT-CROS-FR, ILE DU LEVANT-FR, PORQUEROLLES-FR, VENTOTENE-IT, PONZA-IT, GORGONA-IT, CAPRAIA-IT, PIANOSA-IT, GIGLIO-IT, PALMARIA-IT, SALINA-IT

LEGEND:

Convergence: Convergence Regions

Phasing-out: Phasing-out Regions

Phasing-in: Phasing-in Regions

Comp. & Empl.: Competitiveness and Employment Regions

The number of the islands in each category is summarised in Table 2.

Annex 4 Table 2. Number of Islands in Each Category

	SIZE	DEVELOPMENT STATUS	STATE (0)	NUTS II (1)	NUTS III (6)	ISLANDS (224)	
NORTH (231)	LARGE (2)	Convergence (0)					
		Phasing-out (0)					
		Phasing-in (0)					
		Comp. & Empl. (2)				2	
	MEDIUM (14)	Convergence (2)					2
		Phasing-out (6)				3	3
		Phasing-in (0)					
		Comp. & Empl. (6)			1	1	4
	SMALL (215)	Convergence (16)					16
		Phasing-out (56)					56
		Phasing-in (11)					11
		Comp. & Empl. (132)					132
	SIZE	DEVELOPMENT STATUS	STATE (1)	NUTS II (5)	NUTS III (8)	ISLANDS (117)	
SOUTH (131)	LARGE (13)	Convergence (6)		2	3	1	
		Phasing-out (0)					
		Phasing-in (2)		1		1	
		Comp. & Empl. (5)	1	2		2	
	MEDIUM (30)	Convergence (14)				5	9
		Phasing-out (1)					1
		Phasing-in (13)					13
		Comp. & Empl. (2)					2
	SMALL (88)	Convergence (34)					34
		Phasing-out (8)					8
		Phasing-in (34)					34
		Comp. & Empl. (12)					12

If the choice of islands for in-depth study were based on all the 4 criteria –development status included- (Table 2), the number of case studies would be 27!!! However, the number of expected case studies in this project is only six. **Cyprus as a sovereign state, Åland mainland, Corse, Sardegna island, Sicily island and Crete as NUTS II; and Gotland, Isle of Wight, Lewis and Harris, Orkney mainland, Shetland mainland, Bornholm, Majorca, Minorca, Kerkyra island, Lesvos, Malta island, Zakynthos island, Kephallonia, Samos island, Chios island and Gozo as NUTS III islands (22 islands in total, 7 islands from the north and 14 from the south); can be readily analysed. This is because the basic (routine) data required is already available. Thus, the case study islands should be chosen only from the last column, which means from islands where EU statistical data does not**

exist at the European level. Still despite the elimination of certain islands 18 categories of islands remain which could be eligible as case studies, as can be observed in the last column of Table 2.

Based on the above tables, and keeping in mind that (a) the selected islands are going to be used for the extraction of general conclusions about European islands and (b) the regions where the stakeholders of this project are located, the six representative case studies are presented in Table 3:

Annex 4 Table 3. The Six Selected Case Study Islands

		LARGE	MEDIUM	SMALL
NORTH	CONVERGENCE REGIONS		Saaremaa-EST (coastal)	
	PHASING-OUT REGION			
	PHASING-IN REGION			
	COMPETITIVENESS & EMPLOYMENT REGIONS			Samsø-DK (coastal) Kökar-FI (island region)
SOUTH	CONVERGENCE REGIONS			Salina-IT (island of an insular region)
	PHASING-OUT REGION			
	PHASING-IN REGION		Kalymnos-GR (archipelago) (archipelago)	Lipsi-GR
	COMPETITIVENESS & EMPLOYMENT REGIONS	Ibiza-ES (island region)		

This choice is based on more considerations:

- First, it is critical that all the 3 sub-categories of islands (coastal, archipelago and island region) are represented;
- Second, the small islands are well represented within the selection of four out of the six islands; and
- Finally, some more specific features are taken into account as the model of tourism development for Ibiza, Kalymnos for its specialization in fisheries, and with the small island of Lipsi are within the archipelagos of Dodecanese at the external frontiers of EU, the energy performance of Samsø, the fact that Saaremaa has recently entered in the EU.

The Greek islands of Kalymnos and Lipsi are considered as one case study in an archipelago area which displays large intra-regional disparities.

The overall aims of this analysis are the following:

- to undertake an evaluation of the islands' situation by using and analysing both qualitative and quantitative information;
- to determine, classify and prioritise those features that contribute, enhance or otherwise positively influence the attractiveness of specific islands. This will include some particular consideration of how insularity – the fact that an island is an island – contributes to an island's attractiveness; and
- to collect pertinent information about good practices and policies that have been used in order to address the attractiveness and other aspects relating to insularity.

Therefore, this study will seek to collect the required information for all the 28 islands that will be examined in order to be preferably able to generalize our results to all the European islands. This information will be acquired from the ESPON data base, EUROSTAT, ESPON national focal points, and the stakeholders. **Field work from the TPG will be conducted only for the 6 case studies.**

At this stage of the study, islands will be classified on the basis of findings drawn from the statistical analysis suggested above. A 'SWOT' analysis will help to specify the strengths, the weaknesses, the threats and the opportunities of each category of islands. Based on such a classification, the analysis will continue with:

- an examination of the islands' potential;
- an estimation of the impacts of external factors on the islands; and
- a set of policy recommendations for the islands' development in order to overcome the detected problems and weaknesses, and to maximise any perceived or identified opportunities and competitive advantages.

Annex 5: Information System

The activities of data storage and manipulation, indicator calculation, thematic map production and dissemination of project results, will be supported by a web-based geographic information system, building on the material that has been produced from the former ESPON programs (Data Navigator, Web-GIS, HyperAtlas). **However, a significant novelty will be introduced: the NUTS-island classification.** This new zone is absolutely necessary for this project in order to express the islands' reality; in other words islands should not be included within the existing regional classification of NUTS 0-V, since islands can either be NUTS II, NUTS III, NUTS V, LAU or even a collection of islands within NUTS V. Problems that can emerge by dealing with the different territorial scales that have to be analysed and represented cartographically, must be subjected to the Modifiable Area Unit Problem (MAUP) notion, as well as other forms of innovative cartography, which makes use of ESPON's former experiences.

Database

All spatial data (administrative data, or data collected during the case studies), variables and indicators (offered by other ESPON projects, collected from the EU or the stakeholders, or produced during this project) will be stored in a single central database. Additional kinds of data, such as satellite images or other raster-nature resources, will be stored either in the database or the file system. The database will support the estimation of Island Impact Assessment (IIA) and other quantitative and qualitative indicators. The design of the database will be compatible to the "*external database*" of the ESPON 2013 Database project, in order to facilitate the data import/export procedures.

Metadata

Every data entity will be accomplished with the appropriate metadata record, keeping information about the creator, creation time, thematic category, accuracy and completeness, etc. (according to the INSPIRE Directive and optionally to the ISO 19115 standard). Also, the proposed ontologies from the ESPON 2013 Database project will be considered, as they become available. Metadata will be managed by a metadata catalogue system, supporting also the unified searching of data in the database and external sources.

WebGIS

A specific web-based application (webGIS) will be developed to support end-users interacting with the system. Specifically, the application will provide on-line interactive thematic maps, tables and

graphs, according to end-users' requests. Special care will be given for the visualization of the territory of the islands in relation to the European continent. The above service will be offered through the website (portal) of the project.

Portal

The website (portal) will be the central point for the dissemination of all information (such as announcements, reports, presentations, etc.), and the provision of services (metadata catalogue, webGIS) regarding the project. In addition, the portal will support an on-line discussion group (*islands' forum*).

Technical details

From a technical point of view, the system will be based on a 3-tier architecture: the user layer, the application layer and the data layer (figure 1).

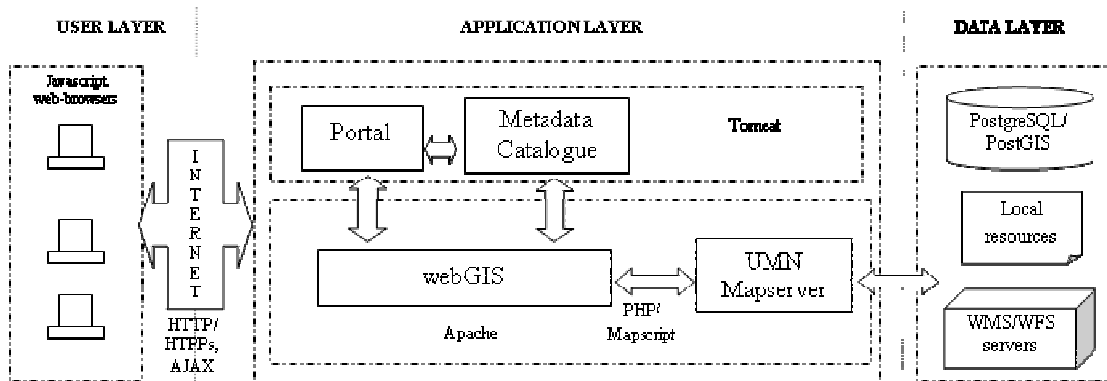


Figure 1: The architecture of the information system

End-users interact with the system (application layer) through Javascript-based web-browsers (MS IE, Firefox, etc.). The application layer consists of three parts: (i) the website (portal), which provides general information, results of the project, and links to the applications developed (services); (ii) the Metadata Catalog, which provides the metadata search/retrieve service (based on the open source GeoNetwork Catalogue Server); and (iii) the webGIS application (will be developed during the project). The webGIS is supported by the (open source) UMN Mapserver, operating on the (open source) Apache web server. The webGIS and the Mapserver interact via the PHP/MapScript API. The data layer consists of a PostgreSQL/PostGIS database, local resources (e.g. raster images) and occasionally other WMS/WFS servers, if needed.

The user-interface of the webGIS consists of the following distinct parts:

1. Toolbar (embedded in map), containing: (a) Dynamic pan, zoom and full extent. Furthermore the user can zoom to a specific area by clicking on the keymap (see below). Map scales are user-defined; (b) Change of map size depending on the user screen resolution (e.g. 1024x768 or 1280x1024) in order to maximize map image; legend can also be hidden for the same purpose; (c) Map save function in various formats (e.g. JPEG, PNG, PDF, HTML) for future reference, with user customizable content; (d) Map print with user customizable content (e.g. map size, legend or keymap on/off etc.); (e) Show map contents in Google Earth; (f) Previous/next view supported, by storing all intermediate system states; any state can be added to user's favorites; (g) Distance and area measurement in user defined units; area can be an arbitrary polygon; (h) Highlight user defined coordinates on map; (i) Point/Area feature information request: the user can perform a request to one or more layers either by clicking on a point on map, or by selecting an area on map and receive information on layer fields. The information received is displayed on the page and can be stored in Excel format. Query-able layers and query-able layer fields are user-defined (via metadata); (j) Query builder: the user can create a custom query through special forms on the fields of a specific layer; the geographic features returned are displayed on map and the information received is displayed on the page and can be stored in Excel format. Query-able layers and query-able layer fields are user-defined (via metadata); (k) WMS/WFS: the user can connect to a remote map server (UMN MapServer, ArcGIS Server etc.) via the WMS. The user can select which layers of the remote server to add to the legend and visualize. For each remote layer that is added to the legend, the user can change its draw order, zoom to its extents, or download all its data via the WFS. The application can also act as a dedicated WMS/WFS web GIS system (e.g. connect to geographic Catalogs); (l) Thematic mapping: the user will be able to configure specific layers via forms, by selecting desired data categories or indicators, the cartographic method, the number of classes, coloring, symbolism, etc.
2. Legend: the user can select the visible layers and layers originating from queries. Depending on the map scale, some layers may not be visible/query-able at all, depending on user input.

3. Map area: this area spans the largest screen area and contains the map, the toolbar, a coordinate box and the scale bar.
4. Keymap: provides the location of the area displayed in the map area in a broader spatial extent (location map). Also, supports the pan operation in relation to the map area.

Annex 6: Sustainability Variables and Indicators

	Variable	Definition	Source
Social cohesion	Unemployment rate	Development (evolution) of unemployment rate	EUROSTAT – ESPON 4.1.3 DB – NUTS 3
	Development of unemployment rate	variation of unemployment rates over time	EUROSTAT – ESPON 4.1.3 DB – NUTS 3
	Youth unemployment.	Unemployment rate < 25 years %	EUROSTAT – ESPON 4.1.3 DB – NUTS 2
	Long term unemployment rate		EUROSTAT – ESPON 4.1.3 – NUTS 2
	Early school leavers	% of	
	Life expectancy	is the average expected lifespan of an individual	
	Multicultural society	% Ethnic minorities and other nationalities in population	
	At persistent risk of poverty rate	Population share with 60 % of the national equivalent median income	
Population's Structure and development	Intra-regional income dispersion	- Gini index - Highest income quantile / lowest income quantile (example S80/S20 = highest quintile / lowest quintile)	
	Regional price index	Price (in common currency) of a selected basket of goods (adapted to the local culture and habits) Could be approached through some proxy, such as just one or two products (e.g. average house prices), but this does not take into account cultural differences	
	Population evolution (time series)		ESPON Data base
	Population pyramid		ESPON Data base
	Births, deaths (time series)		
	Fertility rate	Number of children per women	ESPON 1.1.4 - Atlas – NUTS2
Migratory balance	((Population at the end of the period - Population at the beginning of the period) - (births - deaths))/ total population at the beginning of the period	EUROSTAT - ESPON 1.1.4 / 4.1.3 DB – NUTS 2/3	

	Female activity rate		EUROSTAT – ESPON 4.1.3 – NUTS 2
	Male activity rate		EUROSTAT – ESPON 4.1.3 DB – NUTS 2
	Ageing of population	Share of Population over 64 years %	EUROSTAT – ESPON 4.1.3 DB – NUTS 2
	Dependency rates	Share of population under 15 and over 64 years %)	ESPON DB
Economic effectiveness	Components of population development	Population development Index	ESPON 1.1.4 DB – NUTS 2/3
	GDP in PPS per capita (time series)	Employment (time series)	EUROSTAT – ESPON 4.1.3 DB – NUTS 3
	Growth rate of GDP in PPS per capita	Employment rate	EUROSTAT – ESPON 4.1.3 DB – NUTS 3
	GDP per employee	GDP per employee	EUROSTAT – ESPON 4.1.3 DB – NUTS 3
Economic Development and Fragility	Share of agriculture, forestry and fishery in the regional added value (%)	added value in Agriculture, Forestry and Fisheries / total added value	EUROSTAT – ESPON 3.4.2 – NUTS 3
	Share of technological manufacturing industries in the regional added value	added value in machine tools (Dk), electric and electronic equipment (DI), transport equipment (Dm) / total added value	EUROSTAT – ESPON 3.4.2 – NUTS 3
	Share of financial and business services in the regional added value	Added values in the financial (J) and business (K) services/total added value	EUROSTAT – ESPON 3.4.2 – NUTS 3
	Share of administration, education, health and social services in the regional added value	Added value in administration (L), Education (M), Health and social services (N)/ total added value	EUROSTAT – ESPON 3.4.2 – NUTS 3
Environmental Preservation	GDP per economic activity		
	Employment per economic activity		
	Population density	total population / total area	EUROSTAT – ESPON 3.1 / 3.2 DB – NUTS 3 / LAU 2
	Residence density	(population + tourist beds + non permanent residents)	
Air quality – pollution	Island Vulnerability index		
	Exposure of ecosystems to acidification, eutrophication and ozone	CSI 005	EEA webpage
	Renewable energy consumption	% of Renewable energy of total energy consumption	EEA -
Water resources	Water Exploitation Index	The mean of annual abstraction of freshwater divided by the mean annual total renewable freshwater resource (EEA – CSI 018)	EEA – NUTS 0

	Drinking water quality	Conformity to standards for Microorganisms, pesticides, nitrate, chemicals, heavy metals (Water Directive EU -10)	EEA -
Coast and Seas	Saltwater intrusion	Chloride in groundwater	EEA -
	Bathing water quality	CSI 022 (Directive 76/160/EEC)	EEA -
	Nutrients in coastal water	WEU4	EEA -
	Coastal erosion		EEA - Euroision 2004 NUTS 3
	Sea surface temperature changes		Europe's environment 4 th assessment
	Changes in sea level rise	Millimetres per year	Impacts of Europe's changing climate, 2008
	Statuts of marine fish stocks	The indicator tracks the ratio of the number of overfished stocks to tht total number of commercial stochs per fishing area - CSI 032	EEA -
	Coastal zone with Natura 2000	% of coastline covered by land/seas sites	EEA -The State of the environment of the Coastal Areas 6/2006 - NUTS 3
Biodiversity	Fragmentation index	Calculated as proportion of fragmented areas to homogeneous areas	GTK - ESPON 2.4.1 - NUTS 3
	Fragmentation by urbanisation, infrastructure and agriculture		CORINE - EEA
Land use/landscape quality	Species diversity	CSI 009	ESPON 2.4.1 DB - NUTS 3
	Coverage of protected areas	Share of Natura 2000 area in %	CORINE - ESPON 4-1-3 - NUTS 3
	Land consumption by transport infrastructure	Sensitivity to desertification index	EEA - Diversification in the Mediterranean Region
	Desertification index		EEA - Agriculture and the Environment - The IRENA indicator report - NUTS2/3 OR
	Soil Erosion	Annual soil erosion risk by water based on estimates of annual soil lost	Impacts of Europe's changing climate 2008
	Share of Agricultural Land under Organic Farming	% organic farming area/ UAA	EEA - Agriculture and the Environment - The IRENA indicator report - NUTS2/3
	Artificialisation of coast	Share of built up area in the 0-1 km costal strip OR % of artificial coastline length	EEA - The State of the Environment in the Coastal Areas - NUTS 3
Waste	Municipal waste production	Kg/capita	EEA - The road from landfill to

Municipal waste treatment

% par category of treatment (landfill, recycling, incineration)

recycling – NUTS 0
EEA – The road from landfill to recycling – NUTS 0

Routine variables - indicators

Wish list variables - indicators

Proxy variables- indicators

Annex 7: Attractiveness variables and indicators

	Variable	Definition	Source
Urban dynamism	primacy rate	the share of the largest urban area within an island/ region	EUROSTAT – ESPON 2.4.2 – NUTS 2/3
	Urban influence	Existence of FUA	ESPN 1.1.1. / 1.1.2 / 3.3 /NUTS 3
	Human intervention (high, medium, low)		ESPN 1.1.1. / 1.1.2 / 3.3 /NUTS 3
Public Services Accessibility	Accessibility (transport)	Accessibility to islands from a central European city and/or and to the national center and/or the regional center	Annex 8
	Potential accessibility, multimodal, to population	To be used for weighting incentives to areas	ESPN 1.2.1 – NUTS 3
	Average travel time to three higher hierarchical cities		
Health	Accessibility to hospital	Accessibility to the nearest hospital	
	Accessibility to hospital	Accessibility to the frequently used hospital	
	Accessibility to hospital	Number of hospital beds per inhabitant	
Water	Waste Water Collection and Treatment System	% of population connected to a waste water collection and Treatment System	
Education	Accessibility to High Secondary School		
	Accessibility to Technological Education		
	Accessibility to training structures		
ITC	Population with broadband access	% of population with broadband network access	
	Households with Internet access	% of households with internet access	
	Companies with Internet access	% of companies with internet access	
Culture	Infrastructures for Cultural Activities	Number of places for cultural events (theatre, cinema,)	
Lisbon Strategy competitiveness	Population by highest educational level attained	% of population with tertiary level education as share of population aged 15 years and above	EUROSTAT – ESPON DB – NUTS 2
	investment rate	the share of the gross fixed capital formation of businesses in the regional GDP	EUROSTAT – ESPON 4.1.3 – NUTS 2
	Employment in high tech	persons employed in medium-high and high-tech sector of manufacturing as share of total employment, in %	EUROSTAT – ESPON 4.1.3 DB – NUTS 2

	R&D R&D personel % of total employment	Expenditure for R&D of GDP % share of employees in research and development (both in the private and public sector) in the total amount of employees	EUROSTAT – ESPON 4.1.3 – NUTS ½ EUROSTAT – ESPON DB – NUTS 3
	Labor cost	average income per employee (in 1000Euro)	EUROSTAT – ESPON 4.1.3 DB – NUTS 2
Job opportunities	Youth unemployment. Unemployment rate < 25 years %	Activity rate, employment increase	
Risks – Quality of environment	Flood endangered settlement and artificial areas (Corine) Land use changes	Total number of flood events from 1987 to 2002 multiplied with share of artificial surface Share between natural (forest, grassland, internal waters, wetlands)/ semi-natural (agricultural) and artificial areas	CORINE, GTK – ESPON 4.1.3 – NUTS 3
	Percentage of artificial area - Corine Evolution of natural surfaces Loss of land from agriculture to artificial surfaces Natural and Technological Hazards Vulnerability from natural and technological hazards Risk from sea level raising Political risk Trust in the legal system	Share of artificial area in total area Share of natural surfaces in total surface Change from Agriculture to artificial land, % difference to European mean value Hazards classification index Integrated vulnerability index % of land to be covered from sea level raising Risk from illegal migration Share of persons having complete trust/ no trust at all in the legal system of a country Share of persons finding politics too complicated to understand (never+seldom/regularly+frequently) Share of persons working in an organisation or association (other than a political party) within the last 12 months	CORINE - ESPON 4.1.3 DB – NUTS 3 CORINE CORINE – Land cover accounts NUTS 2/3 ESPON 1.3.1 – NUTS 3 ESPON 1.3.1 – NUTS 3 European Social Survey – NUTS 0 European Social Survey – NUTS 0 European Social Survey – NUTS 0
Social capital	Politics to complicate to understand		
	worked in an organisation or association (other than a party) in the last twelve months.		European Social Survey – NUTS 0
Governance	way in which roles and responsibilities are distributed among the different government levels way in which roles and responsibilities are distributed local government and other involved actors describes the related processes of negotiation and consensus-building within the territorially oriented political fields.		

	Supporting sustainable spatial development or stimulating innovative economic activity		
	Level of administrative (+ other) functions on islands	number of administrative (+ other) functions on islands	
CAPITALS	Effectiveness of public administration (4 th C.R)		
	Number of cultural sites	Number of registered monuments and sites in national lists, weighted by number of 'excellence' resources - or same approach of calculation, normalised by square km	ESPON 1.3.3 DB – NUTS 3
	Natural areas (NATURA 2000)	Share NATURA 2000 area of total area in %	CORINE – ESPON 3.1 – NUTS 3
	Routine variables - indicators		
	Wish list variables - indicators		
	Proxy variables- indicators		

Annex 8: Accessibility

Accessibility is one of the most important factors, especially for areas that are geographically disadvantaged in terms of easy access, such as islands. It is a relative term and it depends with what it is compared against. At the local level, accessibility may refer to the ease of access to the area from a centre of local importance. At the European level, it may refer to the ease of access to one of the “central” urban centers. Another aspect of its relative value is the means of transportation between the areas. Different means entail diverging levels of access. Therefore, the assessment of the level of accessibility is a function of many different factors. For islands, the most important factor is the geographical discontinuity of space. Another important factor that is related with and stems from the first refers to the fact that island accessibility is linked with public transport. With some minor exceptions of small islands, marine transportation is performed via ferries and has to observe their schedules and traveling frequencies. This raises more obstacles as the frequency of connections has to be taken into account when estimating accessibility. Methods for estimating the level of accessibility for the European space fail to take into account this geographical discontinuity of space and are unsuitable for islands. Another effort (EURISLES 1998, for a European level and Spilanis et al., 2005, for an application at a more local scale), use the “virtual distance” to calculate a “remoteness index” or “accessibility index”.

The index measures the ‘virtual distance’ of islands from central ports or from a certain place in the mainland or on another island, by taking into account the frequency of connections between the two points, standard waiting time at a port and possible intermediate ports between the two points. The formula for calculating virtual distance is given in equation (1):

$$VR = AVFS * (Wt + Rtt + F) \quad (1)$$

Where VR stands for virtual distance, AVFS is the average speed of ferryboats in km/hr, Wt stands for waiting time in ports, Rtt stands for real travel time and F stands for the frequency of the ferryboat schedule (see Table 1). If the calculation includes travelling in continental areas as well, the time –distance of this part of the trip is also included in the formula.

This index presents some important advantages and some drawbacks. The most important advantage is that it takes into account the frequency of connections and can be used to reveal seasonal

differences of accessibility for the same island or group of islands. Another important advantage is that it is flexible and can be calculated for separate islands or for groups of islands with some assumptions, it can also be calculated for the same island via different ports.

Its disadvantages include the fact that the quality and capacity of boats is not included in the index and this can be of great importance also. Additionally, other means of transportation such as airports or speed boats are not included, but since generally bigger islands are favoured by these means which are the ones with greater frequencies anyway, comparisons can be performed only for "conventional" ferries.

8 Table 1. Island accessibility indicators, Source: adapted form EURISLES 1997

Indicator	Definition, measurement	Calculation
Real Distance	Euclidean distance in km	Measurement in digital map
Waiting time (Wt)	The minimum time in hours required for embarkation according to port authorities	Different according to port: For Pireas, two hours, for island ports one hour. In cases of two ports the waiting hours are added according to official time schedules
Frequency (F)	Weekly frequency of connections with Pireas port or with intermediate port	Calculated with the formula: $(7*24)/N*1/2 = 84/N$, where $7*24 = 168$ the hours of the week, N stands for the minimum number of weekly connections and $1/2$ or 50% stands for the possibility for a passenger to get to the port accidentally before or after the ship's departure. Data for January and August
Real travel time (Rtt)	The official sailing hours	Time in hours according to the official schedule

Annex 9 Policy Recommendations and Assessment

Policy recommendations have to address topics that affecting islands' attractiveness; these can originate from external influences either as global socio-economic and environmental forces or national and supra-national policies.

The list of external forces can of course be modified if, following the survey of stakeholders, other elements seem to be more appropriate.

With regards to ***external (global) factors*** like climate change and globalization the study can tackle these issues on two levels:

- First, it will evaluate the impacts such external forces cause on different types of islands. For instance, the impacts of climate change are likely to vary depending on each island's size, morphology and geographical location; small and low-lying islands could see a substantial part of their coastline be submerged by the rising sea level and, thus, lose a significant part of their coastal natural and human-built resources (e.g., mangroves, wetlands, coral reefs, beaches, human settlements).
- Second, the study will identify policy and planning challenges with regards to mitigation and adaptation measures in order *to reduce stresses on the resources* that are likely going to be affected (i.e., fresh water, beaches, habitats and soil). Islands can invest in vulnerability reduction as this is their main option for reducing the damage caused by environmental hazards. The causes of vulnerability are closely linked to an island's social, economic and geo-physical characteristics and to their development pattern.

Sectoral EU and national policies have consequences that can be considered equivalent to those of other external factors: changes in the Common Agricultural Policy (CAP), for example, can displace production from one area to another leading to a series of economic, social and environmental impacts for both places; liberalization and privatization of transport (maritime and air) may change the frequency of schedules in order to satisfy existing patterns of demand and companies' goals but, concurrently, these moves may not to meet social needs. Since sectoral policies cover numerous domains, emphasis and priority has to be given:

- First to topics mentioned explicitly in this project's specification as stakeholders' priorities: enforcement of entrepreneurial initiatives; management and valorization of natural and cultural

- resources; the enhancement of human resources and; the amelioration of Services of public interest.
- Second to other policies influencing crucial parameters of islands' attractiveness.

The final list of policies to be assessed is going to be defined during the 1st phase of the project in close collaboration with the stakeholders.

Cohesion policy (at both the European and national level) is aimed at influencing the human, social, economic, and environmental capital throughout the EU. After all, through cohesion policy both new activities and new infrastructure can be created, the natural and cultural capital can be preserved, and the human capital can be upgraded through the organization of training courses and other measures. These interventions aim to create economic, social and environmental effects (new production, new jobs, land use change, resource use, waste production, diminution of sea pollution etc.) whilst also affecting the situation within any given area (e.g., through GDP change, migration, population change, quality of life change, etc.). Since cohesion policy is considered to be the corner-stone for achieving equity, justice and sustainability through territorial cohesion, the study will examine the manner in which this policy can be most effective.

The Policy Assessment topic is divided into two major parts:

- The ex-post evaluation of existing policies and global factors on islands' attractiveness
- The ex-ante evaluation of policies that are going to be proposed in order to ameliorate islands' attractiveness.

The purpose of the first part of the suggested analysis is to evaluate how existing policies have affected territorial aspects of the islands' development and more precisely the parameters influencing islands' attractiveness. Since the islands' socioeconomic conditions and their respective political and administrative structures vary considerably the proposed analysis will steer clear of attempting to deliver a complete or detailed account of every single policy measure and the effects which this may have caused. A more detailed analysis would be overly extensive and cannot be completed within the proposed project. The basic idea of this part of the analysis is, therefore, to flesh out the most significant programme theories which either form the underlying basis of various policies or programmes or which exist implicitly within a particular policy. This means that the proposed analysis needs to

state the basic principles of the policies or in, some sense, reconstruct the manner in which the policies are supposed to operate. This approach follows an important line in modern evaluation theory (Pawson and Tilley, 1997) and the concept of territorial impact assessment as outlined in *Applied Territorial Research* (ESPON scientific report, 2006). The advantage of adopting the approach which focuses on programming theories is that the individual circumstances of the islands selected for the case studies end up having less importance. Instead, the focus will shift towards the way in which the programme theories work under specific conditions influencing attractiveness parameters. Additionally, conclusions will be drawn regarding the theories' causal effects in isolation from various mediating factors (islands' socio-economic and environmental parameters), including the administrative context. These factors have to be integrated into the analysis through islands' typology in order to see if there are different results under different situations. The following policy areas have been selected because they are assumed to be central in terms of addressing the special features of the islands' territorial situation. Even though five policies may seem like an extremely limited selection, the chosen policies are comprehensive, meaning the analysis will be extremely detailed.

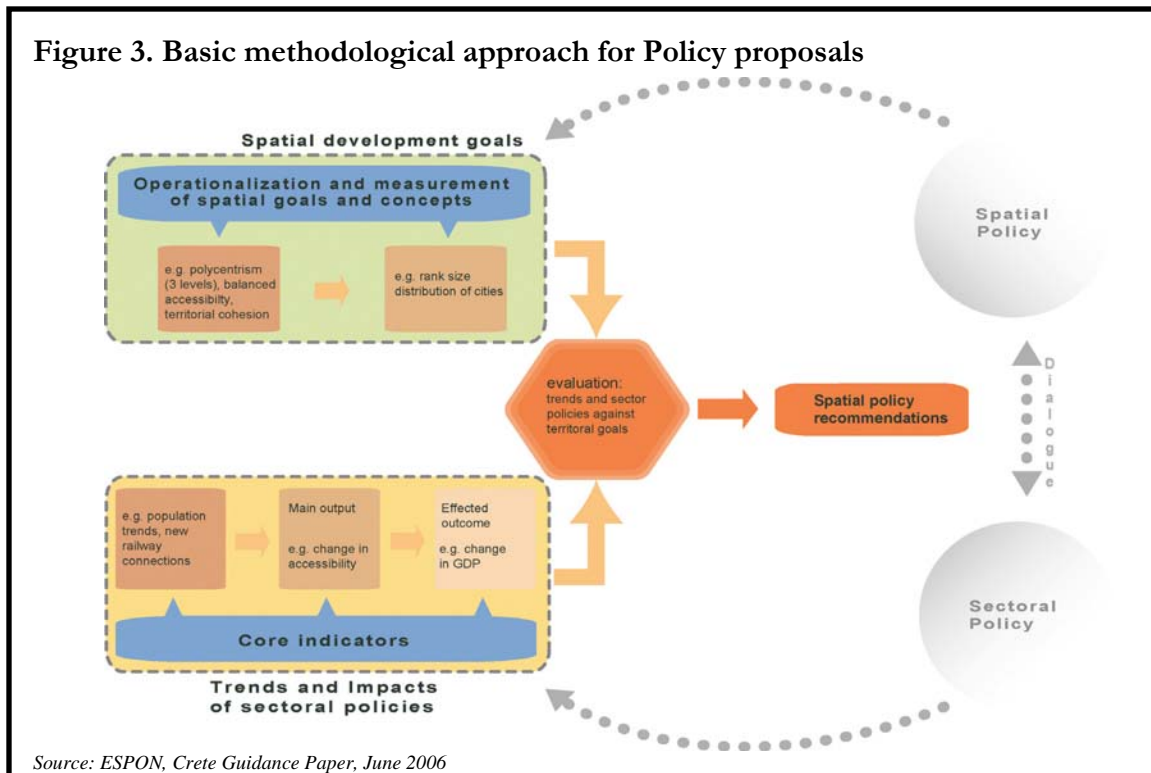
As the focus is on programme theories or mechanisms the analysis will be of use to the stakeholders, not only because it concerns vital policy areas, but also because the method will help to inform these stakeholders about how different sector policies depend on the same mechanisms. This supports the ambition from ESPON to encourage "evidence-informed policy rather than evidence-based policy" (ESPON, 2006, p.18). The policy areas the study will focus at are: (a) Structural funds policy; (b) Enforcement of entrepreneurial initiatives; (c) Management and valorization of natural and cultural resources (Common Agriculture policy, Fisheries and Maritime Policy, environmental policy); (d) Enhancement of human resources; and (e) Services of public interest.

The idea is to contrast the European policy initiatives with the national policies and especially to make an evaluation of the different apparent governance models. The first area relating to general regional development policy is evident as a key evaluation area as a growing number of islands are not any more receiving financial support from EU budget. Policies related with the creation and the support of enterprises as the system of European and national aids and the innovation policy are considered of high priority from the stakeholders, as the maintenance of economic activity on the islands is under

continues pressure especially due to globalization. The preservation of natural and cultural assets, comparative advantage for islands' attractiveness has to be examined in combination with policies as the Common Agriculture Policy, the Common Fisheries Policy, the Maritime Policy and the Environment Policy. Policies related to Services of Public Interest as Transport, Communication, Education, Health are also a central issue for the islands. Possible additions of policy areas will come from a survey that will be distributed to the central policy makers on the islands, in order to examine whether more policies should be included in the analysis and which ones they consider the most important for the islands in relation to territorial cohesion. The aim of the survey is to give a picture of the diversified field of policies the analysis should be relevant for and to fix the list of policies that are going to be evaluated.

The purpose of the second part is, using the outcomes from the evaluation of existing policies, to propose adequate policies that can affect territorial aspects of the islands' attractiveness. As ESPON's scientific report (p.17) underlined "the link between territorial policy aims and objectives with territorial trends, perspectives and policy impacts within the applied research of ESPON has been guided by an approach that can be illustrated with the following figure. In summary, the figure shows an approach to the analysis where the main scientific tasks are (1) to operationalise the policy aims, objectives and concepts; (2) make them measurable and find indicators and data describing territorial development trends and policy impacts; and (3) compare and evaluate the empirical findings against the background of the territorial policy aims and objectives".

Figure 3. Basic methodological approach for Policy proposals



As spatial policy recommendations have to focus on how to maximize islands' attractiveness, our task is to work on sectoral policies that have major influence on the crucial parameters already been investigated. For an ex-ante assessment of this recommendations an adaptation of ESPON's Territorial Impact Assessment (TIA) is going to be used (ESPON scientific report, p.58-63). The Island Impact Assessment (IIA) will be based on the use of an expanded DPSIR framework that will include socioeconomic and environmental issues as it is presented in figure 2.

Annex 10 Analysis of the work packages

The analysis of the Working Packages (WPs) of the project is presented in the following format for each WP: Title; Content; Team that will be responsible; Team(s) that will participate; Duration¹²; and Outputs. The project breaks down into three WPs, Coordination, Activities and Dissemination of the results. The WP of the activities takes place in three phases.

The analysis per WG is as follows:

WP 1. COORDINATION

Content: in WP1 all coordinating actions of the project will take place. These actions include:

- The establishment of a Partnership Agreement setting mutual rights, obligations and duties between project partners;
- The division of tasks among the partners involved in the project;
- The internal management and control system;
- Securing that the project reports are being produced on time and according to the ESPON formal requirements
- Ensuring that the expenditures presented by the beneficiaries participating in the project have been incurred for the purpose of implementing the project and correspond to the activities of the project;
- Verifying that the expenditures have been validated by the controllers;
- Requests of payments and transfers to the partners without delays;
- Ensuring that all key conclusions, changes to the project's strategy and other important decisions are made jointly; and
- Supervising the progress of the actions of the project according to technical requirements and time schedules.

Team that will be responsible: Team LP (project coordinator).

Team(s) that will participate: all teams will participate.

Duration: 84 weeks.

¹² The duration of the project is based on the timetable of p. 18 of the Proposal's Specifications, meaning 18 months (78 weeks) and not 70 week, as analysed on p. 17 (vii – Outputs and timetable).

Output: Interim (every six months) and final Financial and Activities' progress reports.

WP 2. ACTIVITIES

PHASE I

Title: WP2.1.1 Analysis of the general methodology.

Content: in WP2.1.1 the overall methodology for the completion of the project will be finalized. This is absolutely necessary to on the whole ensure the coordination of the methods of the different participating teams. More specifically, WP2.1.1 will include:

(a) The selection of the variables that will be used to specify the Sustainability goals and the parameters of attractiveness. In order that this process is transparent for stakeholders it is necessary to proceed gradually from the determination of the purpose of the assessment, to the definition of the system and of the goals (sustainability – attractiveness), to the clarification of parameters and the chose of indicators.

(b) The data needs from different sources (mainly from EU and Member States) as well as from the participating Stakeholders;

(c) The techniques that will be used in order to classify the islands and to compare with mainland

(d) The detailed breaking down of the monitoring system, which will be an island data base, compatible with existing ESPON data base structures;

(e) Definition of the priority policy fields to be assessed;

(f) The development of the Island Impact Assessment (IIA) tool for policy and external factors impact evaluation on the state of the islands; and

(g) The dissemination process that will include the Webpage of the project, the creation of an Islands' forum and the Presentations of the actions of the project.

Team that will be responsible: Team LP.

Team(s) that will participate: all teams will participate.

Duration: 12 weeks.

Output: Project's methodology.

Title: WP2.1.2 Methodology and Selection of the case studies. Methodology of field research.

Content: WP2.1.2 will plan field the research to be conducted within the project. This research will include a number of case studies. The detailed analysis for their selection process will be given in full, along with a short description of the case study areas. For these case studies, the project will have to provide at the island level all the information that is needed according to the methodology and the goals of the project, whether it already exists at the NUTS II and NUTS III level or not. Such information and data include for example data on the environment of the islands which are scarce even at NUTS II and NUTS III levels. An important part of the methodology will concern a number of local researches, such as:

- The issue of the attractiveness of islands at two dimensions: For enterprises and for the population;
- The issue of Public Services; Definition of critical indicators of output from different services in order to be able to evaluate the quality of the service.
- The issue of social capital and governance quality.

All these researches will be conducted with the use of different questionnaires and will be common throughout the case studies.

Team that will be responsible: Team LP.

Team(s) that will participate: all teams will participate.

Duration: 12 weeks.

Output: Field research methodology.

PHASE II

Title: WP2.2.1 Data compilation and analysis for NUTS II & NUTS III Islands regions.

Content: In WP2.2.1 the data at NUTS II & NUTS III level for Island Regions will be collected (through existing Data Bases at the European level, though national authorities and local stakeholders) and analysed. This data will also include all available information at the island level, when that level is different from NUTS II & NUTS III levels. The analysis will include the estimation of the divergence of these Regions from sustainability and attractiveness goals. WP2.2.1 is linked with WP2.4 (Monitoring system) and will be based upon the

Data Base that will be produced as well with WP3 (Dissemination system) in order to disseminate the results in an Islands' Atlas form.

Team that will be responsible: Team LP.

Team(s) that will participate: All teams will participate.

Duration: 32 weeks.

Output: Islands' Atlas.

Title: WP2.2.2 Analysis of the case studies

Content: The objective of this WP is to do an in depth analysis on island level through a limited number (4-6) of case studies. In WP2.2.2 the data and information from the case studies will be collected through a number of researches laid down in WP2.1.2 and this data will also be analysed according to the guidelines of WP2.1.2. The collection of data and information includes:

- Data required according to the methodology and the goals of the project (answering the three major questions about islands, what is their state, the reasons that have lead to this state and policy responses). Local data that will not be available from WP2.2.1 will have to be retrieved from local sources or produced through appropriate research (e.g. detailed land use classes that will be used for assessing parts of the state of the economy, infrastructure and the environment of the case studies through remote sensing).
- Data on the attractiveness of islands for enterprises and the population;
- Data on Public Services;
- Data on social capital and governance quality.

The analysis of this data will complete missing information at the island level; will present best practices; and will allow generalizations for all islands. WP2.2.2 is again linked with WP2.4 (Monitoring system), as it will also be based upon the Data base that will be produced.

Each partner will be responsible for collecting data and information for a number of case studies, according to the selection of the case study areas laid down in WP2.1.2.

Team that will be responsible: Team 2.

Team(s) that will participate: all teams will participate.

Duration: 28 weeks

Output: Islands Atlas

Title: WP2.2.3 Islands' Typology

Content: In WP2.2.3 the typology of the islands that the project will produce is finalized. This typology is based on the overall analysis of WP2.2.1 and the material from the case studies from WP2.2.2 and will include the following steps:

- (a) Analysis of attractiveness for enterprises
- (b) Analysis of attractiveness for population;
- (c) Typology and SWOT Analysis for each type of islands that will highlight common characteristics and disparities; Success stories per type of islands and the reasons behind the success
- (d) The principles for a policy for Islands that will also pinpoint measures that could be developed to ameliorate the causes of the disadvantages that the analysis will bring forward.

Team that will be responsible: LP.

Team(s) that will participate: Team LP.

Duration: 20 weeks.

Output: Islands' situation and attractiveness (Interim report).

PHASE III

Title: WP2.3 Policy assessment

Content: WP2.3 assesses the effect of policies on the attractiveness of islands. This assessment will be based on the IIA tool that will be developed already in WP2.1.1 and will include:

- (a) The ex post evaluation of existing policies (the internal market, cohesion policy and all pertinent and important for islands sectoral policies) in relation to attractiveness;
- (b) The impact of external factors: climate change, energy prices, globalization, second house.
- (c) Pinpoint policy recommendations and ex ante evaluation. The recommendations have to adopt the principles laid down in WP2.2.3 and to take into account the impact of existing policies and external factors with a possible differentiation on the different types of European islands.

Team that will be responsible: Team 1.

Team(s) that will participate: all teams will participate.

Duration: 32 + 6 weeks.

Output: Policy recommendations and assessment (draft final report + final report).

Title: WP2.4 Monitoring system

Content: WP2.4 involves a horizontal set of actions that will produce the Database, will insert the Data within the Database, will assist in the analysis and will produce the required Maps. The core of the system will be a spatial database for the storage and management of all data regarding the project (spatial extents of administrative units and islands, variables, spatial data produced from the case studies, such as satellite images, etc.). The database will support the NUTS-island level and will be compatible with the already developed information systems of ESPON, with which it will be merged after the project is completed. Two sub-systems will be developed: one for the calculation of statistics, of the Island Impact Assessment and other indicators; and one for the production of thematic maps. A third sub-system (the catalogue) will keep all metadata about the spatial data managed by the system. The information produced by the monitoring system will be available on-line via a WebGIS application. More detailed technical analysis of the monitoring system is presented further down.

Team that will be responsible: Team LP.

Team(s) that will participate: Team LP.

Duration: 62 weeks.

Output: Islands' data base.

WP3 Dissemination

Content: WP3 involves yet another set of horizontal actions geared towards producing:

(a) The website of the project, which will be interactive along the lines of the existing ESPON web pages. It will contain all the results and products of the project (announcements, reports, presentations, etc.). It will also host the webGIS application that will be developed in WP2.4 enabling end-users to search and present desired information from the monitoring system. An electronic Atlas for European Islands will be produced using ESPON Atlas as prototype. Finally, it will support the islands' forum discussion group.

(b) The Islands' forum which is a discussion group about the topics of the research that will be active for the local stakeholders and could also be used for gathering some of the information required by other WPs,

(c) The presentation of the results of the project to different forums that are going to be organized by ESPON, by the project's Stakeholders and also by the external Stakeholders as CPMR's Island Commission, the Network of Insular Chambers of Commerce (INSULEUR), the European Small Islands Federation (ESIN) who organize a conference every year.

(d) Communication with TPGs of other ESPON projects in order to ameliorate and to standardize the used methodologies.

Team that will be responsible: Team LP.

Team(s) that will participate: all teams will participate.

Duration: 66 weeks.

Output: Website, Islands' forum, presentations.

Annex 11 References

- Apostolopoulos, Y. and Gayle, D. J. (2002) *Island Tourism and Sustainable Development: Caribbean, Pacific, and Mediterranean Experiences*, New York, Praeger.
- Appleton, J. (1996): *The Experience of Landscape*. John Wiley & sons, Chisester.
- Armstrong, H. W. & Read, R. (2006) 'Insularity, Remoteness, Mountains and Archipelagoes: A Combination of Challenges facing Small States?', *Asia Pacific Viewpoint*, Vol. 47, No. 1, pp. 79-92.
- Armstrong, H. W. and Read, R. (2004) 'Small States and Island States: Implications of Size, Location and Isolation for Prosperity' in J. Poot (ed.) *On the Edge of the Global Economy*, Cheltenham, Edward Elgar, pp. 191-223.
- Baldacchino, G. (2006a) *Extreme Tourism: Lessons from the World's Cold Water Islands*, Amsterdam, Elsevier.
- Baldacchino, G. (2006b) 'Managing the Hinterland Beyond: Two, Ideal-type Strategies of Economic Development for Small Island Territories', *Asia Pacific Viewpoint*, Vol. 47, No. 1, pp. 45-60.
- Baldacchino, G. and Milne, D. (eds.) (2000) *Lessons from the Political Economy of Small Islands: The Resourcefulness of Jurisdiction*, Basingstoke, Macmillan, in association with Institute of Island Studies, University of Prince Edward Island, Canada.
- Barca, Fabrizio. *An Agenda for a Reformed Cohesion Policy: A place-based approach to meeting European Union Challenges and Expectations*, 2009.
- Baum, T. G. (1997) 'The Fascination of Islands: A Tourist Perspective' in D. G. Lockhart and D. Drakakis-Smith (eds.) *Island Tourism: Problems and Perspectives*, London, Mansell, pp. 21-35.
- Baum, T. G. and collaborators (2000) 'Tourism and Cold Water Islands on the North Atlantic' in G. Baldacchino and D. Milne (eds.) *Lessons in the Political Economy of Small Islands: The Resourcefulness of Jurisdiction*, Basingstoke, Macmillan, pp. 214-229.
- Berleant, A. (1997): *Living in the Landscape: Toward an Aesthetics of Environment*. The University Press of Kansas, Kansas.
- Bertram, G. & Watters, R. F. (1985) 'The MIRAB Economy in South Pacific Microstates', *Pacific Viewpoint*, Vol. 2, No. 3, pp. 497-519.
- Bertram, G. (2006) 'Introduction: The MIRAB Model in the Twenty-First Century', *Asia Pacific Viewpoint*, Vol. 47, No. 1, pp. 1- 21.
- Bertram, G. and Poirine, B. (2007) 'Island Political Economy' in G. Baldacchino (ed.), *A World of Islands: An Island Studies Reader*,

- Canada and Malta, Institute of Island Studies and Agenda Academic, pp. 325-378.
- Blom-Hansen, Jens (2005) Principals, agents, and the implementation of EU cohesion policy, *Journal of European Public Policy*, 12, 4, 624-648.
- Bodin, L., Gas, I., S., (2003). "On teaching the analytic hierarchy process". *Computers and Operations Research*, 30, 1487-1497.
- Boswell, Christina (2008) The political functions of expert knowledge: knowledge and legitimation in European Union immigration policy, *Journal of European Public Policy*, 15, 4, 471-488.
- Boyle, R., J. D. Breul, and P. Dahler-Larsen (2008) *Open to the public. evaluation in the public arena*. New Brunswick, N.J.: Transaction Publishers.
- Briguglio, L. (1995). 'Small Island Developing States and their Economic Vulnerabilities', *World Development*, Vol. 23, No. 9, pp. 1615-1632.
- Briguglio, L., Archer, B., Jafari, J. & Wall, G. (Eds.) (1996a) *Sustainable Tourism in Small and Island States: Issues and Policies*, London, Pinter.
- Briguglio, L., Butler, B., Harrison, D and Leal Filho, W. (eds.) (1996b) *Sustainable Tourism in Small and Island States: Case Studies*, London, Pinter.
- Briguglio, L., Cordina, G. and Kisanga, E.J. (eds.) (2006) *Building the Economic Resilience of Small States*, Msida, Malta and London, islands and Small States Institute, University of Malta and Commonwealth Secretariat.
- Buckly, C., (1995). "Delphi: A methodology for preferences more than predictions". *Library Management*, 16 (7), 16-19.
- Butler, R. W. (1993) 'Tourism Development in Small Islands: Past Influences and Future Directions' in D. G. Lockhart, D. Drakakis-Smith and J. A. Schembri (eds.) *The Development Process in Small Island States*, London, Routledge, pp. 71-91.
- Carter, Caitriona and A. Smith (2008) Revitalizing public policy approaches to the EU: Territorial institutionalism, fisheries and wine, *Journal of European Public Policy*, 15, 2, 263-281.
- CEC, (2007), *Territorial Agenda of the EU*, available at http://www.bmvbs.de/Anlage/original_1005295/Territorial-Agenda-of-the-European-Union-Agreed-on-25-May-2007-accessible.pdf
- CEC, (2008) *Green paper on territorial cohesion*, available at http://ec.europa.eu/regional_policy/consultation/terco/index_en.htm
- Clark, E., Johnson, K., Lundholm, E. and Malmberg, G. (2007) 'Gentrification and Space Wars' in G. Baldacchino (ed.) *A World*

- of Islands: An Island Studies Reader, Charlottetown, Canada and Luqa, Malta, Institute of Island Studies and Agenda Academic, pp. 483-512.
- Commission Of The European Communities (1987): Third Periodic Report on the Socio-Economic Situation of the Regions. EC, Brussels
- Commission Of The European Communities (1991): The regions in the 1990's, 4th Periodic Report on the Socio-Economic Situation of the Regions,
- Commission Of The European Communities (1994): Competitiveness and Cohesion: Regional Tendencies. 5th Periodic Report on the Socio-Economic Situation and Development of the Regions, EC, Brussels
- Commission Of The European Communities (1997): Rural developments, EC, Brussels
- Commission Of The European Communities (1999): Sixth Periodic Report on the Regions, EC, Luxembourg
- Commission Of The European Communities (2002): First Progress Report on Economic and Social Cohesion, COM (2002) 46 final, Brussels.
- Commission Of The European Communities (2004): Third Report on Economic and Social Cohesion: a new partnership for cohesion, convergence, competitiveness, cooperation, CEC, Brussels.
- Condon, E., Golden, B., Wasil, E., (2003). "Visualizing group decisions in the analytic hierarchy process". *Computers and Operations Research*, 30, 1435-1445.
- Cone, J., C., (1978). "Delphi: Polling for consensus". *The Public Relations Journal*, 34 (2).
- Conlin, M. & Baum T. (Eds.) (1995). *Island Tourism: Management Principles and Practices*. Chichester: John Wiley.
- Connell, J. (1988a). *Sovereignty and survival: island microstates in the third world*. Research Monograph, 3. Sydney, University of Sydney, Department of Geography.
- Connell, J. (2003) 'Island Dreaming: The Contemplation of Polynesian Paradise', *Journal of Historical Geography*, Vol. 39, No. 4, pp. 554-581.
- Copus, A. K. Crabtree, J. R. (1996): 'Indicators of Socio-Economic Sustainability: An Application to Remote Rural Scotland', *Journal of Rural Studies* 12(1), 41-54.
- CPMR (2002) *Off the Coast of Europe: European Construction and the Problem of the Islands*, study undertaken by Eurisles on the initiative of the Islands Commission of the Conference of Peripheral Maritime Regions (CPMR).

- CPMR General Secretariat. Territorial Impact of EU Sectoral Policies: The Cases of Air Transport, Energy Package and the 1'st Pillar of the CAP, 2008.
- Cross M. Nutley S. (1999) "Insularity and Accessibility: The Small Island Communities of Westrn Ireland". Journal of Rural Studies, Vol. 15, No. 3, pp. 317-330.
- Daniel T. C. (2001) Whither scenic beauty? Visual landscape quality assessment in the 21st century, Landscape and Urban Planning, Vol. 54, pp. 267-281.
- De Kadt, E. B. (1979). Tourism: Passport to Development? New York: Oxford University Press.
- Delbecq, A., L., Van de Ven, A., H., Gustafson, D., H., (1975). "Group techniques for program planning: A guide to nominal group and Delphi processes". Scott Foresman, Glenview, IL.
- Dommen, E. C. (1980) 'Some Distinguishing Characteristics of Island States', World Development, Vol. 8, No. 12, pp. 931-943.
- Engelen, G., White, R. De Nijs, A. C. M. (2002): 'Environment Explorer: Spatial support system for the integrated assessment of socio-economic and environmental policies in the Netherlands', paper presented in the iEMSs in Lugano, Switzerland, 24-27 June.
- ESPON (2006) Territory matters for competitiveness and cohesion.
- ESPON (2007) Monitoring Territorial Development, available at http://www.espon.eu/mmp/online/website/content/projects/947/1296/index_EN.html
- ESPON Project 2013/1/6. TIP TAP: Territorial Impact Package for Transport and Agricultural Policies, 2008.
- ESPON Secretariat (?). Applied Territorial Research: Building a scientific platform for competitiveness and cohesion, 2006.
- ESPON Secretariat (?). ESPON progress on Territorial Impact Assessment (TIA), 2009.
- EU (2008) Turning territorial diversity into strength.
- EU, 3rd cohesion report.
- EURISLES (1997), Statistical Indicators of Regional Disparities caused by Insularity and Peripherality, EURISLES, available at www.eurisles.org.
- EURISLES, (2002) Au large de l'Europe: la construction européenne et la problématique des îles, Commision de Iles de la CRPM, Paris available at www.eurisles.org..
- European Commission. Green Paper on Territorial Cohesion. SEC(2008) 2550, 2008.
- European Commission. Impact Assessment Guidelines. SEC(2009) 92, 2009.
- EUROSTAT (1994) Portrait of Islands.

- Forman, E., Selly, M., A., (2002). "Decision by objectives (How to convince others that you are right)". 1st Edition. World Scientific Publishing Company.
- Gillis, J. R. (2004) *Islands of the Mind: How the Western Imaginary shaped the Atlantic World*, New York, Palgrave Macmillan.
- Gillis, J. R. and Lowenthal, D. (2007) 'Editorial Introduction', *Geographical Review*, Vol. 97, No. 2, pp. iii-vi.
- Gössling, S. (2003) *Tourism and Development in Tropical Islands: Political Ecology Perspectives*, Cheltenham, Edward Elgar.
- Groom, B., Kontoleon, A., Swanson, T., (2007). "Valuing complex goods: Or can you get anything out of experts other than a decision?". *Research in Law and Economics*, 23, 301-335.
- Haartsen, T. Groote, P. Huigen, P.P.P. (2003): 'Measuring age differentials in representations of rurality in The Netherlands', *Journal of Rural Studies* 19(2), 245-252.
- Hache, J.-D. (2007) 'Islands, Fixed Links and the European Union', in G. Baldacchino (ed.) *Bridging Islands: The Impact of Fixed Links*, Charlottetown, Canada, Acorn Press, pp. 161-184.
- Halfacree, K. (1995): 'Talking about Rurality: Social Representations of the Rural as Expressed by Residents of Six English Parishes', *Journal of Rural Studies* 11(1), 1-20.
- Hampton, M. P. (1994). *Treasure Islands or Fools Gold: Can and should Small Island Economies copy Jersey?* *World Development*, Vol. 22, No. 2, pp. 237-250.
- Harrington, V. O'donogue, D. (1998): 'Rurality in England and Wales 1991: A replication and Extension of the 1981 Rurality Index', *Sociologia Ruralis* 38(2), 178-203.
- Hay, P. (2006) 'A Phenomenology of Islands', *Island Studies Journal*, Vol. 1, No. 1, pp. 19-42, <http://www.islandstudies.ca/journal/ISJ-1-1-2006-Hay-pp19-42.pdf>.
- Hoggart, K. Buller, H. Black, R. (1995): *Rural Europe: Identity and Change*. Arnold, London, New York, Sydney, Auckland.
- Jalan, B. (1982) *Problems and Policies in Small Economies*, London, Croom Helm.
- Jones, O. (1995): 'Lay Discourses of the Rural: Developments and Implications for Rural Studies', *Journal of Rural Studies* 11(1), 35-49.
- Julian, S., L., (1969). "Basic research methods in social science. The art of empirical investigation". Random House Inc., New York.
- Kaminarides, J., Briguglio, L. and Hoogendonk, H. N. (1989) *The Economic. Development of Small Countries: Problems, Strategies and Policies*, Delft, Eburon.

- Keeney, S., Hasson, F., McKenna, H., (2001). "A critical review of the Delphi technique as a research methodology for nursing". *International Journal of Nursing Studies*, 38, 195-200.
- Labrianidis L. (2000) *Economic Geography: Elements of Theory and Empirical Case Studies*, Patakis Publications, Athens (in Greek).
- Leeuw, Frans L. and J. E. Furubo (2008) *Evaluation Systems: What Are They and Why Study Them?*, *Evaluation*, 14, 2, 157-169.
- Lindqvist, P., Nordanger, U., K., (2008). "(Mis-?) using the E-Delphi method: An attempt to articulate the practical knowledge of teaching". *Journal of Research Methods and Methodological Issues*, 2 (1).
- Linstone, H., A., Turoff, M., (1976). "The Delphi method, techniques and applications". Addison-Wesley, London.
- Lockhart, D. G. and Drakakis-Smith, D. (eds.) (1997) *Island Tourism: Problems and Perspectives*, London, Mansell, pp. 3-20.
- Lockhart, D. G., Drakakis-Smith, D. and Schembri, J. A. (eds.) (1993) *The Development Process in Small Island States*, London, Routledge.
- Lothian, A. (1999): 'Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder?', *Landscape and Urban Planning* 44, 177-198.
- Lowenthal, D. (1972) *West Indian Societies*, London, Oxford University Press for the Institute of Race Relations.
- Loxley, D. (1990) *Problematic Shores: The Literature of Islands*, New York, St. Martin's Press.
- Maillet, P. (1998): 'La statistique au service de la politique régionale', in 4th CEIES Seminar: Regional information serving regional policy in Europe, Rennes 30-31/1/1998.
- May, G., H., Green, D., H., (1990). "Planning for the future: The application of the Delphi techniques to the unitary development plan process". CUDEM Working Paper Series 7, Metropolitan Leeds University, Leeds.
- Mazzarol T. & Choo S. (2003) 'A study of the factors influencing the operating location decisions of small firms' *Property Management*, Vol. 21, No. 2, pp. 190-208.
- McElroy, J. L. (2003) 'Tourism Development in Small Islands across the World', *Geografiska Annaler B*, Vol. 85, No. 4, pp. 231-242.
- McElroy, J. L. (2006). 'Small Island Tourist Economies across the Life Cycle', *Asia Pacific Viewpoint*, Vol. 47, No. 1, pp. 61-77.
- Mellander, C., Florida, R. (2007), *The Creative Class or Human Capital? Explaining regional development in Sweden*, CESIS, Electronic Working Paper Series No. 79.
- Ministry of Housing, Spatial Planning and the Environment Netherlands. Discussion Paper on territorial impact, 2009.

- Morton, Matthew H. *Applicability of Impact Evaluation to Cohesion Policy*, 2009.
- Nasar, J.L. (ed.) (1988): *Environmental Aesthetics: Theory, Research & Applications*. Cambridge University Press, Cambridge.
- Netherlands Environmental Assessment Agency. *A territorial Impact Assessment of Territorial Cohesion for the Netherlands*, 2009, Den Haag.
- OECD, (1994): *Creating rural indicators for shaping territorial policy*. OECD, Paris.
- Palang H. Alumae H. and Kaur E. (2003) "What do Locals like in Estonian Landscapes?" in Unwin T. And Spek T. (eds.) *European Landscapes: From mountain to the sea*, Huma, Tallinn.
- Parry, C. E. and McElroy, J. L. (2009) 'The Supply Determinants of Small Island Tourist Economies', *ARA: Journal of Tourism Research*, Vol. 3, No. 1, forthcoming.
- Parsons, R. Daniel, T. C. (2002): 'Good looking: in defense of scenic landscape aesthetics', *Landscape and Urban Planning* 60, 43-56.
- Pawson, R. and N. Tilley (1997) *Realistic evaluation*. Thousand Oaks, Calif.: Sage.
- Polyzos S. And Petrakos G. (2001) 'Industrial Location in Greece: Analysis of influencing factors and empirical research', *TOPOS* 17/2001, pp. 93-123 (in Greek).
- Portnov A.B. Erell E. Bivand R. Nilsen A. (2000) 'Investigating the Effect of Clustering of the Urban Field on Sustainable Population Growth on Centrally Located and Peripheral Towns', *International Journal of Population Geography*, Vol. 6, pp. 133-154.
- Power, M. (1997) *The audit society. rituals of verification*. Oxford: Oxford University Press.
- R. Baker, (Ed.) *Public Administration in Small and Island States*, West Hertford CT: Kumarian Press.
- Radaelli, Claudio (2009) *Desperately Seeking Regulatory Impact Assessment, Evaluation*, 15, 1, 31-48.
- Radaelli, Claudio and F. De Francesco (2009) *Regulatory Impact Assessment*. In B. L. Cave (ed.), *The Oxford Handbook of Regulation*.
- Robinson, E. A. G. (1960) *Economic Consequences of the Size of Nations*, London, Macmillan.
- Royle, S. A. (2001) *A Geography of Islands: Small Island Insularity*. London: Routledge.
- Royle, S. A. (2007) 'Islands off the Irish Coast and the Bridging Effect', in G. Baldacchino (ed.) *Bridging Islands: The Impact of Fixed Links*, Charlottetown, Canada, Acorn Press, pp. 203-218.
- Royle, S. A. and Scott, D. (1996) 'Accessibility and the Irish Islands', *Geography*, Vol. 81, No. 2, pp. 111-119.

- Saaty, T., (1980). "Multicriteria decision making: the analytic hierarchy process". Mc Graw-Hill, New York.
- Saaty, T., L., (1980a). "The Analytic Hierarchy Process". McGraw-Hill Co. New York.
- Saaty, T., L., (1990). "Multicriteria decision making: The Analytic Hierarchy Process". RWS Publications. Pittsburgh, USA.
- Saaty, T.L., (1977). "A scaling method for priorities in hierarchical structures". *Journal of Mathematical Psychology*, 15: 234-281.
- Shadish, W. R., T. D. Cook, and L. C. Leviton (1992) *Foundations of program evaluation. theories of practice*. Newbury Park: Sage.
- Shand, R. T. (1980) 'The Island States Of The Pacific And Indian Oceans: Anatomy Of Development', Research Monograph No.23, Canberra, Australia, Australian National University, Research School of Pacific Studies.
- Stockdale A. (2002) 'Towards a Typology of Out-migration from Peripheral Areas: A Scottish Case Study' *International Journal of Population Geography*, Vol. 8, pp. 345-364.
- Streeten, P. (1993) 'Special Problems of Small Countries', *World Development*, Vol. 21, No. 2, pp. 197-202.
- Tapeinos G. F. (1993) *Elements of Demography: Analysis, socioeconomic factors and population history*, Papazisi Publications, Athens (Greek edition).
- Tsaousi D. G. (1997) *Social Demography*, Gutenberg Publications, Athens (in Greek).
- Tuan, Yi-Fu (1990) *Topophilia: A Study of Environmental Perception, Attitudes and Values*, 2nd edition, New York, Columbia University Press.
- Turoff, M., (1970) "The Design of a Policy Delphi," *Technological Forecasting and Social Change* 2, No. 2
- UNHCR (1995) *The state of the world's refugees: in search of solutions*, Oxford University Press, Oxford.
- Van Dam, F. Heins, S. Elbersen, B. S. (2002): 'Lay discourses of the rural and stated and revealed preferences for rural living. Some evidence of the existence of a rural idyll in the Netherlands', *Journal of Rural Studies* 18(4), 461-476.
- Walker D. and Chapman K. (1987) *Industrial Location: Theory and Policy*, Blackwell, Oxford.
- Walmsley, D.J. Lewis, G. (1993): *People and Environment: Behavioral approaches in human geography*. Longman scientific and technical, London, 2nd edition.
- Wedley, W., Choo, E., Schoner, B., (2001). "Magnitude adjustment for AHP benefit/cost ratios". *European Journal of Operational Research*, 133: 342-351.

- Weiss, Carol H. (1998) Have We Learned Anything New About the Use of Evaluation? , *American Journal of Evaluation*, 19, 1, 21-33.
- Weiss, Carol H. (1999) The interface between evaluation and public policy, *Evaluation*, 5, 4, 468-486.
- Wiersma, W, Jurs, S., G., (2005). "Research methods in education: an introduction". Pearson: Boston.
- Williams, R. (1985, reprinted 1996): 'A Problem of Perspective', in CROW, G. (ed.) *The Sociology of Rural Communities*, Volume I. Elgar Publishing, Cheltenham, 239-243.

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The ESPON 2013 Programme

The Development of the Islands – European Islands and Cohesion Policy (EUROISLANDS)

Targeted Analysis 2013/2/8

Annex to the Inception Report



EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

A. The new selection of the case studies

According to all the 4 criteria mentioned in the Individual Chapter on Case Studies (provided by the Lead Partner on 6 April 2009) the islands in each category are presented in the Table A2 (p.5).

If the choice of islands for in-depth study were based on all the 4 criteria, the number of case studies would be 27. Based on the tables presented in the above mentioned document and in the Annex 4 to the Inception Report, and keeping in mind:

(a) the criteria mentioned in the project specification and
 (b) the political interest showed by the stakeholders following this project and reiterated by members of the ESPON Monitoring Committee, it is important to ensure conciliation between the more scientific criteria and the policy demand.

Regarding the latter, the TPG has taken up the statements made in the last Monitoring Committee meeting on 2 June 2009 in Prague by Cyprus and Malta and in the Steering Committee Meeting on 5 June 2009 by Sardinia.

In order to comply with the objectives of the project and correspond to the policy demand, it is proposed to increase the number of case studies from 6 to 9 (Table A1). **This situation represents an additional effort for the TPG, which is expected to be supported by the group of stakeholders on quantitative and qualitative information gathering. However, this seems to be necessary as the case studies are going to be used for the extraction of general conclusions about European islands.** This approach will ensure usefulness and applicability of the projects' results, both of which are particularly relevant for the Targeted Analyses of the ESPON Programme (including the EUROISLANDS project).

Table A1. The 9 Selected Case Study Islands

		LARGE	MEDIUM	SMALL
NORTH	CONVERGENCE REGIONS		Saaremaa-EST (coastal)	
	PHASING-OUT REGION			
	PHASING-IN REGION			
	COMPETITIVENESS & EMPLOYMENT REGIONS			Samsø-DK (coastal island) Kökar-FI (island of insular region)
SOUTH	CONVERGENCE REGIONS	Malta-MLT (Island state)		Salina-IT (island of insular region)
	PHASING-OUT REGION			

	PHASING-IN REGION	Cyprus - CY (island state) Sargegna - IT (NUTS 2)	Kalymnos-GR Lipsi-GR (archipelago)
	COMPETITIVENESS & EMPLOYMENT REGIONS	Mallorca-ES (NUTS 3)	

This choice is based on more considerations:

- First, it is critical that all the 3 sub-categories of islands (coastal, archipelago and island region) are represented;
- Second, the small islands are well represented within the selection of four out of the nine islands;
- Third, big islands are represented by 2 island-states, 1 NUTS 2 region, and 1 NUTS 3 area, and
- Finally, some more specific features are taken into account as the model of tourism development for Mallorca, Kalymnos for its specialization in fisheries, and with the small island of Lipsi are within the archipelagos of Dodecanese at the external frontiers of EU, the energy performance of Samsø, the fact that Saaremaa has recently entered in the EU.

The Greek islands of Kalymnos and Lipsi are considered as one case study in an archipelago area which displays large intra-regional disparities.

The overall aims of this analysis are the following:

- to undertake an evaluation of the islands' situation by using and analysing both qualitative and quantitative information;
- to determine, classify and prioritise those features that contribute, enhance or otherwise positively influence the attractiveness of specific islands. This will include some particular consideration of how insularity (small scale, remoteness and isolation, special experiential identity, particular rich and vulnerable natural and cultural environment) contributes to an island's attractiveness; and
- to collect pertinent information about good practices and policies that have been used in order to address the attractiveness and other aspects relating to insularity. In general terms, this study will seek to collect the required information for the 9 case studies and the available information for the 24 islands-statistical units; this information will be used in order to generalize some results to all the European islands. This information will be acquired from the ESPON data base, EUROSTAT and the stakeholders. Field work will be conducted in principle for 5 case studies that correspond to small islands (Kokar, Saaremaa, Samsø, Lipari, Lipsi-Kalymnos) as the data for the territories of Mallorca, Sardinia, Cyprus and Malta will in principle be available through official data providers as EEA and ESTAT.

At this stage of the study, islands will be classified on the basis of findings drawn from the statistical analysis. A 'SWOT' analysis will help to specify the strengths, the weaknesses, the threats and the

opportunities of each category of islands. Based on such a classification, the analysis will continue with:

- an examination of the islands' potential;
 - an estimation of the impacts of external factors on the islands;
- and
- a set of policy recommendations for the islands' development in order to overcome the detected problems and weaknesses, and to maximise any perceived or identified opportunities and competitive advantages.

Table A2 Islands Categorization

	SIZE	DEVELOPMENT STATUS	STATE (0)	NUTS II (1)	NUTS III (6)	ISLAND (224)
NORTH (231)	LARGE (2)	Convergence				
		Phasing-out				
		Phasing-in				
		Comp. & Empl.			GOTLAND-SE WIGHT-UK	
	MEDIUM (14)	Convergence				HIIUMAA-EST, SAAREMAA-EST
		Phasing-out			LEWIS & HARRIS-UK, MAINLAND ORKNEY-UK, MAINLAND SHETLAND-UK	UIST-UK, BUTE-UK, SKYE-UK
		Phasing-in				
		Comp. & Empl.		ALAND-FI	BORNHOLM-DK	TEXEL-NL, FOHR-DE, BORKUM-DE, NORDERNEY-DE
	SMALL (215)	Convergence				HIDDENSEE-DE, OSMUSSAAR-EST, ABRUKA-EST, MANILAI-EST, RUHNU-EST, KASSARI-EST, VORMSI-EST, KIHNU-EST, MUHU-EST, VILSANDI-EST, PIIRISSAAR-EST, PRANGLI-EST BARDSEY-UK, SAINT MARTIN'S-UK, SAINT MARY'S-UK, TRESKO-UK
		Phasing-out				FOULA-UK, EGILSAY-UK, HOUSAY-UK, COLONSAY-UK, FAIR-UK, EIGG-UK, EASTBURRA-UK, PAPA WESTRAY-UK, UNST-UK, NORTH RONALDSAY-UK, WHALSEY-UK, TRONDRA-UK, FLOTTA-UK, IONA-UK, GIGHA-UK, RAASAY-UK, EDAY-UK, COLL-UK, LUING-UK, JURA-UK, ROUSAY-UK, SHAPINSAY-UK, FETLAIR-UK, STRONSAY-UK, HOY-UK, SANDAY-UK, WESTRAY-UK, TIREE-UK, WESTBURRA-UK, BRESSAY-UK, YELL-UK, BARRA-VATERSAY-UK, MULL-UK, ISLAY-UK, ARRAN-UK, EASDALE-UK, LISMORE-UK, SEIL-UK, TIREE-UK, BENBECULA-UK, BERNERAY-UK, ERISKAY-UK, GREAT BERNERA-UK, GRIMSAY-UK, NORTH UIST, UK, SCALPAY-UK, SOUTH UIST-UK, VATERSAY-UK, GREAT CUMBRAE-UK, BURRAY-UK, SOUTH RONALDSAY-UK, PAPA STRONSAY-UK, STRONSAY-UK, MUCKLE ROE-UK, TRONDRA-UK, WHASLAY-UK
		Phasing-in				TORY-IE, CLARE-IE, INISHBOFIN-IE, INISHMAAN-IE, INISHEER-IE, ARANMORE-IE, INISHMORE-IE, TORAIGH-IE, INISHTURK-IE, SHERKIN-IE, BERE ISLAND-IE
		Comp. & Empl.				GRODE-DE, HOGE-DE, BALTRUM-DE, SPIEKEROOG-DE, WANGEROOG-DE, PELLWORM-DE, JUIST-DE, HELGOLAND-DE, LANGEBOG-DE, AMRUM-DE, NORDSTRANDISCHMOOR-DE, ENDELAVE-DK, ASKO-DK, MANDO-DK, TUNO-DK, AVERNAKO-DK, DREJO-DK, LYO-DK, ANHOLT-DK, OMO-DK, FEMO-DK, STRYNO-DK, AGERSO-DK, SEJERO-DK, FEJO-DK, LAESO-DK,

						FANO-DK, ERO-DK, SAMSO-DK , EGHOLM- DK, FUR-DK, HJARNO-DK, ORO-DK, VENO-DK, AARO-DK AASLA-FI, ATTU-FI, KEISTIO-FI, MIELISHOLM-FI, UTO-FI, JURMO-FI, SEGLINGE-FI, SAVERKEIT-FI, KASNAN-FI, LAPPO-FI, HITIS-FI, ENKLINGE-FI, MOSSALA-FI, NORRSKATA-FI, VARTSALA-FI, SOTTUNGA-FI, BJORKO-KIVIMO-FI, INIO-FI, SKALDO-FI, BAROSUND-FI, ROSALA-FI, KUMLINGE-FI, PELLINKI-FI, KOKAR-FI , BRANDO- FI, HOUTSKAR-FI, VARD0-FI, BERGO-FI, FOGLO-FI, SUOMENLINNA-FI, HAILUOTO-FI, KORPO-FI, NAGU MAIN ISL-FI, HOEDIC-FR, AIX-FR, ARZ-FR, HOUAT-FR, MOLENE-FR BREHAT-FR, BATZ-FR, OUESSANT-FR, GROIX-FR, BELLE-ILE-FR, YEU-FR, MOLENE-FR, SEIN-FR, ILE AUX MOINES-FR CLEAR-IE, SCHIERMONNIKOOG-NL, VLIELAND-NL, AMELAND-NL, TERSCHELLING-NL, ARHOLMA-SE, RAMSO-SE, HOLMON-SE, SVARTSO-SE, KOPSTADSO-SE, SANDON-SE, NORD KOSTER-SE, INGMARSO-SE, HERMANO-SE, LYRON-SE, ORNO-SE, UTO-SE, MOJA-SE, SYD KOSTER-SE, RUNMARO-SE, STORA DYRON-SE, RORO-SE, TYNNINGO-SE, VEN-SE, VRANGO-SE, YXLAN-SE, ASPO-SE, MARSTRAND-SE, BLIDO-SE, FARO-SE, HALSO-SE, BRANNO-SE, LJUSTERO-SE, DONSO-SE, STYRSO-SE, OCKERO-SE, HONO-SE, TYNNINGÖ-SE, HEMSÖN-SE, GRÄSÖ-SE, TJOCKÖ-SE, VÄRINGSÖ-SE, LADNA-SE, SANDHAMN-SE, RINDÖ-SE, SKARPÖ-SE, STORHOLMEN-SE, TRANHOLMEN-SE, ORNÖ-SE, OAXEN-SE RATHLIN-UK	
	SIZE	DEVELOPMENT STATUS	STATE (2)	NUTS II (4)	NUTS III (11)	ISLAND (114)	
SOUTH (131)	LARGE (13)	Convergence	MALTA MLT	SICILIA-IT, KRITI-GR	KERKYRA-GR, LESVOS-GR, MALTA island-MLT	ISCHIA-IT	
		Phasing-out					
		Phasing-in		SARDEGNA-IT			RODOS-GR
		Comp. & Empl.	CYPRUS-CYP	CORSE-FR	MALLORCA-ES, MENORCA-ES, IBIZA-ES		
	MEDIUM (30)	Convergence			ZAKYNTHOS-GR, KEPHALONIA-GR, SAMOS-GR, CHIOS-GR, GOZO-MLT	SKOPELOS-GR, SKIATHOS-GR, IKARIA-GR, LIMNOS-GR, THASSOS-GR, PROCIDA-IT, CAPRI-IT, LIPARI-IT, PANTELLERIA-IT	
		Phasing-out				AEGINA-GR	
		Phasing-in				KARPATIOS-GR, LEROS-GR, KALYMNOS-GR , KOS-GR, MYKONOS-GR, TINOS-GR, ANDROS-GR, THIRA-GR, PAROS-GR, NAXOS-GR, SYROS-GR, MADDALENA-CAPRERA-IT, SAN PIETRO-IT	
		Comp. & Empl.				FORMENTERA-ES, ELBA-IT	

SMALL (88)	Convergence				KASTOS-GR, ANTIPAXOS-GR, OTHONI-GR, MATHRAKI-GR, ERIKOUSA-GR, KALAMOS-GR, MAGANISSION-GR, PAXI-GR, ITHAKI-GR, GAVDOS-GR, ALONISSOS-GR, THYMAINA-GR, EFSTRATIOS-GR, PSARA-GR, OINOUSAI-GR, FOURNI-GR, SAMOTHRAKI-GR, TOURLIS-GR, STEFANION-GR, NISOS-GR LEVANZO-IT, MARETTIMO-IT, FAVIGNANA-IT, ALICUDI-IT, FILICUDI-IT, PANAREA-IT, STROMBOLI-IT, VULCANO-IT, SALINA-IT , LINOSA-IT, LAMPEDUSA-IT, SAN DOMINO-IT, USTICA-IT, COMINO-MLT
	Phasing-out				ANTI-KYTHIRA-GR, AGISTRI-GR, AMOULIANI-GR, YDRA-GR, KYTHIRA-GR, POROS-GR, SPETSES-GR, PALAION TRIKERION-GR
	Phasing-in				ARKI-GR, PSERIMOS-GR, TELENDOS-GR, AGATHONISSI-GR, TILOS-GR, MEGISTI-GR, CHALKI-GR, LIPSI-GR , ASTYPALAIA-GR, KASSOS-GR, NISYROS-GR, SYMI-GR, PATMOS-GR, DONOUSSA-GR, IRAKLIA-GR, SCHINOUSA-GR, THIRASSIA-GR, SIKINOS-GR, ANAFI-GR, KOUFONISSI-GR, FOLEGANDROS-GR, KIMOLOS-GR, ANTIPAROS-GR, SERIFOS-GR, KYTHNOS-GR, AMORGOS-GR, IOS-GR, KEA-GR, SIFNOS-GR, MILOS-GR, SKYROS-GR, TRIZONIA-GR, FARMAKONISI-GR ASINARA-IT,
	Comp. & Empl.				PORT-CROS-FR, ILE DU LEVANT-FR, PORQUEROLLES-FR, VENTOTENE-IT, PONZA-IT, GORGONA-IT, CAPRAIA-IT, PIANOSA-IT, GIGLIO-IT, PALMARIA-IT, SALINA-IT

LEGEND:

Convergence: Convergence Regions
Phasing-out: Phasing-out Regions
Phasing-in: Phasing-in Regions
Comp. & Empl.: Competitiveness and Employment Regions

B. Clarification of the territories to be analyzed with IIA

In the inception report (p. 46f) is a quite detailed description of how the case studies is going to be carried out. Only a few comments can help clarification further on this point in the study, where the selected islands have to be explored in detail and the concept of IIA are going to be developed.

Three considerations will be central in the selection of cases or maybe more correctly examples of IIA:

1. Highlighting important (conceptual) questions in the concept of IIA.
2. Focusing on major policy areas relevant in the European context.
3. Covering different categories of islands.

It is important to notice that the two first points have priority. In the study of IIA we will try to use examples from different categories of islands (according to the Island typology that will be included in the Interim Report), but the prime concern is to find examples with relevant for islands policies and with data available, so the IIA-concept can be explored best possible.

To enhance the synergy with other ESPON-projects, CAP and transport policies will be used in at least two of the examples. This gives the opportunity to contrast the results of this project with the results from the ESPON-project called TIP-TAP. The complete examples (amounting to 6 in all) are going to be chosen on basis on further research of the islands.

C. Wish list of variables and indicators

The islands' analysis in order to be complete has to be based on the routine and the wish list variables and indicators. The TPG is aware that:

- Routine variables and indicators are available on the European level only for Islands – Statistical Units. So it is vital to collect this information for the 5 case studies in order to be able to do basic analysis.
- Wish list variables and indicators are necessary for an in depth analysis of islands. This data is generally not available in the different European Data Bases and Reports (ESPON, EUROSTAT, EEA). A list of proxy variables is going to be used to complete this lack for the general analysis. Information for

wish list variables is going to be collected for case studies with the collaboration of stakeholders.

One of the goals of the project is to show to different European Bodies that the collected information is not always suitable for the analysis of islands and that Islands' Monitoring System needs an additional (specific) effort.

D. Involvement of Stakeholders. Research Note for Attractiveness Factor Questionnaires, Data Compilation and Case Study Reports

Introduction

This research guide provides some general and specific guidelines for designing, carrying out and codifying the research required for the determination and classification of islands' attractiveness factors as well as the analysis for the 9 case studies:

- As committed, Kalymnos-Lipsi, Majorca and Sardinia will be analysed by the LP; Cyprus, Samso and Saaremaa by P1; and Malta, Lipari and Kokar by P2.
- During the SC it was agreed that the TPG can decide whether field trips will take place and in which case studies they are going to take place, according to a methodology. Based on this, field research will take place only on islands that are not at NUTS 0-3 level (the "small" islands) where no data is available on the European level as it was initially proposed. Therefore, there will be no field research from the TPG for NUTS 0, 2 and 3 islands, such as Malta, Cyprus, Majorca and Sardinia (the "big" islands). In these cases the missing data (mainly the wish list variables) and other information (attractiveness questionnaires to local population and entrepreneurs) will be collected with the help of the project's stakeholders.

The definition of research populations and sampling techniques for each population will be discussed here, along with the data collection from the case studies and case study reports.

As already analysed in the inception report, attractiveness factors will be classified with the use of input from: (a) stakeholders, (b) permanent population of the islands and (c) entrepreneurs established on the islands, while, the analysis of the state of the

islands will be based on the collection of data and information as it is developed in the inception report.

The document is structured into 3 sections:

1. Research for the classification of attractiveness parameters
2. Data collection for sustainability and attractiveness for the case study reports
3. Case study reports

1. Classification of Attractiveness Parameters

1.1 Information from all the islands and the project's stakeholders

A very wide list of stakeholders –including decision makers from a maximum number of islands- is already compiled and the different questionnaires are prepared. Three different questionnaires will be used¹:

- (a) A questionnaire on attractiveness factors concerning households (ESPON-Attractiveness_population_Questionnaire final.doc);
- (b) A questionnaire on attractiveness factors concerning companies (ESPON-Attractiveness_enterprises_Questionnaire final.doc); and
- (c) A form for recording best practices for policies and evaluation of European policies that are related to attractiveness (ESPON-Policy_best_practice_final.doc).

There will be a specific distribution of the questionnaires to the stakeholders: Local Governments (Mayors of small islands and Presidents of NUTS II/III executives) will receive all questionnaires and forms; Presidents of CCI, (one per NUTS II/III area) will receive only the second questionnaire plus the form about best practices and European policies.

The questionnaires are already distributed by the Interregional Organisations (“horizontal” stakeholders) as the CPMR Islands’ Commission, INSULEUR and ESIN. The LP will analyse the responses.

The questionnaires have to be collected by the end of July, but if the number collected until then is inadequate, more could be completed and collected after summer vacations.

The Stakeholders of the program -particularly the Interregional Organisations- are requested to assist for a wider collection of questionnaires.

¹ All questionnaires are available on the website (<http://geo-ellanikos.aegean.gr/espon>) with username SC and password [obseurisles](#)

1.2. Attractiveness parameters according to the local populations

(Attractiveness_Population_Survey_Questionnaire_190609_en.doc)

The research targeted at the local population refers, in principle, to many different social groups, as attractiveness differs for different groups over characteristics such as age, education, occupation, family status, etc. For this particular research, we will restrict our focus to two different groups:

- (a) Local residents who have lived on the island for all their lives or at least for more than 15 years; and
- (b) "Newcomers" or residents who have moved to the island during the last 15 years.

The type of research strategy and the sampling will be different for these groups and depends very much on **the size of the islands' population**.

- For permanent residents on islands with a relatively small population (less than 2000 inhabitants), the design of the strategy is less complicated. The size of the sample needs to be up to 50 residents. The sampling process depends on the knowledge of the population. For those populations for which a complete register is available, a selection process of 50 random persons, based on a systematic selection of the n th record (where $n=N/50$ and N stands for the total population) could be applied. Where the knowledge of the population is less precise, a random selection based on the available population (i.e. those that are present at the time of the survey) could be applied, or a snowball strategy (i.e. each respondent provides three more contacts for interviews). In the case where the later two strategies will be adopted, the researchers need to take care that the sample is representative in broad terms with the overall population (e.g. to ensure that most of the sample will be old people on islands where the majority of the population are elderly). There can be no actual representative sample, but this approximation is still better than nothing.
- For permanent residents and islands with big populations, the design of the strategy is more complicated. The overall size of the sample in this case should not exceed 50 residents, although of course more are better. The sampling process again depends on the knowledge of the population. For those populations for which a complete register is available, a selection based on random numbers, or a systematic selection could be applied. Where the knowledge of the population is less precise, again a random selection based on the available population, or a snowball strategy could be applied. Extra care should be taken for a broad *spatial* representation of the size

of the population, with more respondents from the denser populated areas, but some answers from the rest as well. Again here, the sample will not be completely representative, but with some care the approximation could be satisfactory for the question that this research wants to address.

- For newcomers, the design is not affected by the size of the island. Here, almost certainly the knowledge of the population is limited and there is no record that will allow us to employ random strategies to select the sample. Therefore, snowball strategies (i.e. each respondent provides one - three more contacts for interviews) will be adopted, with the overall goal to have in the end as many questionnaires as possible. A desirable number is about 20-30 questionnaires in bigger islands, but in smaller islands these numbers may be unattainable., Nationals, from other parts of the country, repatriates (returned migrants), as well as foreigners -from developed and less developed countries- have to be included in the sample.

As this information will be used for the final classification of attractiveness parameters, the questionnaires have to be collected by mid September.

Every team has to assure the completion of these questionnaires from the local population on the case studies that are its responsibility; in "small" islands, the teams are responsible for their collection, in the "big" islands, it is the Stakeholders who are responsible for this.

1.3. Attractiveness parameters according to local businesses/entrepreneurs

(Attractiveness_Business_Survey_Questionnaire_190609_en.doc)
For local businesses a slightly different approach is advised. First of all, the **type of business** is very important for the approach followed here. Generally speaking, the research is more interested in businesses that are involved in a "competitive" productive activity. Such activities can usually be characterized as: 'exporting' (products or services) which bring income to the area; and the ones that cover local needs so that imports are avoided (and consequently economic leakages). Such activities for most islands are agriculture (for the local market and for export from the islands) and tourism services, but also fish farming and manufacture sector. With this approach, we exclude branches and businesses that cannot be substituted by imports (e.g. commerce, public administration, education and health services, financial and personal services, construction).

Second, the size of the sample should not exceed 30 businesses in any case. For small islands the total number of businesses may be known and may be small enough to cover all that is comprised in the competitive sector (much less, or up to 30 businesses). If this is not the case, systematic or random sampling may be the most suitable. For bigger islands, again if the total number is known, systematic or random sampling is the best choice. If the knowledge of the number of enterprises is less precise, a snowball selection process will have to be applied.

Within the business sector we need to collect questionnaires from "old" and "newly" established enterprises not as stratification in the sample, but as a general concern during the sampling, to include at least some new enterprises. As this information will be used for the final classification of attractiveness parameters, the questionnaires have to be collected by mid September.

Every team has to ensure the completion of these questionnaires from the local businesses on the case studies that are its responsibility; in "small" islands the Teams are responsible for their collection; in the "big" islands, the Stakeholders are responsible.

1.4. Classification of attractiveness parameters

The input from stakeholders and field research will be used for a first classification of attractiveness parameters. A group of experts will be used for the final classification by using the Delphi Method during October for the final classification.

The LP is in charge of the classification.

2. Data collection for determining the state of sustainability and attractiveness

The data collection is a vital part of the approach followed here. The basic three questions of the study are: what is the state of European islands today (sustainability); what are the causes of this state (attractiveness); and what can be done (policies). In order to respond to the first two questions, a list of variables has been compiled in the inception report (annexes 6 - 8). These are separated according to (theoretical) data availability in three classes:

- (a) Routine variables
- (b) Proxy variables
- (c) 'Wish list' variables

The first two will be (supposedly) provided either by European Data Bases and Reports or by other official sources for all NUTS O, NUTS II and III zones; with respect to the case studies of “small” islands the values of these indicators must be collected in collaboration with the Stakeholders. The third category is the one that we are looking for data only for the case studies. These data will have to be provided by local authorities/stakeholders. Therefore, the research team will visit the small ‘case study’ islands and collect data for these variables. Three issues are of great importance here:

(i) The consistency of the data. Care has to be taken to provide the source of the values of the variables; whether it is a measurement or estimation by experts and an estimation of its reliability.

(ii) The creation of time series. Time series are in general desirable if they are available. Even if they are not available, any repetitiveness of the measurement / estimation of the variable should be noted.

(iii) The qualitative variables. We have not had a chance to calibrate the estimation of the values of some of these variables, so we will have to make the best for each case.

All these metadata for the variables are vital for a complete and reliable data set that will allow a sound analysis and lead to more solid findings and robust conclusions.

Every team has to assure the completion of these data and other information; in “small” islands the Teams are responsible to collect them with the help of stakeholders, in the “big” islands the Stakeholders are responsible to collect them with the help of the Team responsible. It is recommended that the Teams should ask the Stakeholders of the “big” islands to provide data for Routine and Proxy Variables as well, as the European Data Bases at our disposal are not complete and/or lack the data series that Stakeholders can provide.

Questions on the definition of the variables, on collecting the information and on qualitative information have to be addressed to the LP through the website (forum function).

3. Case study reports

The case study reports should have the following structure:

a) State of sustainability, divided into 3 parts (economic effectiveness, social equity and environmental preservation) with quantitative and qualitative information based on the analysis in the Inception Report and the Variable lists (annexes 6-8);

- b) State of attractiveness, with quantitative and qualitative information based on the analysis in the Inception Report and the Variable lists (annexes 6-8);
- c) Classification of attractiveness parameters based on the questionnaires;
- d) Policy measures already applied and proposed for the future.

The outcome of these reports will be used along with the analysis conducted on the NUTS II/III level in order to:

- reveal common characteristics of islands compared to European mainland;
- classify the islands on the basis of the disparities existing between them.

The Stakeholders are asked to assist the different Teams with data and other information necessary to complete the study.

4. Final remarks

It is obvious from the above discussion that a unified research approach for attractiveness will be unattainable. The research strategy that will be adopted for each case study should be laid down and the relevant sources should be recorded by the research team for future reference. It is of the utmost importance to have a clear account of the different research components of this study.

With respect to the attractiveness research, it is important to pay special care to the way that the questionnaires will be completed, since there is no calibration of the interview process in a test interview that would be conducted with all of the researchers together. It seems that the most obvious and common mistake here is to lead the respondent to what he/she thinks that we want to hear. In this sense, language and body language are very important.

Concerning the time of execution of different tasks, the following time-table has to be respected in order to submit the Interim Report on time:

- o 16 November: Submission of the Interim Report from LP to ESPON CU
- o 1 November: Submission of Case study reports to LP
- o 1 November: Submission of Report on qualitative questions of questionnaires from P2 to LP
- o 15 October: Completion of Attractiveness Parameters classification from LP.
- o 1 October: Collection of Data from Secondary Sources for the horizontal analysis of all NUTS 0-3 islands in order to move on

Islands' Atlas Production, Islands' typology and Swot analysis (WP 2.2.1, and WP 2.2.3) from LP

Next meeting of TPG partners will take place on Bornholm on the 26th of September. The Draft Agenda of the meeting contains:

- Attractiveness questionnaires: responses and analysis of parameters (LP);
- Analysis of qualitative questions of questionnaires (P2);
- Data compilation for Islands – Statistical Units (LP);
- Case Study Research (LP, P1, P2);
- Policy assessment: Policy questionnaire: responses and analysis. Methodology for IIA. Discussion on Policies and Islands to be assessed (P1).

Version 16/09/09



The ESPON 2013 Programme

The Development of the Islands – European Islands and Cohesion Policy (EUROISLANDS)

Targeted Analysis 2013/2/2

Clarifications on Annex to the
Inception Report

1. Introduction

In the following text you will find answers to the questions developed in your response on the Annex to the Inception Report in order to provide clarifications on Part B and Part D; the text in italics repeats ESPON CU questions. It has to be mentioned that certain questions (mainly questions no 8,9 and 16) are not related with the Inception Report but with the Interim Report or an other procedure of on-going reporting.

2. Responses to comments on Part B – “Island Impact Assessment Tool”

In relation to Part B, the three considerations given to select the territories to be addressed by the so called Island Impact Assessment Tool are not convincing. In particular you are kindly asked to provide a clarification to the following questions:

1. What do the three considerations listed mean in practice?

The three considerations comprise the basic steps of the IIA (which is the subject of Phase III, WP 2.3):

- **The finalization of the methodological framework that is going to be used;**
- **The selection of the European policies that are going to be assessed using the Island Impact Assessment Tool;**
- **The selection of the islands-examples to which IIA will be applied.**

2. What do you exactly mean when mentioning “highlighting important (conceptual) questions in the concept of IIA” (page 8)?

The analysis of this aspect in the examples will focus on 4 important dimensions of the IIA methodological framework:

- **The use of the results emanating from the IIA (the results specify the characteristics of the methodology);**
- **The methodological basis of the IIA and more particularly the criteria on which the assessment is based;**
- **The object of IIA (the qualitative & quantitative characteristics of the policy assessed).**

3. What are the major policy areas relevant for islands in this context? On which basis will you identify these policies?

The policies to be examined are selected on the basis of the following:

Firstly, the policies should have a strong European element. Secondly, the policies should be relevant for the development of the islands. The outcome of the WP2.2.2 of the Interim Report will be the classification of the islands’ attractiveness parameters which in turn will highlight and rank the policies relevant for the development of islands.

However, the determinant of the final selection of the policies is the availability of data on a European level (comparable data between European mainland and islands) (p. 46 of the IR).

4. What is the situation on the data availability on this respect?

The reports from ESPON projects are going to be used (see p. 46 of the IR). If necessary, communication with the researchers responsible for the studies will be established (that is for the previous ESPON projects since cooperation with the TIP TAP project has already been developed).

5. *What do you mean when mentioning that “The complete examples (amounting to 6 in all) are going to be chosen on basis on further research of the islands”? What research in particular do you have in mind to support your selection?*

The six islands -examples will be selected from the different types of islands that will arise from the WP2.2.3: Islands’ Typology, which will be completed in and be part of the Interim Report (p. 46 of the IR). The “further research of the islands” refers exactly to the work necessary to construct the island typology (p. 41 of the IR).

6. *Which are the six islands to be chosen based on these three considerations?*

The outcome of the Islands Typology work will provide the necessary information for the final selection of the examples (see answer to the 5th question).

3. Detailed comments on Part E - “Involvement of stakeholders”

This part seems very confusing and vague and does not provide a concrete clarification in relation to the expected involvement of the stakeholders, the different tasks to be carried out and timetable.

7. *In the classification of attractiveness parameters, information from all the islands and stakeholders, you make reference to 2 questionnaires and a form that has been prepared in the framework of this project. You are kindly requested to provide the ESPON CU with these questionnaires and the form developed on the best practices of European policies.*

They are attached as annex A.

8. *It is mentioned that a wide list of stakeholders has been prepared and that the questionnaires will be distributed to them. In that respect, you are kindly requested to inform us on the stakeholders included in this list. In particular the report refers to Presidents of NUTS II/III executives (page 10), what do you mean with that?*

The two questionnaires and the form were sent by the TPG to the stakeholder organisations at European level, which are the CPMR Islands’ Commission, INSULEUR and ESIF on the 19th of June. The two questionnaires and the form were then distributed by these organizations to their members that are the island regional authorities (19 members); Islands’ Chambers of Commerce and Industry (31 members); and National Associations of Small Islands (10 direct members).

Therefore the list included local governments: Mayors of small islands and heads of NUTS II and NUTS III islands (the latter refers to the head of the Region or of the Prefecture), and Presidents of regional (NUTS II and NUTS III) CCI’s.

9. In the annex to the Inception Report (page 10) it is mentioned that “questionnaires are already distributed by the Interregional Organizations as the CPMR,....”. Could you please provide us with some information on how this process has been organised, how many questionnaires were distributed? You also mentioned that these questionnaires would be collected by the end of July. How many questionnaires have been collected so far?

The process was the following: the TPG provided the questionnaires to the Interregional Organizations - CPMR Islands’ Commission, INSULEUR and ESIF. Then these organizations distributed the questionnaires to their members (administrative staff & local experts) asking them to send their answers to the LP of the TPG either by email or by post. The following table provides the number of questionnaires sent and returned so far:

Stakeholders/ Interregional Organizations	Questionnaires sent	Questionnaires received (quantity)
CPMR Islands’ Commission	89	7
INSULEUR	84	0
ESIF	10	1

A new forwarding has been effectuated by the TPG on the 16th of September to the members of the above organizations who have not responded yet requesting their responses before the end of the month.

10. In the classification of attractiveness parameters, according to the local populations, a questionnaire has also been developed. You are kindly requested to provide the ESPON CU with this questionnaire.

They are attached as annex B.

11. In relation to the sampling of the population, you make reference to important parameters such as age, education, occupation, size of the islands but finally is not clear the way you will ensure sample representativity. This fact is important to avoid misleading results and ensure the European dimension to this project.

12. Concerning the size of the sample. It is mentioned that it “needs to be up 50 residents” (page 11) for permanent residents on islands with a relatively small population and to not exceed 50 residents” for permanent residents and islands with big populations. You are kindly requested to explain the way you arrived to these figures.

13. On page 11 it is mentioned “for the selection process of 50 random persons, based on a systematic selection of the nth record (where $n=N/50$ and N stands for the total population could be applied)”. What do you mean with that? Do you intend to adjust the size of the sample according to the total population of each island?

14. “For newcomers, the design is not affected by the size of the island”. Could you please explain why? In particular you mentioned that “a desirable number is about 20-30 questionnaires in bigger islands but in smaller islands these numbers may be unattainable”. Could you please explain how did you arrive to this conclusion?

15. *In the classification of attractiveness parameters, attractiveness parameters according to local business/entrepreneurs, you are kindly requested to explain the way the sample was selected (composition)*

The part of research regarding the case-studies that will be conducted through the questionnaires addressed to local population and enterprises has to fulfil two goals: (a) to explore the way that local population conceives attractiveness parameters and eventually to record any differences between the opinions of the decision makers (public authorities) to whom the questionnaires of Annex A have already been sent, and the ones of the local population, and (b) to explore if newcomers have different priorities in the hierarchy of attractiveness parameters than native people.

Regarding the local population, the research is targeted, in principle, at different social groups, as attractiveness is apprehended differently by different groups over characteristics such as age, education, occupation, family status. However, in this particular research, we will restrict our focus to two different groups: local residents and “newcomers”. Therefore, the sampling technique will be based on the “nth” record of the local population registry.

According to the current acquired experience and practice¹, and given that initially the case-studies included only non-NUTS (small) islands, an indicative sample of 50 records has been estimated as sufficient. In this case the nth record would be equal to $N/50$, where “N” stands for the total population. For example for a total population of 1000 inhabitants we would select every 20th record ($1000/50=20$, i.e. the 1st, 21st, 41st, etc.) of the local population registry to fill in the Questionnaire. Similarly, according to the current experience, a sample of up to 20-30 records regarding the “newcomers” is estimated as indicative. In addition, the number of “newcomers” in an island is certainly not affected by its size, but by its attractiveness parameters.

Regarding the research for the local businesses in the non-NUTS (small) islands, a sample of up to 30 records could similarly – according to the current experience – give a sufficient indication for the attractiveness of the local market.

However, due to the inclusion of NUTS islands as additional case studies in the research, a respective adaptation of the above methodology is required.

Thus, regarding the local population of the NUTS islands, the research will be based on the response of the Local Authorities to the respective Questionnaire. In this case, the EUROISLANDS stakeholders of Malta, Cyprus, Sardinia and Mallorca, will assume the task of distributing and monitoring the completion of the Questionnaires. Regarding the research for the local businesses, the research will be based on the response of the various industry associations (e.g. manufacture, tourism, agriculture, etc). In this case the above EUROISLANDS stakeholders will assume the responsibility of distributing and monitoring the completion of the respective Questionnaires.

¹ *Although the relevant research and knowledge on such issues is currently little at European islands level, the proposed approach will help in moving from the conceptual and theoretical to the empirical. The proposed number of the samples will comprise a sound basis for basic statistical analysis and comparisons between the views of inhabitants of different types of islands.*

16. In relation to the distribution, completion and analysis of the questionnaires, you are kindly requested to provide the CU with a table including the envisaged timing and dates to complete the different tasks related to this process.

The initial planning had foreseen:

	Distribution	Completion/ Collection	Analysis
Questionnaires to local government and CCI (WP 2.2.1)	16/6	End of July	Completion of attractiveness parameters 15/10
Questionnaires to local population and enterprises (case studies) (WP 2.2.2)	July - September	July-September	Completion of attractiveness parameters 15/10

The actual situation can be described as follows:

	Distribution	Completion/ Collection	Analysis
Questionnaires to local government and CCI (WP 2.2.1)	16/6 YES	Small number of responses till now. New round of distribution. Collection end September	Analysis and Completion of attractiveness parameters 30/11
Questionnaires to local population and enterprises (case studies) (WP 2.2.2)	Lipsi, Kalymnos, Aland ²	Lipsi – Kalymnos (completed) Aland (on going)	Analysis and Completion of attractiveness parameters 30/11

17. For the classification of the attractiveness parameters (page 13) you mentioned that a group of experts “will be used for the final classification by using Delphi Method during October”. How have these experts been selected? Is the group of stakeholders following this project represented in this list of experts?

The project’s stakeholders will comprise the group of experts that will participate in the final classification of the attractiveness parameters.

18. Finally, in relation to the concrete involvement of the stakeholders involved in this project, it is not clear when and exactly how they are expected to support the TPG. In general it is mentioned along the annex to the Inception Report that “in the big islands, it is the stakeholders are responsible” for the questionnaires. In order to clarify this situation you are kindly requested to explicitly mention the islands you referred to and avoid the terms “small and big islands”. In addition, it seems convenient to coordinate this process with the stakeholders in a permanent dialogue in order to achieve the best results. Therefore, you are kindly requested to provide

² The field research in these islands begun before the emergence of contestation on the research approach from ESPON CU.

the ESPON CU with a timetable and tasks where the stakeholders will be involved and the way the process will be coordinated by you.

The stakeholders' involvement in the project differs as follows:

- the representatives of Sardinia, Cyprus, Malta and Balearics have (a) to check if the questionnaires addressed to their local government and CCI have been completed, (b) to provide information about the variables (annexes 6-8 of the IR) and (c) to distribute and monitor the completion of the questionnaires to local population, new comers and “competitive” enterprises.
- The representatives of Aland and of Saaremaa have (a) to check if the questionnaires addressed to their local government and CCI have been completed, and (b) to assist the TPG representative appointed for the field work in the quantitative and qualitative data collection, as well as the survey completion
- The representatives of Regional Municipality of Bornholm and of the Municipality of Gotland –as their island is not a case study area- *have only to check if the questionnaires addressed to their local government and CCI have been completed*
- The representatives of the Italian and the Greek Ministry of Economy have (a) to check if the questionnaires addressed to their local governments and CCI have been completed, and (b) to facilitate to find a contact person and information for Salina, Kalymnos and Lipsi. The Greek Ministry has taken the initiative to send the questionnaires to all the Greek islands' local governments and CCIs'; 121 letters were mailed and we have 29 responses up to now (23 and 6 respectively).
- Finally the Interregional Organizations (CPMR, Insuleur, ESIN) had, in this phase, to distribute the questionnaires to their members and assure their completion.

Stakeholders	Questionnaires Annex A	Variables	Questionnaires Annex B
Cyprus, Malta, Sardinia, Mallorca	Check Completion 30/9	30 October	30 October
Aland, Saaremaa	Check Completion 30/9	30 October	30 October
Bornholm, Gotland	Check Completion 30/9	-	-
Greek and Italian Ministry	Check Completion 30/9	Facilitator	-
CRPM, Insuleur, ESIN	Distribution and – Completion 30/9	-	-

D. Conclusion

Due to the fact that the Inception Report is not approved yet, some of the tasks concerning the case studies were not possible to be completed. To this effect an updated realistic timetable regarding the Interim Phase is proposed below:

TIMETABLE: TOWARDS THE INTERIM REPORT

WP/ TASKS		September	October	November	December	January
WP2.2.1: Data compilation and analysis for NUTS II & NUTS III Island regions						
T 2.2.1.1	Attractiveness & sustainability variables collected through existing Data Bases		1 October			
T 2.2.1.2	Questionnaires on attractiveness distributed through the INTERREGIONAL ORGANIZATIONS	30 September				
T 2.2.1.3	Questionnaires on attractiveness collected & analysed			10 November		
WP2.2.2: Analysis of the case studies						
T 2.2.2.1	Attractiveness & sustainability variables collected through STAKEHOLDERS - 4 islands		30 October			
T 2.2.2.2	Attractiveness & sustainability variables collected by the TPG - 5 islands		30 October			
T 2.2.2.3	Information from the 4 islands - questionnaires collected by the STAKEHOLDERS		30 October			
T 2.2.2.4	Information from the 5 islands - questionnaires collected by the TPG		30 October			
T 2.2.2.5	Questionnaires on attractiveness analysed			10 November		
T 2.2.2.6	Classification of attractiveness parameters			30 November		
T 2.2.2.7	Case studies' Report				15 December	
WP2.2.3: Islands' Typology						
T 2.2.3.1	Analysis of attractiveness for enterprises & for population (data analysis)					15 January
T 2.2.3.2	Typology of Islands & SWOT Analysis for each type of island					15 January
T 2.2.3.3	Principles for a policy for Islands					15 January

This questionnaire has been constructed within the ESPON study EUROISLANDS to investigate and record the opinions and attitudes of European stakeholders regarding the factors that make islands more or less attractive for taking up local residence.

Your answers will be held in strict confidentiality and will only be published in a summative form.

Once you have filled the questionnaire, kindly either fax it to +30 22510 36290, e-mail it to: mkou@env.aegean.gr or snail mail it to this address

Spilanis Ioannis,
University of the Aegean, Laboratory of Local and Islands Development,
University Hill, Mytilini, 81100,
Greece

Thank you in advance for your time and cooperation

Spilanis Ioannis
Project coordinator, EUROISLANDS

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INVESTING IN YOUR FUTURE

1. Which are the most important factors that make an island attractive to live on?

2. How would you briefly define island attractiveness?

3. A list follows with some selected factors that are believed to affect the contemporary attractiveness of islands for the purpose of **residence**.

3A: First, can you give your opinion on ALL the factors across an importance scale that ranges from ‘2’ (very important) to ‘5’ (insignificant). If you are uncertain, or have no opinion, about a particular factor, please tick the final column.

3B: Next, can you prioritize the five (5) most important factors from the listing below which, in your opinion, impact on making islands attractive to residents. You can do so by placing a ‘1’ next to the most important factor in column 1; then a ‘2’ next to the second most important factor; and so on until you place a ‘5’ next to what you consider to be the fifth most important factor. ALL your selections should be placed in column 1.

Factors	Priority of 5 most important factors	Very Important	Important	Of little importance	Insignificant	No opinion
	1	2	3	4	5	6
Frequency of scheduled trips (by ferries, ships, airplanes...)						
Cost of air or sea travel to mainland						
Quality of transport services to mainland						
Broadband connection						
Regularity of energy supply						
Regularity of water supply						
Connection to the waste water collection and treatment system						
Effectiveness of solid waste collection/disposal						
Quality of local public transportation network						
Job opportunities						
Career opportunities						
Training opportunities						
Opportunities to attend cultural events						

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Opportunities to attend sports events						
Quality of Health Care and services						
Availability of specialised health personnel						
Quality of Education services						
Availability of specialised educational services						
Land and construction cost of domestic homes						
Cost of living						
Extent of linguistic, religious, racial or ethnic diversity in society						
Participation in non-government collective activities (cooperatives)						
Networks of trust and social capital						
Quality of life (short everyday distances, low noise, clean air)						
Quality of Nature						
Quality of the built environment						
Residence in a place with distinct cultural identity						

4. Would you like to add other factors – not listed in Question 4 above - that impact on an island’s attractiveness to residents and that you believe are important and should also be taken into account?

5. What should be the content of a European insular policy that aims at the improvement of their attractiveness?

6. If all could go as you wished, what would the results of such a European insular policy be?

7 Stakeholder: _____ Island: _____

8. Name and Position of person that has filled the questionnaire:

Thank you very much for your cooperation. We wish to remind you that your answers will remain confidential.

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This questionnaire has been constructed within the ESPON study EUROISLANDS to investigate and record the opinions and attitudes of European stakeholders regarding the factors that make islands more or less attractive for setting up local economic activities.

Your answers will be held in strict confidentiality and will only be published in a summative form.

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1. Which are the most important factors that make an island attractive to develop economic activities on?

2. How would you briefly define island attractiveness?

3. A list follows with some selected factors that are believed to affect the contemporary attractiveness of islands for the purpose of **setting up and running local economic activities**.

3A: First, can you give your opinion on ALL the factors across an importance scale that ranges from ‘2’ (very important) to ‘5’ (insignificant). If you are uncertain, or have no opinion, about a particular factor, please tick the final column.

3B: Next, you can prioritize the five (5) most important factors from the listing below which, in your opinion, impact on making islands attractive to business development. You can do so by placing a ‘1’ next to the most important factor in column 1; then a ‘2’ next to the second most important factor; and so on until you place a ‘5’ next to what you consider to be the fifth most important factor. ALL your selections should be placed in column 1.

Factors	Priority of 5 most important factors	Very Important	Important	Of little importance	Insignificant	No opinion
	1	2	3	4	5	6
Frequency of scheduled trips (by ferries, ships, airplanes...)						
Cost of air or sea travel to mainland						
Quality of transport services to mainland						
Broadband connection						
Regularity of energy supply						
Regularity of water supply						
Connection to the waste water collection and treatment system						
Effectiveness of solid waste collection/disposal						
Quality of local public transportation network						
Supply of Trained/ qualified human capital						
Labour costs						
Business support agencies (such as business development corporations)						

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Land and construction cost of commercial property						
Support by other businesses (goods and services of local market)						
Economic incentives to businesses (subsidies, tax incentives)						
Possibility to support innovations in the production process						
Cooperation with other businesses for information and know-how exchange						
Effectiveness of public administration						
Competence of local authorities to solve problems						
Development vision of local authorities (strategy, plan, activation)						
Degree of stakeholders' involvement in the decision making process						
Security (from criminal activities)						
Threat of Natural hazards						
Threat of Technological hazards						

4. Would you like to add other factors – not listed in Question 6 above - that impact on an island's attractiveness to business people and that you believe are important and should also be taken into account?

5. What should be the content of a European insular policy that aims at the improvement of their attractiveness?

6. If all could go as you wished, what would the results of such a European insular policy be?

10 Stakeholder: _____ Island: _____

11. Name and Position of person that has filled the questionnaire:

Thank you very much for your cooperation. We wish to remind you that your answers will remain confidential.

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The purpose of this form is to record some examples of ‘best practice’ with respect to policies that address island development and which have been planned and implemented on European islands. According to our ESPON Project specifications, these policies can be subsumed under one of four broad themes, namely:

- Human resources;
- Services of public interest;
- Management and valorisation of natural and cultural resources;
- Promotion of entrepreneurial activities.

These examples of ‘best practice’ could be national, regional or local initiatives and financed under a variety of instruments or projects. With this form we attempt to record as many successful policy examples as possible.

So, if you know about, or have been involved with, a particular policy that has impacted on an island (or group of islands) particularly well, please record it in the space provided below. Feel free to add as much relevant information as necessary to this form, including references and/or supporting documentation concerning the ‘best practice’ examples that you are referring to.

You are also invited to submit your own overall assessment of the European Union’s Policy as it applies to islands, and of the impacts of such a policy on European islands. We are also interested in your suggestions and ideas for a future European Insular Policy.

Kindly return your completed questionnaire by e-mail to mkou@env.aegean.gr, by fax to: 0030 22510 36290 or by snail mail it to this address

Spilanis Ioannis,
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 University Hill, Mytilini, 81100,
 Greece

Thank you in advance for your time and cooperation

Spilanis Ioannis
 Project Coordinator, EURO ISLANDS

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7. Where could we get more information on the particular policy and who should we contact? Is there a relevant web site?

Part B: European Policy Questions

8. Which existing European Policies have, according to you, had either significant positive or negative impacts on your island, or islands in general?

9. What do you think should be included in a future European insular policy?

10. If all aspects of this future European policy could be implemented in full accordance with your wishes and hopes, what kind of outcome would you envisage?

11. Anything to add?

12. Stakeholder: _____ Island: _____

13. Name and Position of person that has filled the questionnaire:

Date: _____

Thank you so very much for your cooperation.

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This questionnaire has been constructed within the ESPON study EUROISLANDS which aims to develop policy recommendations for the European Islands by studying the problems and showing the unique (common) characteristics of the islands (insularity). The aim of this questionnaire is to investigate and record the opinions and attitudes of inhabitants of European Islands regarding the factors that make islands more or less attractive for living.

Guidelines for the completion of each question are provided. In the case you consider that some questions or parts of them are not clear to you, don't hesitate to contact with us. We would like to make clear to you, that your answers will be held in strict confidentiality and will not be published in any form.

Once you have filled the questionnaire, kindly either fax it to [local telephone](#) or e-mail it to: [local email](#).

Thank you in advance for your time and cooperation

Spilanis Ioannis

Project coordinator, EUROISLANDS

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1. A list follows with some selected factors that are believed to affect the contemporary attractiveness of islands for the purpose of **residence**.

1.B: We would like you to record your opinion about the sentences that follow and they refer to your life on the island with respect to all these factors, in a scale of importance from “I agree totally”, to “I disagree totally” (columns 1-5)

	I agree totally	I agree	Neither I agree or disagree	I disagree	I disagree totally	I Don't know/ I have no Answer
	1	2	3	4	5	
1.The Frequency of scheduled trips (by ferries, ships, airplanes...) is adequate						
2. The cost of air or sea travel to mainland is praiseworthy						
3. The quality of transport services to mainland is satisfactory						
4. The broadband connection is satisfactory						
5. The regularity of energy supply is sufficient						
6. The regularity of water supply is sufficient						
7. The waste water collection and treatment system is adequate						
8. The quality of local public transportation network covers the local needs						
9. There are sufficient job opportunities						
10. There are sufficient opportunities for training						
11. There are adequate opportunities to attend cultural events						
12. There are adequate opportunities to attend sports events						
13. The quality of Health Care and services covers my needs						
14. The quality of Education services covers my needs						
15. Land and construction cost of domestic homes is praiseworthy						
16. The cost of living is satisfactory						
17. The quality of life (short everyday distances, low noise, clean air) is satisfactory						
18. The quality of Nature is satisfactory						

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19. The quality of the built environment is satisfactory						
20. The local Public Administration is effective						
21. The degree of involvement of the citizens in the decision making process is sufficient						
22. I generally feel security (from criminal activities)						
23. I trust the local authorities (municipality)						
24. Generally the locals are trustworthy						
25. My interest for the local politics is high						

2. Are you a member of a local non-governmental organization (ex. sports union, local environmental organization etc.)? _____ No _____ Yes

3. Have you ever offer volunteer work at any local non-governmental organization (ex. Blood donor, local Red Cross volunteer, reforestation, etc.)? _____ No _____ Yes

4. At your opinion, which are the most important factors that make the island attractive for residence?

5. What could make you leave the island?

6. Would you like to add something else that you want to be considered? Or something that is not included in this questionnaire and you believe is important and should also be taken into account?

7.a Since when you live permanent on this island: _____ 7β. Where you were living before: _____

8. Gender: _____ 9. Age: _____ 10. Education: _____

11. Occupation: _____ 12. Marital status: _____

13. Number of family members: _____ 14. Family Income: _____

Thank you very much for your cooperation. We wish to remind you that your answers will remain confidential.

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The aim of this questionnaire is to investigate and record the opinions and attitudes of European stakeholders regarding the factors that make islands more or less attractive for setting up local economic activities.

Guidelines for the completion of each question are provided. In the case you consider that some questions or parts of them are not clear to you, don't hesitate to contact with us. We would like to make clear to you, that your answers will be held in strict confidentiality and will not be published in any form.

Once you have filled the questionnaire, kindly either fax it to (local telephone)....., e-mail it to (local mail).....

Thank you in advance for your time and cooperation

Spilanis Ioannis

Project coordinator, EUROISLANDS

1. It follows a series of questions related with the economic and social dimensions of enterprises in islands. Please record the degree of your agreement or disagreement with these questions

	I agree totally	I agree	Neither I agree or disagree	I disagree	I disagree totally	I Don't know/ I have no Answer
	1	2	3	4	5	6
1.The Frequency of scheduled trips (by ferries, ships, airplanes...) is adequate						
2. The cost of air or sea travel to mainland is praiseworthy						
3. The cost of transport of goods from and too the island is praiseworthy						
4. The quality of transport services to mainland is satisfactory						
5. The broadband connection is satisfactory						
6. The regularity of energy supply is sufficient						
7. The regularity of water supply is						

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sufficient						
8. The waste water collection and treatment system is adequate						
9. The quality of local public transportation network covers the local needs						
10. There is sufficient and available trained/ qualified human capital in the area/island						
11. There are sufficient opportunities for training of the employees in the area/island						
12. The land and construction cost of commercial property is praiseworthy						
13. The cost of life is satisfactory						
14. The local Public Administration is effective						
15. The labor cost is satisfactory						
16. The business support agencies (such as business development corporations) are adequate						
17. There is sufficient support by other businesses (goods and services of local market)						
18. The Economic incentives to businesses (subsidies, tax incentives) are sufficient						
19. The possibility to support innovations in the production process is sufficient						
20. There is the possibility to develop cooperation with other businesses for information and know-how exchange						
21. The local authorities show sufficient competence to solve problems						
22. The local authorities have an adequate development vision (strategy, plan, activation)						
23. The degree of stakeholders' involvement in the decision making process is sufficient						
24. I generally feel security (from criminal activities)						
25. My trust to the local authorities (municipality) is high						
26. Generally the locals are trustworthy						
27. My interest for the local politics is high						
28. The perspective of my business on the island is positive						

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2. At your opinion, which are the most important factors that make the island attractive for setting up local economic activities?

3. What could make you terminate your business or relocate?

4. Would you like to add something else that you want to be considered? Or something that is not included in this questionnaire and you believe is important and should also be taken into account?

5. Gender: _____ 6. Age: _____ 7. Education: _____

8 Position in the enterprise: _____

9. Sector of activity of the business: _____ 10. Legal Entity: _____

11. Number of employees: _____ Permanent: _____ Seasonal : _____

12. Turnover of the last year: _____

13. Headquarters of the enterprise: _____

14. Area of activity: _____

15. Affiliated company: Yes ___ No ___ 16. Franchise: Yes ___ No ___ 17. Year of creation _____

Thank you very much for your cooperation. We wish to remind you that your answers will remain confidential.

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