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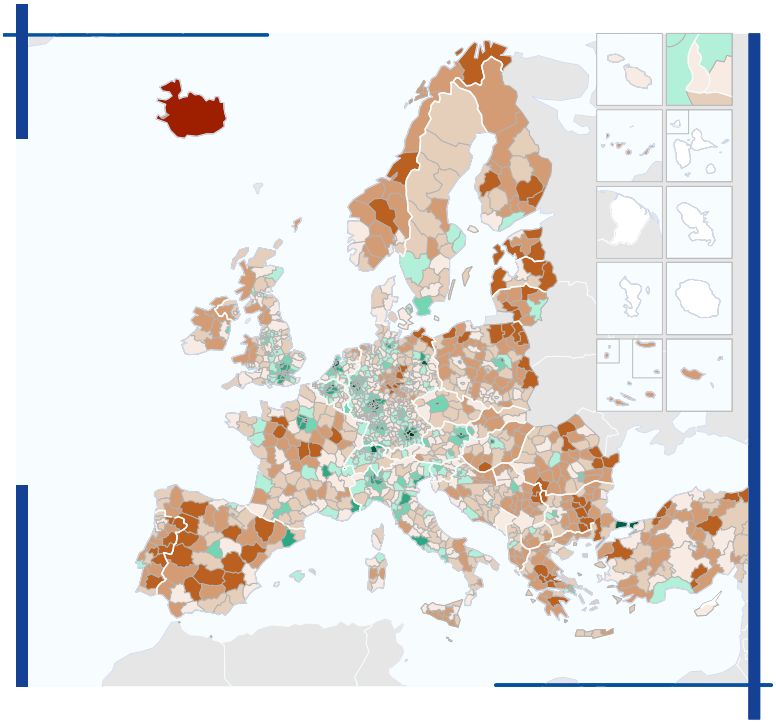
Inspire policy making by territorial evidence

ESPON Policy Brief

Shaping new policies in specific types of territories in Europe: islands, mountains, sparsely populated and coastal regions



Territories with geographical specificities are important for Europe

Article 174 of the Lisbon Treaty states that "*In order to promote its overall harmonious development, the Union shall develop and pursue its actions leading to the strengthening of its economic, social and territorial cohesion. In particular, the Union shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions. Among the regions concerned, particular attention shall be paid to rural areas, areas affected by industrial transition, and regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions*".

Within Europe these regions have unique geographical characteristics in which the identification of competitive opportunities is linked to their specific advantages and territorial assets. These vary by region and the key policy questions are:

- How to better explore these unique assets?
- How to reduce and overcome development challenges?

The concepts of smart and place-based (functional, integrated) approach seem very suitable at supporting factors for sustainable growth in these territories such as labour market, small and medium-sized enterprises, territorial cooperation, innovation and infrastructure.

European policy debate on the development of territories with geographic specificities in the past years has been moving away from the discussions on the need to compensate for the "natural handicaps" and develop a special policy or instrument "per handicap/ specificity". The discourse nowadays, while still acknowledging that the specific challenges of these places may require tailored solutions, is much more oriented on the need to reveal and strengthen their development potentials.

This policy brief presents main territorial observations on key development patterns of territories with geographic specificities (coastal areas, islands, mountains and sparsely populated regions) and key messages for policy-makers for designing and implementing development strategies specifically tailored to the needs of these places.

The policy brief was prepared by the ESPON EGTC at the initiative of the Maltese Presidency of the Council of the European Union on the basis of the background working paper that was presented at the Network of Territorial Cohesion Contact Points (NTCCP) meeting in Malta on 2 March 2017.

The main territorial observations presented in this policy brief should be considered as a contribution of the Maltese Presidency to the upcoming policy debates on the future EU Territorial Agenda, Cohesion policy and Transport policy.

Key policy messages

The following key policy messages are presented as guidance points for policy-makers engaged in promoting development in territories with geographic specificities. They are derived from the analysis of development trends and challenges observed in coastal areas, islands, mountains and sparsely populated regions. In general, the analysis reveals a wide diversity within European regions characterised by geographic specificities and supports the development of integrated and place-specific policies.

- **Place-based approaches are necessary**

Due to large diversity, overlapping specificities (e.g. one area can be mountainous and sparsely populated at the same time) and other factors influencing the development patterns of these territories, such as the national context, the 'typology' approach to developing policies for these areas does not seem to be the right starting point. Policies should rather be developed on the basis of a **functional approach dealing with common features, such as insularity, remoteness, demography and a coastal situation.** These issues are relevant for regions that are marginally concerned by geographic specificity, or even only in the vicinity of specific types of territories, as well as for regions that are primarily insular, mountainous, sparsely populated or coastal. In addition, functional links with surrounding areas should be revealed and taken into account. Opportunities of mountain areas can, in many instances, generate positive social and economic effects in neighbouring lowland areas; obstacles to development in an island may be overcome through targeted measures in other regions.

Performance, compared to other territories, is of secondary importance. Regions cannot be compared against the same benchmarks because different types of regional activity create different levels of economic return. Understanding specific processes to inform policy-making is more important than benchmarking and the focus should be on potentials rather than on relative performance of different places.

Therefore, there is no need to develop a policy "per geographic specificity". **Supporting integrated asset-based development strategies that respect territorial challenges and opportunities** is worth considering as a strategic approach. At the same time, there is a need to assess the potential impacts of wider EU, national and regional policies on the development of different groups of regions, including territories with geographic specificities. Policy frameworks developed for territories with geographic specificities should be territorially sensitive (strengthening the specific territorial potentials of places) and offer implementation tools that support integrated solutions, encourage multi-level governance and multi-fund approach. The results of applying integrated territorial investments in the framework of EU Cohesion policy and community-led local development in the framework of EU Rural development policy, will offer the basis for discussion on opportunities and needs to develop these tools further.

Integrated place-based strategies and wider policy frameworks should promote territorial potentials based on unique historical, cultural, natural and social capital of these areas and specifically consider a number of aspects that are common to these places. The latter are presented in the following points.

- **Place-based strategies and policies should aim at promoting diversification of economic activities.**

Considering that territories with geographic specificities are usually characterised by a low level of economic diversification, strategies and policies should promote **multi-activity through smart solutions and preservation of small-scale activities.** Multi-activity is often the key to economically sustainable development.

Smart approaches play an important role in supporting sustainable economic development and innovation in specific types of territories. The main objective should be to identify unique opportunities, not to try to make these territories function in the same way as 'mainstream regions'. Cultivating 'uniqueness' generally offers more promising economic development perspectives and might be easier to translate into policy actions. Challenges linked to specific types of territories have, in some cases, been successfully overcome through smart specialisation strategies capitalising on their unique resources, developing and branding high-added value niche-products (e.g. aquaculture specialised in seed mussels).

There is a wide political agreement that **small-scale agriculture and fisheries** should be preserved in specific types of territories. In this context, their products should be able to compete on European markets and compensatory measures might be considered as an option. In particular, actions related to protected designations of origin have significantly contributed to preserve these economic activities. Specific types of territories, in this respect, often have a competitive advantage, as many of them are well-known by the public and can be associated with values such as 'untouched nature' and attractive landscapes.

At the same time, the viability of agricultural and fisheries activities can be improved by promoting cross-sectoral and vertical integration. Agro-tourism and tourism-fishing are well-known examples of cross-sectoral combination of different types of activities that allows reducing the seasonality in tourism and at the same time sustaining the demand for agricultural and fishing products. There are also examples of innovative initiatives such as the creation of small-scale homes for elderly persons in combination with farming activities.

Small farm size can be compensated for by specialisation in high-added value products, e.g. organic produce, products for niche markets. This in many cases requires vertical integration between groups of farmers or artisanal fisheries, processing plants and commercialisation activities in order to ensure a viable food-production chain (e.g. apple production in the Tyrolean Alps). While businesses in "mainstream regions" generally can choose between vertical and horizontal integration (e.g. increase in farm size), vertical integration is in many cases the only option in specific types of territories.

- **Policy actions should counteract population decline and address the impacts of seasonal variations of population**

In declining areas, it is necessary to design and implement policy actions to encourage return migration and to attract young graduates and, at the same time, to promote sufficient employment opportunities for women. Such actions need to be permanent, as the circulation of population otherwise generates a constant loss of inhabitants. Access to services of high quality is increasingly a precondition to avoid population decline. Policy actions to provide access to services of general interest should be integrated as part of development policies in specific types of territories. For transport as for other services of general interest, market actors often do not spontaneously offer a satisfactory level of service provision in these territories. The market basis tends to be weak compared to other regions, which makes it difficult to capitalise on economic development assets. It is therefore important to weigh public expenditure required to offer services in these territories against the potential demographic gains.

In islands, coastal areas and mountain resorts that attract large numbers of tourists and generate significant activity, amenity migration policies should specifically address the impacts of additional pressure to local infrastructure and increasing housing prices (e.g. through additional regulation of the housing market).

- **Policy actions related to accessibility should be linked to existing and future economic activities and overcome bottlenecks**

Accessibility is the combined result of a transport network and the location of service points, markets and other facilities or destinations that are considered attractive. The improvement of accessibility may therefore be approached both from the perspective of investments in transport infrastructure, and of the territorial organisation of service provision, settlements, natural areas, etc.

The underlying assumption is that increased accessibility will enhance growth and therefore contribute to territorial development. From the perspective of specific types of territories, a more place-based rationale is needed, in which the starting point for reflections on improved accessibility would be the needs of the existing economic activities, their development perspectives, and perspectives for improving the living environment of their inhabitants.

The objective, for a region, is to have access to the transport infrastructure needed to draw benefits from its economic development opportunities. For instance, an attractive island region needs airports connecting it to potential tourists, while a sparsely populated region within mines may need trains to export ore, and a forested mountain region may need roads to export wood products. More generally, it can be an advantage for business development if day trips to urban centres offering advanced services (e.g. financial services) are possible. However, in many respects, and especially for freight transport, travel times seem of less importance than costs, regularity and reliability of connections. From this perspective, access to alternative modes of transportation when needed (e.g. when extreme weather events occur or in case of damage to essential infrastructure) can be of importance.

Furthermore, extra-European accessibility is important for a number of specific types of territories on the margins of Europe. Iceland has, for example, positioned itself as an air hub between Europe and North America. Opportunities deriving from these connections can be incorporated in the policy interventions.

- **Access to high-quality broadband should be enhanced**

For an increasingly broad spectre of economic activities, access to high-quality broadband is essential. Providing such access is challenging for a number of specific types of territories. Low population numbers, large distances and challenges linked to the natural environment (e.g. topography, bodies of water) often implies that it is not profitable for private companies to provide broadband to these territories.

In spite of its importance, broadband access is not defined as a 'Universal Service Obligation' (USO) at the European level. Transfers of experience on how these USO's are implemented could be particularly relevant for specific types of territories.

- **Development strategies and policies should consider specific opportunities and vulnerabilities of the physical environment and environmental protection measures aimed at generating opportunities for development**

More generally, economic development strategies could consider specific vulnerabilities of the physical environment in mountain areas, islands and coastal regions. There is extensive evidence on processes and risks to be taken into account such as the vulnerability of buildings and other types of infrastructure along the coastline. In addition, monitoring would help to identify possible needs for preventive and risk management measures.

At the same time, territories with geographic specificities can effectively build their strategies around the high value of natural capital that creates additional perspectives for development and branding of these places. For example, the natural environments create very good preconditions for the production of renewable energy (hydropower, offshore wind power, wave and tidal energies, biomass and solar energy) both as a way of satisfying local energy demand and of developing a niche export industry. Another example is related to developing public goods and services that do not receive market pricing (air purification, groundwater recharge, recreation, bioremediation of waste and pollutants).

In addition, territorial development strategies should include measures to preserve landscapes and wilderness that constitute assets for tourism development, as well as to preserve fish stocks and plants that can be collected for human consumption and for medical purposes. However, their establishment and operation also in some cases leads to conflicts with the local population, notably when nature protection measures generate limitations in the range of activities that can be developed. Therefore, development assets often have to be balanced with the interests of environmental sustainability in order to avoid overexploitation of resources and damage from mass tourism.

Key territorial observations

- **Socio-economic conditions in specific types of territories in Europe are very diverse and geographic specificity is only one of many factors influencing performance**

Mountainous and coastal regions have diverse GDP per head (figure 1). Values observed in island regions tend to be distinctly lower that the EU average, while the opposite is true for sparsely populated areas. This can however be ascribed to the fact that a majority of island regions are found in Greece, southern Italy, Spain and outermost regions, while sparsely populated areas are mainly found in the Nordic countries and Scotland. Differences between categories are therefore mainly linked to the national economic context of each region.

Employment in relation to working age population is slightly lower for mountain regions than for Europe as a whole, while it is significantly higher for sparsely populated regions and significantly lower for island regions (figure 2).The main explanatory factor for these differences is, as for GDP/ head level, the way in which these categories of territories are distributed across the EU territory. The lowest rate of employment in relation to working age population of Europe is observed in the Western Athens region; the fact that this region is a coastal region can hardly be considered as an explanatory factor.

Population developments have significant territorial consequences and are diverse in European regions. Specific types of territories face diverse demographic challenges. Many specific territories are exposed to depopulation, especially at the sub-regional level. These trends are often associated with lower proportions of women in the population. Island and coastal regions tend to have slightly higher population growth when compared to other regions (figure 3). Some islands, coastal areas and mountain resorts attract large numbers of tourists and generate amenity migration and therefore face challenges, related to additional pressures on the real estate market and the physical environment.

Figure 1: GDP per head (2013), EU28 average: 100%

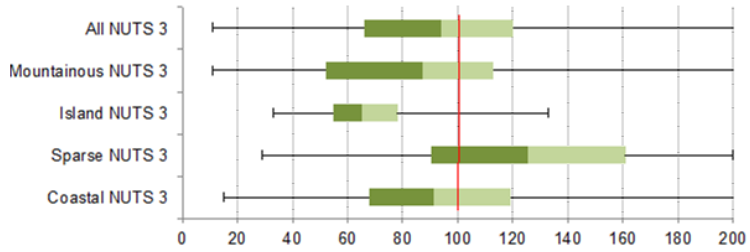
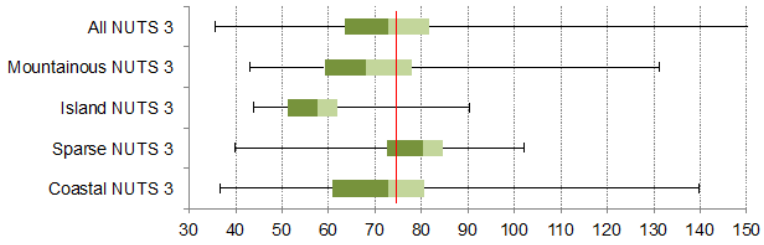
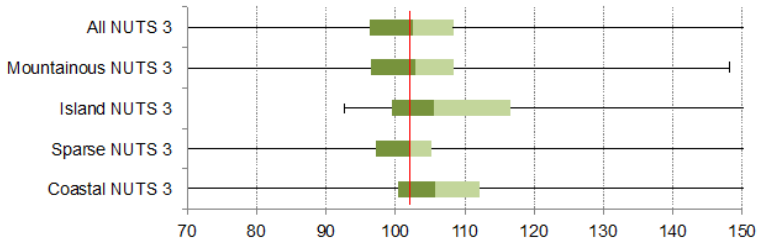


Figure 2: Employed persons in relation to working age population (20 to 64- year olds, 2014), EU28 average: 74.1%*



* Employed persons at place of work divided by working age population at place of residence.

Figure 3: Population change (2001-2015), EU28+4 average: +2.3%



- **Despite the wide diversity of territorial development patterns among and within groups of specific territories, some common trends can be identified:**

Specific types of territories are normally characterised by low levels of economic diversification, limited added value and small scale economic activities. This exposes them to external shocks and limits their resilience. An insufficiently diverse labour market can for example lead to limited employment opportunities for women, triggering a gender imbalance which, on the medium to long term, jeopardizes concerned local communities. A recurring issue in many specific types of territories is that natural resources are exported unprocessed, generating limited added-value. A shared challenge in a number of mountainous, insular or sparsely populated areas is small farm size and lower labour productivity. Island fisheries similarly tend to be primarily artisanal.

Specific types of territories display a rich biodiversity and high vulnerability to climate change. These territories reveal a rich biodiversity, which works as a development factor by offering tourism and recreation activities such as fishing, agro-tourism, hiking, bird or whale watching, and aqua sports. Specific types of territories are also, in different ways, particularly exposed to impacts of climate change (e.g. changes in precipitation regimes in mountainous areas, sea level rise, storms, erosion and flooding in islands and coastal areas) having very direct economic and environmental effects (e.g. low altitude ski resorts are shut down as a result of insufficient snow cover, additional risks to agriculture and forestry that are very climate-dependent, ecosystem disturbances such as new pests in forests etc.).

Limited accessibility is one of the key challenges in specific types of territories. In terms of accessibility, islands, sparsely populated areas and mountains often face more challenges than coastal and cross-border areas. Air transport therefore plays a major role binding together the European continent; it is particularly important for remote regions. Contrast between road/rail and air accessibility values are particularly pronounced for island regions. In some cases lower accessibility and connectivity, as well as a weaker economic base, lead to emigration flows and brain-drain.

A number of island regions depend on imports for essential goods such as foodstuffs and energy, as well as for most other consumer goods. Maritime freight is the central means of transport for these imports. Costs of living tend to be higher in islands compared to corresponding mainland regions due to constraints for the provision of goods. A second major component of sea accessibility is the possibility of exporting locally produced goods, in particular whether available sea transport meets the need of established and foreseen types of production. Transport needs of a fisheries industry, or of agriculture, can be quite different from those of a manufacturing industry in terms of constraints linked to volumes, cost, frequency and reliability.

Maritime passenger traffic in ports comes either from ferry passengers or from tourists doing a cruise. European coastal regions and islands have developed a rather dense ferry network. These ferry lines provide important services for those types of regions. In several areas, ferry lines are important for daily life. However, the handling of touristic traffic, freight traffic and related economic impacts might be more important for the development of these regions.

Figure 4: Accessibility by road (2014), EU28 average: 107.2

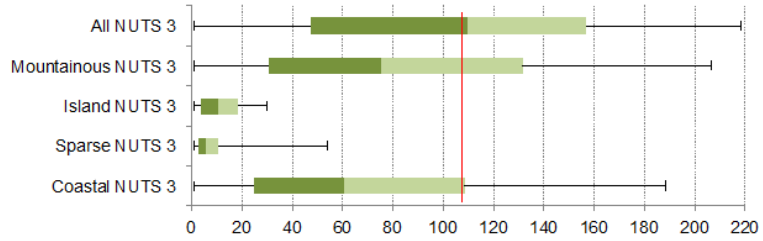


Figure 5: Accessibility by rail (2014), EU28 average: 101.4

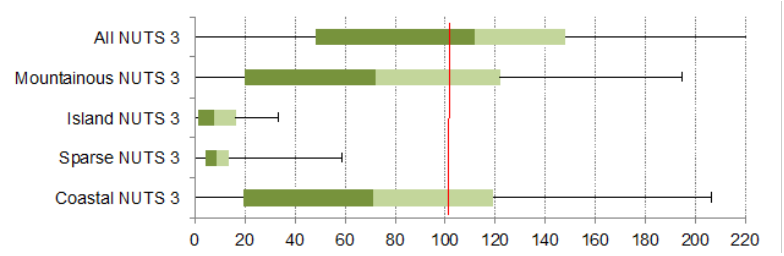
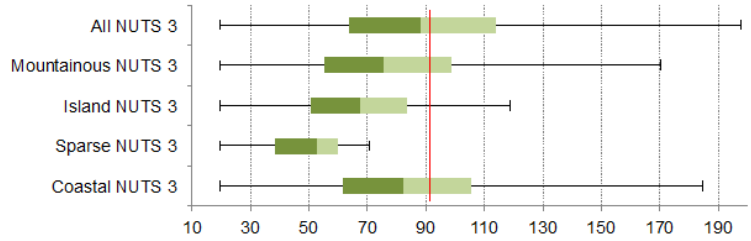
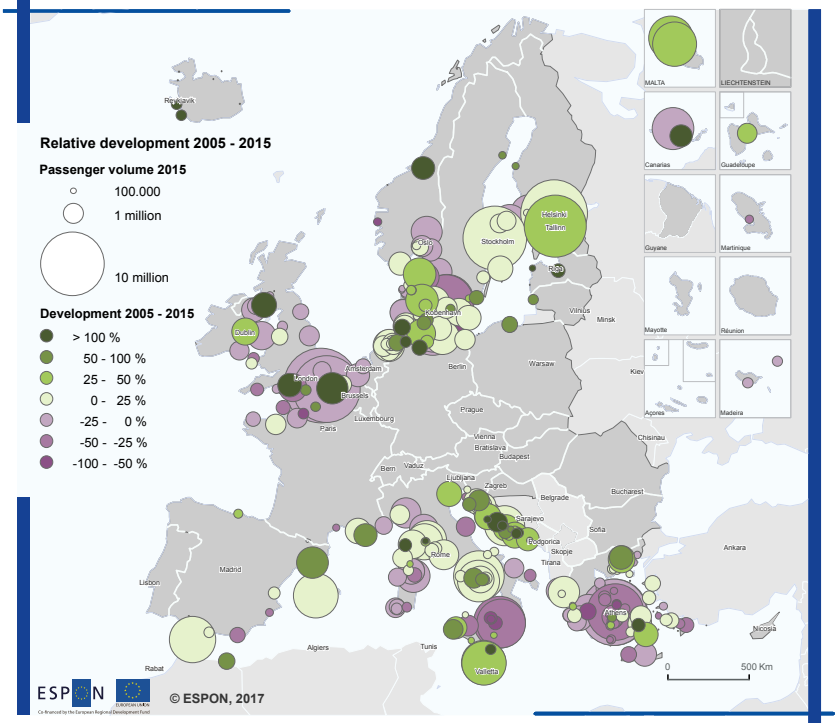


Figure 6: Accessibility by air (2014), EU28 average: 91



Map 1: Development of maritime passenger traffic 2005-2015



Source: Spiekermann and Wegener Urban and Regional Research (S&W), Accessibility by sea, 2017
Origin of data: Eurostat (online data code: mar_pa_aa), 2005 & 2015
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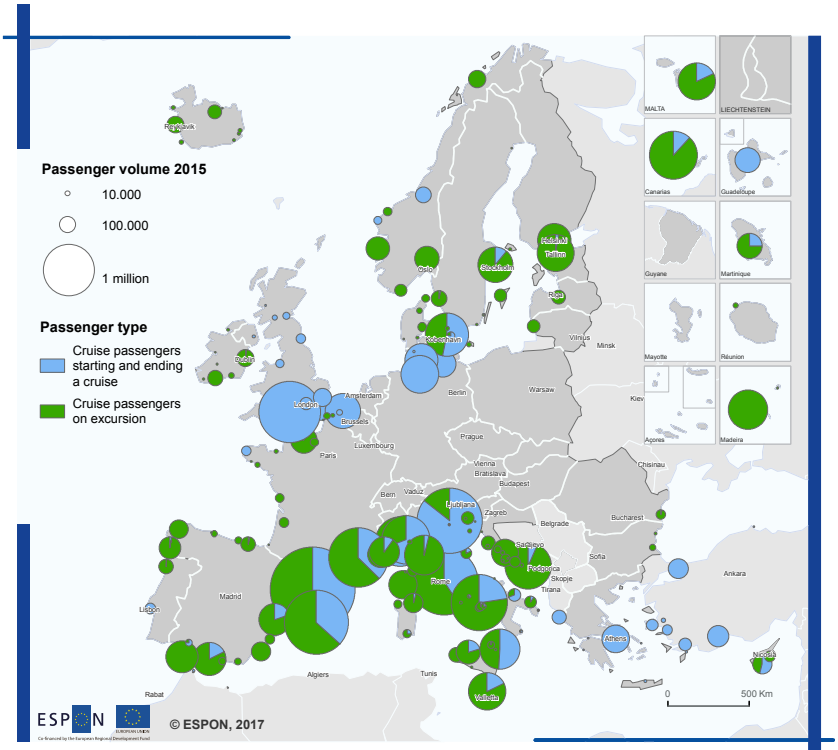
Map 2: Cruise passengers 2015



Source: Spiekermann and Wegener Urban and Regional Research (S&W), Accessibility by sea, 2017
Origin of data: Eurostat (online data code: mar_pa_aa), 2015
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- **Accessibility scenarios: the overall pattern of potential accessibility by road, rail and air will be relatively stable until 2030**

This situation is mainly due to the distribution of population in Europe but beyond this overall pattern, the development of the TEN-T will yield a lot of improvements in the regional, national and international connectivity.

Accessibility potential by road and rail will continue to show the traditional core-periphery pattern in Europe. The clear dominance of urban regions will continue in the future, rural regions will have about 80% of the road accessibility average in ESPON countries. All regional types in the EU15 will perform much better than the same types of regions in the EU13. Mountain regions as well as islands will have an accessibility level lower than the ESPON average (about 70% and 80% of the ESPON average for road and rail, respectively). Islands and in particular sparsely populated regions will register the lowest accessibility by road and rail by 2030.

The relative changes of potential accessibility by road show that the largest relative future increases compared to today will happen in areas with lower accessibility. The relative increases of potential accessibility by rail are much higher than those for road. From the specific regional types, mountain regions and sparsely populated regions are relatively benefitting from TEN-T rail investments, whereas islands and coastal regions are slightly falling behind.

Regarding accessibility by air it is hard to forecast. Besides the issue of appropriate infrastructure in terms of airports, it is a question of the future strategies of the air carrier offering the flight services. However, the overall pattern of regions with higher and lower accessibility will not change dramatically. Of course, individual regions, in particular with regional airports with very few flight services, might be strongly affected. This situation is particularly relevant for low cost airports.

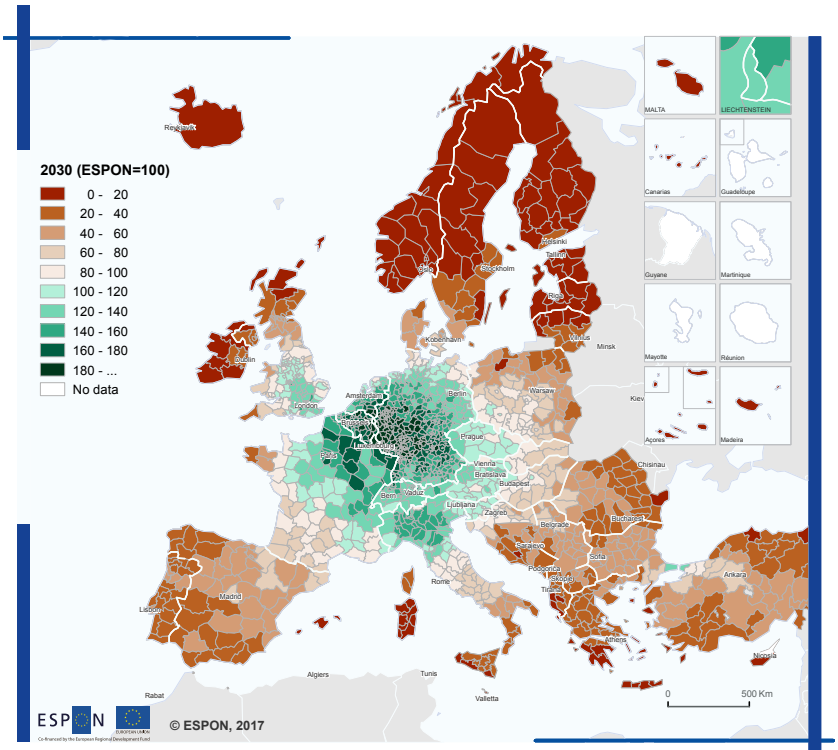
Therefore, three scenarios for the air flight network reflecting three different assumptions on market behaviour but maybe also on political decisions or price changes due to stronger environmental and climate policies have been developed and implemented: Scenario A: Regional airports gaining, Scenario B: Regional airports losing, Scenario C: Air connections reduced. The scenario assumptions are implemented in an increase (scenario A) or decrease (scenarios B and C) of flight services between European airports.

According to scenario A, the specific regional types will have much higher accessibility by air compared to the ESPON average than it will be for road and rail. Coastal regions will have accessibility by air in this scenario which is almost at the average European level, mountain regions will have clearly more than 80 index points. But also islands will be in a comparable good position due to the flight services and will have around 70 index points compared to the ESPON average. Only sparsely populated areas will fall a little bit more behind with around 50 percent of the European average accessibility by air in this scenario by 2030.

For scenario B, the overall pattern of regions with highest and lowest accessibility is rather similar to the one of scenario A. Sparsely populated areas seem to be the regions losing the most in relation to scenario A (7 index points compared to scenario A).

Finally, as the results of scenario C show, islands and sparsely populated areas would even improve their relative position a little if the overall flight services in Europe would be reduced.

Map 3: Accessibility potential by road, 2030



Regional level: NUTS 3 (version 2013)
Source: Spiekermann and Wegener Urban and Regional Research (S&W), ACC SCEN, 2017
Origin of data: S&W Accessibility Model, 2016
RRG GIS Database, 2014
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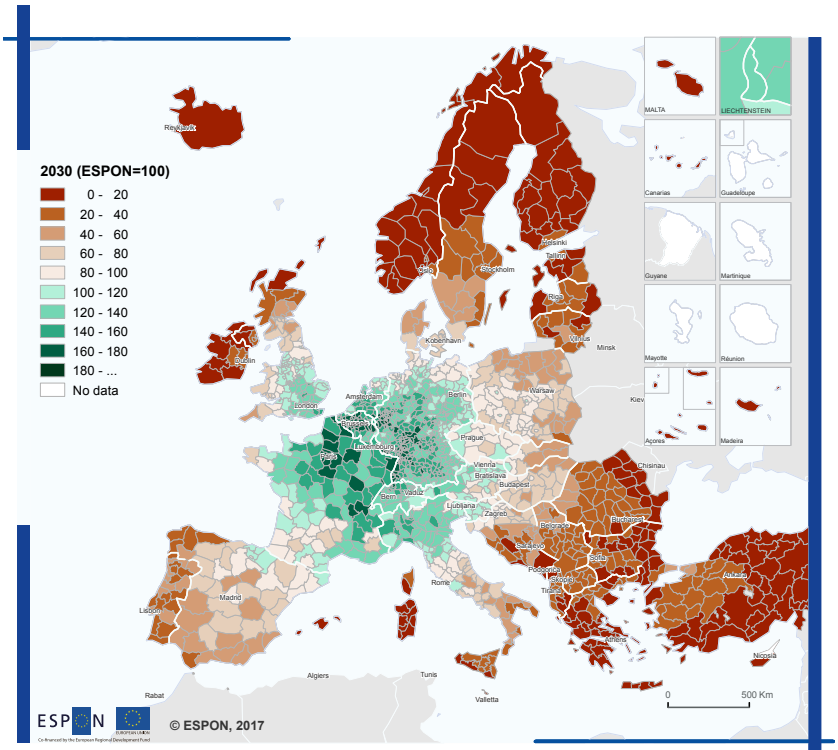
Map 4: Accessibility potential by rail, 2030



Regional level: NUTS 3 (version 2013)
Source: Spiekermann and Wegener Urban and Regional Research (S&W), ACC SCEN, 2017
Origin of data: S&W Accessibility Model, 2016
RRG GIS Database, 2014
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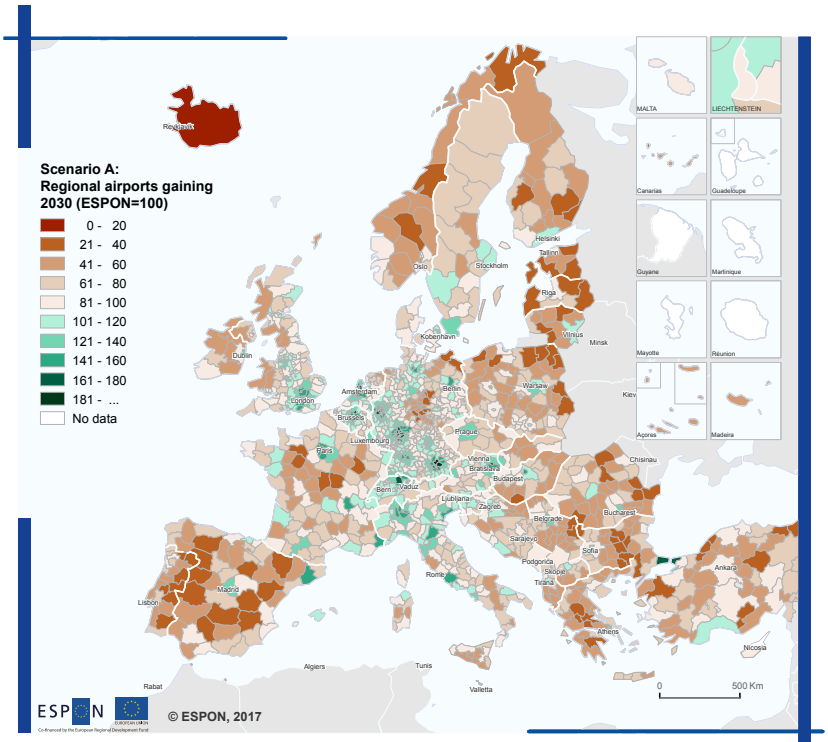
Map 5: Accessibility potential by air, 2030 (Scenario A)



Regional level: NUTS 3 (version 2013)
Source: Spiekermann and Wegener
Urban and Regional Research (S&W),
ACC SCEN, 2017
Origin of data: S&W Accessibility Model, 2016
RRG GIS Database, 2014
S&W Flight Network Database, 2014
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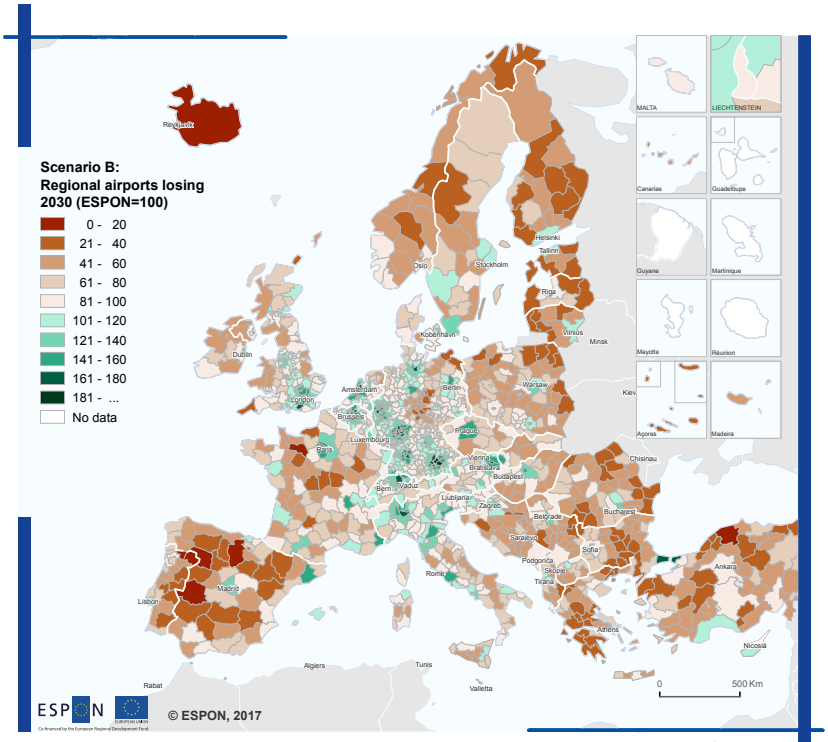
Map 6: Accessibility potential by air, 2030 (Scenario B)



Regional level: NUTS 3 (version 2013)
Source: Spiekermann and Wegener
Urban and Regional Research (S&W),
ACC SCEN, 2017
Origin of data: S&W Accessibility Model, 2016
RRG GIS Database, 2014
S&W Flight Network Database, 2014
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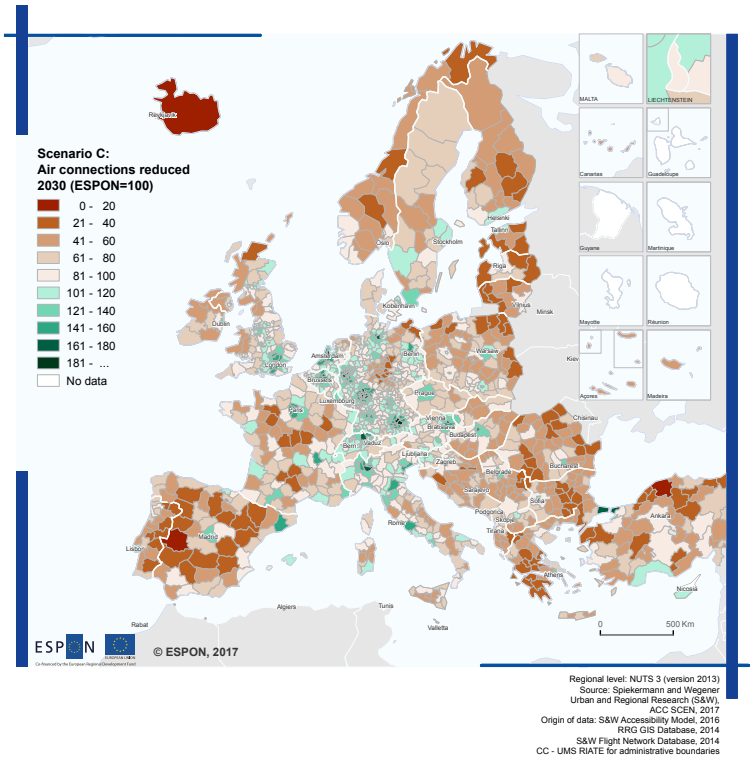
Map 7: Accessibility potential by air, 2030 (Scenario C)



Way forward

Addressing the opportunities and challenges of specific types of territories from an integrated and functional perspective requires information and data that allows revealing specific development patterns of these places and links to other places. This implies that further analysis of development patterns should go beyond NUTS III scale and be based on more qualitative observations.

Opportunities and challenges cannot be fully identified on the basis of general socio-economic indicators at NUTS III level. A comprehensive understanding of development patterns and perspectives of these places that would support a functional and integrated thinking requires data below NUTS III, data at the scale of functional geographies, as well as observations on quality of life applying existing methodologies.

In 2017 and 2018 ESPON will be implementing a new applied research activity to continue the development of evidence-base in support of place-based approaches in territories with geographic specificities. This new activity will be designed in a way that might help addressing the analytical and methodological challenges mentioned above.

Further reading: Working paper "Revealing territorial potentials and shaping new policies in specific types of territories in Europe" available at www.espon.eu.

ESPON 2020 - More information

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