ESPON EUROPEAN UNION
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3 Low potential accessibility in Europe and in national context

Potential accessibility is a measure for the potential for inhabitants and enterprises in a given region or locality to reach markets and activities. It is based on a measure of 'markets and activities' (e.g. total population, total GDP), which is weighed with a negative function of distance (i.e. the closer the market or activity, the more it contributes to potential accessibility). It is typically used to measure 'market potentials' or 'economic potentials'

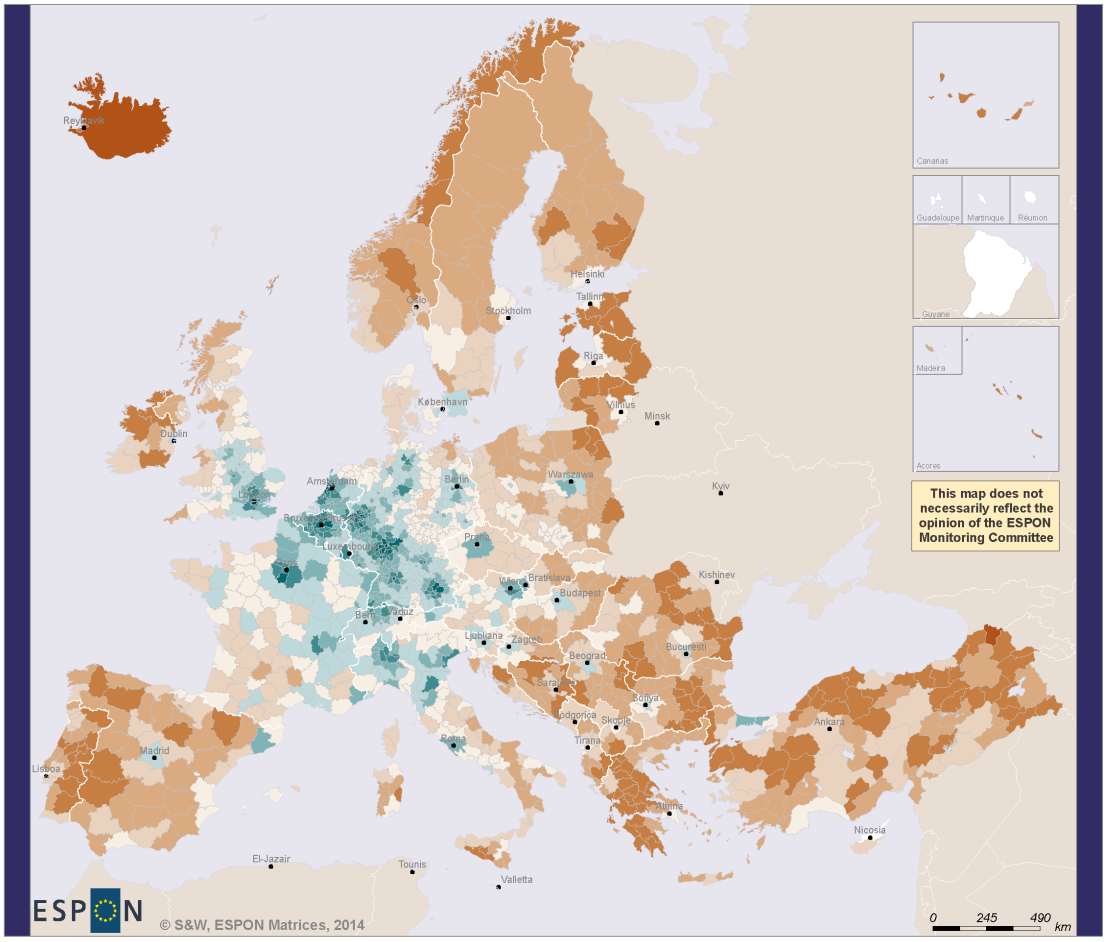
Low potential accessibility is to variable degrees a concern for TGS:

- **Mountains**: A number of mountain areas are located in central parts of Europe, e.g. the Alps or the Ore mountains. European potential accessibility can therefore be good compared to more marginal mountain ranges near the edges of Europe, e.g., in the Nordic countries, Iberian Peninsula, Carpathians and Balkans.
- **Islands**: The insular state of islands affects accessibility to European markets negatively. These connectivity challenges often lead to additional transport costs which act as an impediment to competitiveness issues and deters economic and social development. Some islands such as Malta and Mallorca have sought to address this constraint through the development of reliable transport nodes which in part have been driven by developments in the tourism sector. Accessibility in the national context for islands is considered in relation to the gateway to and from islands. For instance, islands which face double insularity issues such as islands forming part of the Greek and Croatian archipelago, face greater accessibility constraints compared to islands which are well connected by means of maritime and air transport.
- **NSPA**: NSPA are located far from the European economic core ("the 'Pentagon'). This peripheral position has strengthened a 'northern' regional cultural identity. The critical issue for NSPA is to access logistic hubs and world markets, rather than distance to the European core. NSPA have historically constituted 'frontiers' in the construction of Finnish, Norwegian and Swedish nation states. Significant efforts have been made to integrate them in each country's transportation system. NSPA natural resources generate significant incomes. NSPAs are also an important interface to the Arctic region, in economic, political, environmental and cultural terms.
- **Other SPA**: Other SPAs are concentrated in the Iberian peninsula, South-Eastern Europe, the Baltic countries and westernmost Ireland. They are therefore mostly on the outer margins of Europe. These areas are often located at the margins of the administrative boundaries of regional or provincial authorities. This means that territorial development issues for these territories often end up being low prioritized across multiple governance level, increasing their marginalisation on the regional and national policy agendas.

3.1 Representation of accessibility

Potential accessibility maps can be produced considering one transportation mode only, ore the fastest transportation considering multiple modes (e.g. Map 3-1). Geographic patterns are stable: highest values are found in a Europe core area running for south-east England to northern Italy, and in the main national transport hubs, i.e. capital city regions and some other regions hosting some other major metropolises (e.g. Catalonia). When considering air transport only, the high potential accessibility of some insular tourism hotspots such as the Baleares is shown.

Map 3-1: Multimodal potential accessibility



Objective factors of contraints : Low potential accessibility

3.2 Measurement issues

Measures of potential accessibility may intuitively appear easy to understand and interpret. However, their implementation is particularly complex and multifaceted. Issues to be addressed are:

- Are destination outside the ESPON space incorporated? If not, the accessibility of regions on the European margins will be underestimated.
- Which negative function of distance is used? The relative importance of close and distant 'markets and activities' varies depending on the function used.
- Which modes of transportation are considered? Depending on the type of activity, different modes of transportation may be more relevant. They are rarely interchangeable. Costs, frequency and reliability of connections may also be an issue.
- Is accessibility calculated from the main node of each region? This is acceptable proxy in small NUTS regions, e.g. Germany. In northern Finland or Sweden, accessibility differences between core and periphery of each region are significant. Differences of accessibility between island and mainland component of regions may also be important.

In general, and as shown for example in the case of the NSPAs, maps of potential accessibility generally provide limited evidence on the effective accessibility related challenges of regions. The main issue for an Arctic SPA region or for an isolated valley in the southern Carpathians is not distance to main Europe markets. Their concern is to have access to the transport infrastructure needed for their economic development and to satisfy the needs of their inhabitants. Measures and maps of relevance for each region would therefore need to be tailored to fit their specific economic profile and development objectives.

3.3 Political issues

Traditionally, in European policy-making, the issue of connectivity has been addressed through transport infrastructure investments where the paradigm is that creating physical connections between large cities and smaller regions will allow for the diffusion of economic development and reinforce territorial cohesion. Although the attention to reducing pan-European 'core-periphery' disparities is laudable, past studies have shown that such 'hard' investments tend to exacerbate these disparities rather than resorbing them (Spiekermann and Wegener, 1996). What this indicates is that the issue of connectivity should be addressed globally by addressing the physical infrastructure needs and bottlenecks as well as improving the capacity of 'small regions' actors to establish and deepen new forms of relationships with other actors, near or far. In sparsely populate regions, this approach translate by a significant share of the structural funds being invested in the regional transport infrastructure (Giordano and Dubois, 2018).