Analysis of the indicators used in the framework of implementation of the European territorial cohesion policy

Euromontana is the European multisectoral association for co-operation and development of mountain territories. Euromontana brings together organisations of mountain people: development and environmental agencies, agricultural and rural development centres, territorial authorities, research institutes, etc. It includes organisations from Western Europe as well as from Central and Eastern European countries with the aim of developing international co-operation. Currently 72 organisations from 17 wider European countries are members of Euromontana.

Euromontana’s mission is to promote living mountains, integrated and sustainable development and quality of life in mountain areas.

In order to achieve this, Euromontana facilitates the exchange of information and experience among these areas by organizing seminars and major conferences, by conducting and collaborating in studies, by developing, managing and participating in European projects and by working with the European institutions on mountain related affairs.

December 2011
Foreword

Euromontana asserts that availability of territorial evidence at the proper disaggregation level is crucial to characterize development trends, measure territories development potential and constraints, evaluate progress made towards more balanced development and efficiency of territorial development policies.

Throughout the discussion on the cohesion policy 2014-2020 and the inclusion of territorial cohesion as an objective in the Lisbon treaty which entered into force on December 1\textsuperscript{st} 2009, Euromontana has asked for development of a coherent statistical approach and indicators that would inform policy making and monitoring. The V\textsuperscript{th} Cohesion report published at the end of 2010 and the recently published legislative proposals on territorial cohesion include a common strategic approach to all territorial development policies, a partnership contract that should be signed between at least the member states and the European Commission, including indicators and targets, and a performance framework which aims at measuring the performance of each region and member state in the use of EU funding.

The importance of indicators therefore increases. The choice of indicators which will be used, the way they are calculated, what they mean and how they will be interpreted can be very strategic. Some indicators can be very informative when others can communicate completely wrong messages, in particular composite indicators. Also, the limited list of indicators that will be monitored can distort the way we measure performance in a way that is more or less positive for territories as specific as mountains.

In front of these challenges, Euromontana has decided to work on indicators and build-up concrete proposals regarding what indicators should be taken into account to assess the situation of the different territories. We aim to make full use of the work which has been achieved in previous studies such as ESPON Territorial Diversity, the elements provided by the EEA mountain study and the on-going ESPON Geospecs project.

We have identified 3 dimensions on which clarifications are needed:

1. How to characterize mountains for statistical purposes?
2. How to measure territorial development of mountain territories ad how to evaluate their progress towards more territorial cohesion?
3. How to measure performance of regions in the implementation of cohesion policy?
1- Characterizing mountains for statistical purposes

There is no pan-European definition of mountain areas applied transversally to all policies. Euromontana considers that this is not necessarily a problem, as different policy purposes might justify different approaches to delineation of territories which require a common action.

One delineation is implemented in the framework of the rural development policy, where mountains are defined as a sub-category of areas facing natural constraints, which are eligible to specific support. The European regulation provides a framework where characteristics of mountains are described in qualitative terms and where elements which must be taken into account for delineation are specified (slope and altitude impacting length of the growing season). On this basis, Member states which wanted to have mountain dedicated measures have adopted a delineation. The fact that farms are mountainous or not is registered in the Farm Accountancy Data Network. This allows to distinguish between economic data from areas known as mountainous as compared to others.

For policy purposes, when it comes to defining mountains to establish specific support measures, we consider that this approach is right and could be enlarged to other policies. Member States should be encouraged to adopt a delineation of their mountain areas based on guiding principles but integrating their knowledge about local specificities. This delineation should address two levels: the mountain itself, and the mountain “massif” including the piedmont and valley areas which are functionally important.

Until this is implemented, it can be useful, especially for the uses depicted above, to adopt a typology or approach that allows to assemble territorial indicators, data and evidence with a mountain/not-mountain distinction. Such a typology is useful only if it is relevant and not prejudicial or distortive of the real mountain nature of a territory.

A starting point can be to try to define mountains based on topographic criteria applied universally across the European territory. There have been several attempts of this kind each one of them being a refinement of the former:

- NORDREGIO study 2004 “mountain areas in Europe”
- EEA study “Europe’s ecological backbone: recognizing the true value of our mountains”, 2010
- ESPON geographical specificities GEOSPECS, to be finalized in 2012.

These works should not be applied in a systematic and blind way for policy purposes but do provide a vision of where mountains are, topographically on the European territory.

The challenge is to move from these scientific maps to administrative units at which we can obtain relevant statistical data to inform policy making, monitoring and evaluation. Hence, most part of the time, mountains do not coincide with administrative units and statistics are available only at a certain administrative level. For the purpose of data analysis, we can be forced to answer for example the question “what is a mountainous NUTS3 area?”

There again, there have been several attempts at producing such a typology. We can mention lately:

- DG REGIO green paper on territorial cohesion
- DG REGIO working document on territories with geographical specificities
- ESPON final report of the Territorial Diversity (TeDi) programme,
- ESPON regional typologies

- 3 -
Both DG REGIO documents mentioned above adopted a typology based on the proportion of population inhabiting the mountain area. Euromontana together with AEM and other organizations have heavily criticized this approach in a critical note sent to DG REGIO in January 2010.

As regards the regional typologies produced by ESPON, the purpose is a bit more complicated as the typology tries to characterize at the same time different degrees of mountainousness and different degrees of remoteness. The main problem is that once again, the typology is based on percentages of population. Euromontana comments, co-signed by AEM, have been communicated to all mountainous member states within the ESPON monitoring committee on the 17th of June 2011 and sum-up our position on these issues:

“We welcome of course the fact that ESPON carried out work to try to classify mountain areas in different categories as we share the view that these are diverse, even if that diversity does not mean they do not also have common challenges and opportunities. We also all recognize that this is a complex task and that it is difficult to define relevant enough “boxes” to fit territorial reality. However, regarding the typology adopted, and considering the objectives of this typology (differentiating statistics and not making maps), we welcome the idea to characterize i) different degrees of mountainousness, ii) different degrees of remoteness.

Regarding the degree of mountainousness, we are critical about the choices which have been made in ESPON typology and are bound to repeat the arguments sent to DG REGIO in January 2010 and contributed also before to the ESPON Territorial Diversity priority 2 project. Mountainousness is a topographic concept and so to characterize mountain areas it is necessary first to evaluate the characteristics of the area in terms of altitude, slope, relief roughness etc… as is done in some reference studies (NORDREGIO 2004, EEA 2010, on-going ESPON Geospecs). An approach to mountainousness based solely on the percentage of population living in mountain areas is both inaccurate and irrelevant. The presence of a metropolitan centre at the foot of a mountain is sufficient to erase this mountain from the map, together with the settlements and people inhabiting the mountainous part of the area. Furthermore, the most handicapped mountain areas which have suffered the most from depopulation and the population of which has moved to lowlands thus suffer the additional burden of having their mountain reality ignored.”

As representatives of mountainous communities throughout Europe and the ESPON space, we encourage you to revise this typology to adopt an approach to mountainousness which differentiates different proportions of mountainous area. We understand the need, for some policy or statistical purposes, for approaches at NUTS 3 level although we have demonstrated that it is more relevant to address mountain area delineation at LAU2 level. We can also recognise the need to evaluate the proportion of population in the mountain area, for example to approach issues like provision of infrastructures and services of general interest on an equitable basis to all citizens. Population should be evaluated based on figures aggregated from LAU2 level as advised at present in the Geospecs exercise. A population ratio can possibly be “combined” in the mountainous area ratio but only as a second step. We encourage you to read in that respect the critical note sent to DG REGIO in January 2010 reacting to the working paper on territories with geographic specificities published in December 2009. The response sent by Director General Dirk Ahner to AEM in June 2010 officially recognises the relevance of our argument and proposes the adoption of an approach based on a combination of area and population ratios. This recognition from European Commission should

---

be taken into account by the ESPON programme. Contrary to the argument contained in the letter sent by Dirk Ahner we consider that the topographic approach is as relevant to a discussion on socio-economic issues as is a population approach: indeed topography determines the potential and constraints to economic activity that must be overcome by policy.

As regards remoteness, there are many approaches that are possible. The one chosen, i.e. the idea of accessibility to an urban centre of more than 50,000 inhabitants can be considered as reasonable although the indicator does not say if the economy of this urban centre is really impacting on the mountainous part or not and again does not reflect the remoteness of the area as such. For example, if population is already concentrated around its urban centres, the area will appear as being under urban influence even if 60% of its territory is within more than 45-minute drive of such an urban center. Choosing driving time as an indicator is also reasonable as most of mountain people still have unfortunately to travel by car due to lack of efficient public transport. But we need to ensure it is actual driving time considering all seasons and accessibility and practicability of these roads in particular at winter time and that, once again, we characterize the area in that respect and not only in terms of population.”

**In short:**

**We are in favour of an approach allowing to characterise the mountainousness of administrative entities that:**

- includes several degrees of mountainousness (25% and 50% seem like reasonable figures to adopt, an alternative can be to adopt threshold linked to a certain percentage above EU average)
- uses proportion of territory and not of population
- uses figures aggregated from LAU2 levels.

**In a second step, this approach can be completed to take into account the level of population/depopulation of the mountain area.**
2- Measuring territorial development of mountain territories and evaluating progress towards territorial cohesion

The problem we encounter when trying to assess the development challenges or performance of mountain territories is again the absence of data at the sufficient disaggregation level. Depending on the level of mountainousness of a region, and depopulation of the mountainous area as compared to the lowland area within the region, most figures can be distorted to a very wide extent. As mentioned in the last INTERCO meeting, we understand the difficulties related to data unavailability. However, territorial cohesion will not be achieved without proper territorial indicators. Statistics collection must be improved and brought to a more local level if we are to properly evaluate things like accessibility to services and infrastructures... We consider therefore that indicators are useful, for most of them, if produced at LAU2 level or aggregated from that level.

The following comments are based on a synthesis of a note sent by Euromontana to the ESPON INTERCO project managers. It aims at commenting their proposal for indicators (see appendix) to assess territorial cohesion. Comments are about 4 thematic issues:

- conditions for economic development everywhere;
- economic performance and population trends;
- investment and support;
- environment and energy.

Regarding the conditions for economic development everywhere

ICT are considered as a very – if not the most – important tool to overcome accessibility challenges. ICT should be the “death of distance”. In any work that Euromontana has carried out recently, on innovation, education and training (see Interreg IVC PADIMA), improving attractiveness, territorial marketing, economic diversification, development of sustainable tourism, sustainable transport solutions, access to services of general interest... accessibility to high-speed broadband appear as a key component to unleash development potential. There should be some data available at ESPON level as ESPON has produced in April 2011 a report entitled “Territorial dynamics - Trends in internet roll-out” providing indicators with different statistics: internet users, internet backbone capacity, internet infrastructure and usage, households using a high-speed internet connection, and the indicator IP addresses differentiated by different types of territories (see page 18-19). We would even argue that, for territorial cohesion, we should have an idea of the proportion of territory covered by access to broadband and not only the proportion of population. If we were to retain only one indicator for territorial cohesion, it would be the proportion of territory (LAU2) covered by access to high-speed broadband or to the latest level of technology.

As regards physical accessibility, the only indicator proposed was the accessibility to passenger flights. This is not sufficient as people on a daily basis do not travel by plane. Accessibility by road, train and multi-modal transport (length and frequency) should be addressed, reflecting journey time and journey price per km. There again, some indicators have been used in reports like ESPON territorial diversity that we do not find reported here. Territorial cohesion is about knowing how far is the school, the university, the grocery shops, the company with which you want to develop a cluster, your suppliers, and your clients. It is about knowing if it is possible to obtain some goods and

---

2 Territorial Dynamics in Europe - Trends in Internet Roll-out, ESPON, Territorial Observation No. 4, April 2011 – download here
deliver them as well anywhere. This approach of multi-modal accessibility must be strengthened as accessibility varies territorially and very much depends on policies and public investments.

As regards services in general, we argue that population potential in particular is a good proxy of critical mass of clients for services in particular and economic possibilities in general. Our work on services of general interest in mountain areas, in relation with the ACCESS INTERREG IVB Alpine Space project this year, has shown that postal services remain vital to most inhabitants. It is still necessary, for example, if you want to reply to a call for tender in due time. Availability of public transport is also important. The indicators proposed on the emissions of CO₂ per inhabitant have to be complemented to qualify the existence of clean transport alternatives for rural and remote communities. This reflects, in addition to access to a key service for people without cars for example (children, elderly people), the dependency on CO₂ intensive forms of transport and the sensitivity to energy price raise. The price of energy, especially petrol, is likely to raise everywhere, but access to alternatives to fuel has a territorial dimension and policy makers can adopt orientations to counter these effects.

Regarding access to education, indicators need to differentiate access to secondary, upper secondary schools and university. Access to compulsory school is not enough to say if a given territory can offer sufficient education to its population. Access to university is indeed more discriminatory. We have tried to qualify this in our work on education and training in INTERREG IVC PADIMA and found big disparities. It must be said that the presence of a university plays a triple role: easing access to higher-education for local population, among which we might find households with no sufficient means to send students very far away, serving as a catalyst for innovation and research on economic development adapted to the regional context and finally preventing out-migration of young people by offering them the capacity to study inside the region and be aware of professional opportunities locally. It also can help to solve difficulties for employers in finding skills they need locally. It can even attract students from elsewhere. This as well can be fostered by policy actions. INTERREG IVC PADIMA has identified 42 good practices in the field of education and training aiming at countering depopulation in mountain areas.

Health finally is crucial. There, several indicators are proposed in the INTERCO paper, like life expectancy at birth at NUTS2 and self-perceived personal state of health. This does not explain there again how accessible hospitals or even doctors are in the rural or remote parts of a region. Indicators like distance to the nearest hospital with sufficient surgery capacities should be considered instead or some better objective approximation of access to health care.

**Regarding economic performance and population trends**

Indicators on employment and unemployment can be useful if looked at a sufficient level of disaggregation. One key characteristic of specific territories like mountains is also the selective out-migration of young people and women (cf. ESPON TeDi, Interreg IVC PADIMA). Unemployment rates must be interpreted in connection with indicators on population trends. It is likely that youth unemployment and female unemployment are going to be very low in some mountain areas, not because there are plenty of job opportunities but because people in these groups have left. In any case, employment rates would be more interesting if differentiated by age as well as by gender.

We consider that the age structure of the working age population is a more interesting indicator, read in connection with migration trends, also differentiated by gender. Ageing represents a policy
challenge because it puts a burden on health and welfare services of an already fragile infrastructure in mountain regions. Of course this represents an opportunity for employment but funding of this employment depends very much on public funding when people could be occupied in adding value jobs if the age structure was more balanced. Furthermore, ageing trends are likely to be accelerating and policy action needs to be taken quite quickly. These indicators should be provided at a higher disaggregation level, as figures at NUTS2 level do not tell us anything.

Regarding migration trends, there again it is as informative to have figures of out-migration (by age and gender) and in-migration (by age and gender) than to just have the result of the two but we fully agree that net migration trends should be included, differentiated by age and gender and at local level. They must be compared as well to indicators such as excess of births over deaths, which tell about the dynamic of the local population.

Regarding economic performance, indicators that reflect the output without taking into account production costs are easy but not really informative. GDP per capita would be informative if calculated at local purchasing power parity and not at national purchasing power parity. In that respect, an indicator on labour productivity in industry and services is more interesting than GDP indicators as considered now, if only it can be produced at a lower level than NUTS-2 or on a functional area basis. Indicators related to economic density can also provide interesting insights.

**Regarding investment and support**

It is important for territorial cohesion to try to measure the level of public and private investment in economic development in different parts of the territory. Research and development investment is an interesting indicator if looked at a sufficient level of disaggregation. To get a proper picture of the efforts put into economic development, it would be interesting to cover as well other types of investments, support for economic development in general. One interesting element could be the amount of cohesion support granted in different parts of the territories, at local level for example.

**Regarding the environment and energy**

We agree overall with the indicators proposed, but some of them require some further explanation. It is important however to know how they will be read and interpreted and how they will guide political decisions. The indicator on soil sealing per capita/per job for example reflects the important concern to stop urban sprawl and ensure that sufficient land remains available for inter alia food production purposes. The fact that decrease is desired, with no limit indicated, suggests that achieving territorial cohesion would mean concentrating population as much as possible, without any limit. We know that this concentration has also counter-productive effects related to congestion, social problems, pollution and in general decrease of population welfare. Furthermore, this indicator, on a simple per capita basis, can be misleading and, if used, must be adjusted to reflect population density.

Indicators on CO₂ emissions and energy intensity must also be looked at considering the energy mix available to different parts of the territory. Some populations are bound at present to use more energy or less clean energies because no alternative is provided to them. Provision of these alternatives must be as high on the agenda as concentrating these populations further in places where for example public transport is provided.
Using these indicators to assess progress of territorial cohesion

Evaluating progress towards better territorial cohesion requires establishing medium and long term trends based on these indicators, and comparing them with:

- **Equivalent territories**, in terms of geographic specificities, in close proximity or among Europe to be able to analyse the effect of different policy options for territorial development from a wide point of view,

- **Higher aggregation level of territorial units** (for example NUTS3 or NUTS2), to analyse the evolution of territorial cohesion within the territory
3- Measuring performance of regions as regards implementation of EU territorial development policy, especially cohesion policy

The legislative proposals for Cohesion policy are presented as more result-oriented than the current texts. In this objective, the European Commission proposes a common framework to assess the implementation of Cohesion policy, with prior conditionalities, performance reserve and ex-post evaluation.

However, the European Commission does not provide with a common list of indicators in the general regulation. It rather refers to each fund-specific regulation, and so to each Operational programme, which should develop a common set of indicators to evaluate performance of the policy, based on a common list.

This part aims to present a rapid overview and some first comments on the indicators proposed for ERDF, ESF and Cohesion Fund.

**Legislative proposal for the ERDF and the Investment for growth and jobs goal**

The indicators are gathered under 8 classes, for which several indicators are displayed:
- Productive investments,
- ICT infrastructure,
- Transport,
- Environment,
- Research and innovation,
- Energy and climate change,
- Social infrastructures,
- Urban development

Regarding the analysis detailed above, we must firstly regret the lack of indicators dedicated to areas with geographic specificities, and in particular to mountain areas, although the legislative basis provided by article 174 could (and should) have make that possible. The only “territorial” approach is dedicated to urban areas.

When it comes to the indicators themselves, they don’t seem to be efficient enough to analyse the effect of ERDF as regards territorial cohesion.

For example:
- transport indicators mostly deal with length of the networks (road, railway) and do not address the issue of accessibility (i.e. evolution of journey time and journey prices); in addition accessibility to public transport is only addressed regarding with urban development;
- ICT infrastructure is only seen through the percentage of population covered by high-speed broadband and do not take account of territorial coverage;
- Health and education services are only addressed through service capacity; the accessibility is not taken into account.
**Legislative proposal for the ERDF to the European territorial cooperation goal**

As regards this regulation, the list of indicators is based on the one developed for the Investment for growth and jobs goal, and is complemented with 2 classes:
- Labour market and training,
- Institutional and administrative capacity.

The same comments can be made on that list, both for common part with the Investment for growth and jobs goal and for the two added classes.

**Legislative proposal for the ESF**

The common list of indicators proposed by this regulation is organised under 4 approaches:
- output indicators on participants
- output indicators for entities
- immediate result indicators on participants
- longer-term result indicators on participants

All of them are purely quantitative data and do not cover territorial challenges. The issue of gender is not addressed, nor the matter of in- and out-migration.

**Legislative proposal for the Cohesion Fund**

The list of indicator proposed in this regulation is quite similar to the one for ERDF, although reduced to 3 classes:
- Environment,
- Energy and climate change,
- Transport;

The same comments can also be done on that list.

**Further work**

The Operational programmes for each fund will have the opportunity to implement these indicators and to adapt them to their specific situation. Thus, further work should be carried out to analyse:
- whether guidelines are provided through CSF and Partnership contracts to develop a territorialisied view of the implementation of the ERDF, the ESF and the Cohesion Fund;
- the way these indicators are integrated in the Operational programmes, and in particular whether these indicators can highlight territorial evidences.
< Insert the background document for the INTERCO meeting on 20.10.2011 >