TERMS OF REFERENCE

ESPON project 1.1.4: THE SPATIAL EFFECTS OF DEMOGRAPHIC TRENDS AND MIGRATION

(2003-2006)

(o) Political challenges for the ESPON projects

The Second Report on Economic and Social Cohesion, published in January 2001, presented for the first time a third territorial dimension of the cohesion (beside the economic and social cohesion), which calls for a better co-ordination of territorially relevant decisions. Stressing the persistence of territorial disparities within the Union, the report stated the need for a cohesion policy not limited to the less developed areas as well as the need to promote a more balanced and more sustainable development of the European territory.

The Second Cohesion Report represents in that respect a follow up of the European Spatial Development Perspective (ESDP), adopted at ministerial level in May 1999, calling for a better balance and polycentric development of the European territory.

The projects launched under the ESPON programme shall follow an integrated approach and, seen together, cover a wide range of issues, such as:

- Identifying the **decisive factors relevant for a more polycentric European territory**; accessibility of a wide range of services in the context of enlargement; integration of wider transnational spaces; promotion of dynamic urban growth centres; linking peripheral and disadvantaged areas with those centres; etc.
- Developing **territorial indicators and typologies** capable of identifying and measuring development trends as well as monitoring the political aim of a better balanced and polycentric EU territory
- Developing tools supporting diagnoses of principal structural difficulties as well as potentialities, such as disparities within cities and regenerating deprived urban areas; structural adjustment and diversification of rural areas; strategic alliances between neighbouring cities at transnational, national and regional scale; new partnerships between rural and urban areas; potential support from infrastructure networks in the field of transport, telecommunication, energy; etc.
- Investigating **territorial impacts of sectoral and structural policies** in order to enhance synergy and well-co-ordinated decisions relevant for territorial development within policy fields such as Structural Funds, agriculture, transport, environment, research and development; developing methods for measuring the territorial impact of sectoral and structural policies; etc.

- Developing integrated tools in support of a balanced and polycentric territorial development; approaches to enhance the potential of cities as drivers of regional development, new tools for integrated urban-rural development and planning, etc.

With the results of all the ESPON projects, the Commission and the Member States expect in particular to have at their disposal: a diagnosis of the principal territorial trends at EU scale as well as the difficulties and potentialities within the European territory as a whole; a cartographic picture of the major territorial disparities and of their respective intensity; a number of territorial indicators and typologies assisting a setting of European priorities for a balanced and polycentric enlarged European territory; some integrated tools and appropriate instruments (databases, indicators, methodologies for territorial impact analysis and systematic spatial analyses) to improve the spatial co-ordination of sector policies.

In this respect, the ESPON projects will serve as a strong scientific basis for the propositions of the Commission in the Third Report on Cohesion, at the end of 2003, in view of the reform of post-2007 Structural Funds.

(i) Relation to the ESPON 2006 Programme

The priorities describing the work-programme of the ESPON 2006 Programme are structured in four strands:

- 1. **Thematic projects** on the major spatial developments on the background of typologies of regions, and the situation of cities.
- 2. **Policy impact projects** on the spatial impact of Community sector policies and Member States' spatial development policy on types of regions with a focus on the institutional inter-linkages between the governmental levels and instrumental dimension of policies
- 3. **Co-ordinating and territorial cross-thematic projects** represent a key component of the programme. These projects evaluate the results of the other projects towards integrated results such as indicator systems and data, typologies of territories, spatial development scenarios. The cross section projects help to thematically co-ordinate the whole programme and add value to the results and to fill gaps, which are unavoidable when different themes are dealt with in different projects.
- 4. **Scientific briefing and networking** in order to explore the synergies between the national and EU source for research and research capacities.

This project belongs to the first strand and therefore holds a key position for the elaboration of the whole programme by the preparation of the common ground for the investigation of the basic spatial structure in Europe. Therefore a strong co-ordination with all other ongoing projects is needed, in particular with other projects within the same strand and with the coordinating and cross-thematic projects under priority three and the Co-ordination Unit.

ii) Thematic scope and context

The Cohesion Report stresses the effects of the demographic changes expected in many spheres of the society. Demographic trends include natural population trends (births, death, age structure), migration on large scale and regional/local migration. Another observation is that the attitude and migration of cohorts is changing over time. That relates, in particular, to the third age (ageing population). Those demographic trends together with migration and increasing mobility cause severe effects on the territorial development, welfare system, and the division of labour between regions. Trends could be distorted by the enlargement of the EU where additional movements are expected.

iii) General objectives:

The general objectives are the following:

- to **identify** the demographic, social and economic **characteristics of** the natural population development and the international (particularly candidate countries, South-Mediterranean countries and Balkan countries) , **interregional and intraregional migration trends** affecting the EU territory; to investigate the **determinant causes of** migration cohorts;

This should be undertaken in collaboration with both, neighbouring countries of the EU and, particularly, enlargement countries;

- to **assess** the positive and negative short and long-terms **effects of migration and natural population development** for different regions and for countries in the EU (i.e. changes on the labour market structure, pressure on provision of housing, health and other public services, etc) investigate their responses towards achieving social and spatial integration
- to anticipate the effects that enlargement will have on existing migration trends (if increases on population movements do happen as result of completion of enlargement process);
- to **identify different types of processes that lead to depopulation** in peripheral areas but also in the central part of Europe;
- to provide conclusions in terms of **policy recommendations** (ex: strategies of migration regulation).

iv) Primary research issues envisaged

The concepts, indicators and data should be addressed in close collaboration with ESPON projects 1.1.1 and 1.1.2.

• Identification, gathering of existing and proposition of **new indicators and data and map-making methods** to measure and to display the state, trends and impacts of the

developments referred to above; Compilation of national and community studies on demographic trends with European focus.

- Definition and measurement of EU wide determinants of demographic and migration trends with a particular focus on the role of enlargement;
- Identification of **spatial patterns** with reference to the typologies of cities and regions. Investigation of the characteristics of regions which attract certain migrating groups. Analysis of spatial effects in certain types of regions (ex: rural regions) which take advantage but are also at risk towards those trends. Trends at the enlarged EU scale and possible policy responses need to be investigated.
- Investigation and anticipation of the **consequences of demographic trends** related to long term spatial scenarios; analysis of specific cases;
- Analysis and **typology of the depopulation process**.

v) Expected results and timetable

One of the main objectives of the ESPON 2006 Programme is to focus on research with policy relevance and to contribute to the development of relevant policies. Therefore, the deliverables of the research project should be highly operational and coordinated in time, as far as possible, to fit into the relevant political agenda. The following timetable and specification of output is reflecting this objective:

March 2003 (first interim report):

- a) Consensus on indicators and data needed, after a precise analysis of the availability and comparability of data at Community and European level, to develop new database, including territorial indicators and the facilities needed for map-making. For the analysis, the results of the study programme and the results of other ESPON projects in course, in particular under priority 3.1, should be taken into account. This task should also define the appropriate geographical level and technology required for data collection, taking into account the availability of relevant data.
- (b) A first detailed and comprehensive list of main requests for statistical and geographical data to be collected from Eurostat, the EEA and National Statistical Institutes and National Mapping Agencies?.
- (c) A review and assessment of recent theories and models explaining and projecting interregional migration trends and patterns;

August 2003 (second interim report):

(d)) Preliminary results on the basis of available territorial indicators, including European maps showing, as far as possible, the existing spatial structure of population in relation to types of regions (prepared by the other ESPON projects in particular 1.1.1.) as well as problems and dynamics in different parts of the European territory.

- (e) A first overview on concepts and methodology and possible final results.
- (f) Establishment of a new database, so far based on indicators available and with the ability to produce European maps related to polycentrism.
- (g) A second revised and extended request for further indicators to be collected (mainly) at Eurostat, the EEA, National Statistical Institutes and National Mapping Agencies.

February 2004 (third interim report):

- (h) Interim results on the basis of the extended number of available territorial indicators, including European maps showing, as far as possible, the existing spatial demographic developments in and between urban nodes, in relation to polycentrism as well as problems and dynamics in different parts of the European territory, including a profile on the expected effects on the economic base, knowledge, potential complementarities with other regions, capitals and regional cities, potential increase of attractiveness through urban and rural qualities, natural and cultural assets.
- (i) Detection of territorial typologies combining regions into revealing risks and potentials for the identified types, such as a typology of the depopulating process.
- (j) Development of appropriate tools for the processing of the new data base, indicators and map-making
- (k) Applicable systems for the monitoring of new trends of territorial developments in the context of the European territory, including candidate countries and neighbouring countries;
- (l) Provisional policy conclusions and results.

November 2004 (final report):

- (m) An executive summary of the main results of the research undertaken and recommendations for policy development.
- (n) Comprehensive presentation of territorial development trends within demography and migration facing a polycentric and balanced development of the enlarged European Union;
- (o) Presentation of access points and concrete ideas for policy responses to the territorial trends with regard to demography and migration at different scale and in different parts of the Union that could improve territorial cohesion;
- (p) Presentation of the developed territorial indicators, concepts and typologies linked to polycentrism, including maps;
- (q) Presentation of the database and the mapping facilities developed, covering as far as possible an enlarged EU and neighbouring countries
- (r) Listing of further data requirements and ideas of territorial indicators, concept and typologies as well as on further developments linked to the database and mapping facilities.

vi) Rational and structure

1. Approaches to the definition and methodology

The following text has the role of shaping the mind on thinking of developing a proposal for undertaking the ESPON action 1.1.4. The text is not meant to be exhaustive, but should provide guidance for the contractor.

1.1. Description and explanation of the general demographic trends

Europe is characterized by several well-known demographic trends: decline of fertility rates, ageing population, growing demand for new labour force, migration at intraregional and large scale.

Low birth rates, ageing and migration – both internal and cross-border – are of great importance for the future development in all parts of Europe. Today, the birth rates are at a very low level – so low that a population decrease should be the result without immigration. In 2001 around 75 % of the European population growth was due to migration and only 25 % to natural population increase. In such a context, international and interregional migration gains in importance. All dimensions, fertility, mortality, migration (inside the EU and from outside the EU) should be taken into account.

In particular at state level the migration balances are well known. The UNDP (United Nation Population Division) calculated migration under different scenarios. Also many studies have been conducted on international migration and anticipation of demographic trends (see access points). What is missing is the analysis of migration at regional and infraregional level, which is necessary because the demographic disparities within the European countries are important. Regions with a growing population are adjacent to peripheries with a declining and ageing population and territorial fractures between ageing areas deprived of innovation capacities and dynamic areas are increasing. What is also missing is an in-depth analysis of the territorial effects of the demographic trends.

1.2. Special focus on depopulating areas and areas with a particular high growth rate

A specific task will be to focus on the analysis of the process of depopulation going in specific areas and to construct a typology of this process. The same applies for areas, which face a tremendous growth rate. (see below under point 3).

2. Indicators and data

The study should concentrate on:

• To understand and to **describe the demographic trends** gathering and analysing existing demographic indicators would be the first step including a discussion of the indicators their comparability, definition and data sources; data gathering should

occur at the lowest territorial level possible (NUTS 3 level but also functional areas like "Labour market areas", travel to work areas (TTWAs), SSL and potentially LAU-2 level data (i.e local administrative units = NUTS 5).

- The project should focus on **establishing a multiregional data set (typically at NUTS 2 level or NUTS 3)** which is necessary for further calculation. This data set has to include at least the following **types of indicators**:
 - fertility patterns,
 - mortality and the spatially differentiated life expectancy at birth,
 - age structure (share of population younger than 20 years, share of population older than 60 years),
 - migration flows and net migration (balance);
 - evolution of the population (average change over previous years)

The age structure of the migrant populations from the candidate countries is of particular interest.

3. Quantitative and qualitative analysis

3.1. The general demographic trends on a regional level

The **diagnosis** of the population development should result in a integrated picture of the different components of the demographic development on a regional level preferably NUTS 3 or below.

3.2. Driving forces for the demographic development

The principal **factors driving and explaining migration** should be investigated: attraction of regions with strong economic growth, availability of jobs, more skilled labours (relative expected income discrepancies); attraction of regions providing infrastructures, networks, basic services; attraction of regions providing high quality environments (sun-belt); migrations for reasons of family reunification, etc..

3.3. Demographic development in relation to general spatial development

The study should always take into account both the natural population development and migration.

A typology of regions should be developed which then can be compared with other spatial typologies set up in the other ESPON projects such on the urban rural structure or other interesting sectoral aspects in order to better understand the spatial element in the demographic development. ESPON project 1.1.1 pays attention to out-migration questions and to the imbalance between depopulating areas and polarisation process in other areas. ESPON project 1.1.2 investigates the phenomena of metropolisation and urban sprawl, quantifies population flows between rural and urban areas and examines

the impact of those flows on the evolution of areas. An approach of close co-ordination with these two projects is requested in order to facilitate cross-coordination.

Based on the factors driving migration, different types of migration should be analysed: migrations from lagging behind regions towards richer regions; migrations from rural areas towards urban areas; counter-urbanisation (sprawling out from most densely populated cities into their surroundings; etc..

Also the driving factors for natural population trends need to be investigated and analysed. Special attention should be paid to depopulating areas such as rural areas and city centres.

3.4. Social and economic effects

The social and economic effects of the demographic trends on the territories on gaining and losing regions as well as regions with a restructured should be envisaged.

Tentative results on the future effects in regions on:

- production, productivity, revenue, wealth in terms of GDP/capita
- size and capacity of the labour force and employment
- capacity to provide services in depopulating areas.
- congestion and inadequacy problems of social services and housing in recipient regions.

The above mentioned effects should as well be analysed for some specific areas like in particular urban areas: possible reinforced polarisation/concentration/segregation.

3.5. Forecast of demographic trends and their territorial effects

The study would have both historical and future perspective, trying to point out both long-term demographic trends and present challenges of policy-making. This task has clearly a forwarding perspective but it must be directly related to the first one where the current situation is analysed.

A forecast of **future demographic trends and migrations** in member states and candidate countries will be made.

Particular attention should be paid to regions being subject to higher than average immigration for both cases: into the existing and into the future enlarged EU.

Regional migration trends will be related to the foreseen differences in labour market conditions between regions. In this analysis, the evolution of national and regional proportion of ageing population is of importance.

3.6. Analysis and typology of processes of depopulation

Taking data on natural population growth and gross migration as a starting point, the study will seek to identify different types of processes that lead to depopulation (typology). This will be done by looking at administrative entities, their net migration

level and possible push and pull factors. This would lead to identify different scales in population movements, from rural areas to local centres, and from less favoured regions to national or continental core areas. But it would also be interesting to look at the issue from a life cycle perspective; one would seek to identify which are the critical stages in a life cycle, when opportunities offered in a peripheral or less-favoured area appear insufficient so as to produce migratory movements. In Northern peripheries, one might find that educationally or culturally induced population movements will have replaced previous migration triggered by search for employment. In other cases, industrial restructuring will still be important.

The ageing population of Europe, with "grey spending power", will probably have an increasing impact on demographic patterns. This would elucidate possible links between economic prosperity, life cycles and migration, and could thus form a basis for policies seeking to resist depopulating trend in European peripheries: increased immigration as a solution to insufficient labour force, to ageing populations, etc..

In depopulated areas, the analysis of the correlation between the **net migration level and the indicators of accessibility/peripherality** should be explored.

Also an analysis of the link between the degree of depopulation and the increase of the cost of basic services to populations should be approached the capacity to still offer a balanced work force (brain drain)

3.7. Areas with demographic pressure

Some areas in particular some metropolitan areas suffer from massive immigration nationally, European and world wide which puts pressure on the social (housing etc.) and environmental (land use etc.) capacities. A risk assessment in this respect represents a further interesting aspect of the study.

4. Orientations for policy recommendations

In contributing to the development of policy strategies reference should be made to all policy options in the ESDP dealing with demography. Recommendations have to address all relevant Community and national policies in order to promote the potentials of the regions, especially in peripheral and low-density areas, and to tackle the problem of concentration in the some urban areas. The role of territorial governance as well as the European Strategy for Sustainable Development has to be integrated into propositions.

Contributions on how the recommendations on demography are to be applied to Structural Funds policy and other Community and national policies with territorial impact should also be made, bearing in mind co-ordination and coherence among them.

Demography refers to differentiated mechanisms and specific intervention strategies according to the territorial scale taken into account. A multi-dimensional approach provides a more comprehensive view of the nature of such a functioning.

In view of deriving policy recommendations the study should focus not only on policies with impacts on demography, but also on the influence of territorial governance and institutional aspects. In this context, networking seems to be of great importance, in particular between "neighbours" across borders.

vii) Existing access points:

The access points listed below are by no mean exhaustive, but should serve the purpose of providing the tenderer useful information for preparing his proposal

- The reports on spatial integration¹ and social integration² of the SPESP programme already listed indicators in relation to migration and determinants of migration. If economic strength represents a pull factor for migration various indicators are listed in the report of the working group on that issue which are already available.³
- Study "Demographic consequences of enlargement of the European Union with the 12 Candidate countries" (study done for preparing the second report on economic and social cohesion): H. Cruijsen, H. Eding, T. Gjaltema, Statistics Netherlands;
- Study "demographic change in EU-Pre-accession countries: the challenges of an enlarged EU", G. Coomans, ISMEA Paris, oct.2001;
- Study "Regional international migration and foreign population within European Union", Netherlands Interdisciplinary Demographic Institute (NIDI), funded by FEDER, 2001;
- Eurostat studies and working papers in the area of "population and social conditions"; for example, Eurostat has launched recently the following studies (NUTS 2 level): a) completion of national and regional demographic data series concerning the 1990s for the EU, the 12 EU candidate countries and the 4 EFTA countries; b) compilation of long-term national and regional population scenarios for the EU candidate countries; c) low-fertility regions within the EU: where, how long and why; d) high life expectancy regions within the EU: where, how long and why?; e) past and future interregional migration trends and patterns within EU countries-in search for a generally applicable explanatory model.
- OECD work on international migration (e.g. Working papers "Trends in International Migration 2001 Edition), Trends in immigration and economic consequences");

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¹ SPESP 2000 CD report of working group on spatial integration, p. 51ff

² SPESP 2000 CD report of the working group on social integration p. 57ff.

³ SPESP 2000 CD report of working group on economic strength.

• Council of Europe work: Population studies.

In addition, an ESPON Data Navigator creating an overview, a handbook, giving information on principal data sources, contact points, etc is under elaboration. The Data Navigator is expected to cover all countries in an enlarged European Union as well as neighbouring countries. The Data Navigator is (as a preliminary version) online at the official ESPON Web site (www.espon.lu).