ESPON 2006 Programme
ESPON 1.4.1

„Small and Medium-sized Towns (SMESTO)“

Interim Report

Commissioned by:
Ministry of the Interior and Spatial Planning of the Grand Duchy of Luxembourg,
Directorate for Spatial Planning DATer
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1. OBJECTIVES AND SCOPE OF THE STUDY

1.1 Terms of Reference

The ESPON 1.4.1. project aims at an improvement of the knowledge about the role of small and medium sized towns (SMESTOs) in spatial development. This comprises in our understanding of the Terms of Reference:

- the definition of small and medium sized towns (on a European level)
- analysing their role in spatial development differentiated according to their geographical context, their economic performance, their function and size or accessibility or specialisation in a certain sector
- finding typologies of the regions regarding small and medium sized towns on the NUTS 3 or 2 level
- analysing the specific potentials and challenges of small and medium sized towns.

With this scope of tasks the study shows strong conformity with the “future guidelines” for European cities mentioned already in the “Pathways of urban development in the European Union” published in 1997 (EU – Commission COMM(97)197final). This communication paper mentioned the requirement for the Commission to play a role in providing support for urban development as EU policies show direct effects on the quality of living and development in cities and towns. This support lies amongst other in the procurement of information about the role and functions of cities as asked for within this project.

It is clear from the description in the ToR, that although there is a rich base of information already compiled in the ESPON projects, this project will have an introductory character in many respects. Particularly the statistical and other empirical evidence about SMESTOs and their regions is yet little investigated and mainly restricted to regional and national level. A study on European SMESTOs has not been attempted so far.
1.2 Workplan and Methodology

The Work on this study has been organised within five work packages, each being led by one of the core team’s partner:

**Work Package 1: Identifying European Small- and Medium-sized Towns (SMESTOs)**

**Review of Small and medium Sized Town definition across ESPON space (task 1.1)**

Recent analyses of European cities illustrate two dominant comparative approaches of cities in Europe:

- Rozenblat and Cicille’s study entitled *European cities – a comparative analysis* \(^1\) published by DATAR in 2003, favours an approach based on urban agglomerations. In this perspective, cities are delimited as continuous settlement areas reaching a certain demographic mass.

- ESPON study 1.1.1., entitled *Potentials for polycentric development in Europe*, and published by a research consortium lead by Nordregio, illustrates an approach based on urban regions, also referred to as “functional urban areas” (FUAs). In this perspective, functional criteria, (e.g. travel to work areas), are used to delimit each city.

Rozenblat and Cicille quite rightly point to the difficulty of delimiting these functional areas. ESPON 1.1.1. has to some extent shown that these problems can be overcome, by using the concept of “Potential Strategic Urban Horizons” (PUSH). These PUSH correspond to overlapping areas where neighbouring cities could potentially develop their functional area, based on time-distances covered by most inhabitants in their daily life. Considering these overlapping areas, rather than traditional mutually exclusive labour market areas, one avoids many of the delimitation problems, and creates a more realistic picture of how urban nodes relate to each other in terms of territorial governance.

Whether one considers functional areas or agglomerations, one however always first needs to identify which central nodes one should depart from. When looking at large European cities, the identification of these nodes is relatively unproblematic. Indeed, both the agglomeration and the functional area will meet the selection criteria (e.g. demographic mass), except for a few intermediary nodes. Determining whether a city should or should not be taken into account is therefore a marginal issue, compared to the delimitation of its area.

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The situation is quite different with regards to Small and Medium Sized Towns (SMESTOs). Indeed, identifying which nodes should be considered is in this case the core issue; the approach taken in terms of delimitation will determine which nodes are taken into account to a much greater degree than in the case of larger cities, as one is dealing with much larger numbers of nodes, with relatively closer population figures. The review of definitions used across ESPON Space is consequently of considerable importance for any further analysis.

A priori, we may consider that three statistical approaches prevail in Europe:

- A morphological approach, each SMESTO corresponding to a settlement area,
- A functional approach, each SMESTO corresponding to an integrated zone in terms of social and/or economic activity,
- An administrative approach, each SEMSTO corresponding to an area defined as urban, as a result of predetermined quantitative criteria (e.g. a population threshold, a prevailing type of economic activity) or of a political process (statutory rights of the commune).

These three approaches may co-exist in each country. The first task of WP1 is to review the prevailing approaches, and to describe how and to what end they are being applied.

**Data availability at the scale of SMESTOs (task 1.2)**

For a future quantitative study to be possible, these general recommendations outlining the ideal approach of defining SMESTOs will be developed (see task 5.2). In order to assess the viability of such an approach we will inquire the situation in terms of data in terms of territorial governance and policy relevance, may need to be adapted to the situation in terms of data availability.

The second part of WP1 will therefore focus on data availability, listing basic indicators which can be obtained at the level of SMESTOs in each country. These indicators would include among others:

- Administrative status,
- SMESTO population (most recent available),
- SMESTO population (10 years before most recent available),
- Total employment,
- Employment in Services, Manufacturing and Primary activities,
- Unemployment,
- Endowment with public amenities.
**Workpackage 2: Analyses of the Roles and Functions of SMESTOs**

**Scope of functions of SMESTOs (task 2.1)**

It will be one of the most striking results of WP 1 to see how widespread the notion of SMESTO is perceived within Europe, mainly depending on geographic and institutional factors of the individual member state. As has been pointed out earlier most of the academic and policy literature on urban development and on the relation between urban cores, urban agglomerations and the non-urban, i.e. rural areas is concentrated on the major cities\(^2\).

We first have to distinguish the SMESTOs, the subject matter of this project, as a group and individually from the metropolises (no matter how small these may be on a global scale). A differentiation which cannot only rely on numbers (of inhabitants or else) alone but has to take into account the different functions of metropolises and SMESTOs on the one hand side and between the SMESTOs on the other hand.

The findings from ESPON 1.1.1, especially the MEGA’s as a group of cities complementary to SMESTOs serve as a starting point, assuming that MEGAs per definition and in the real world are functionally complete, whereas SMESTOs tend to be specialized on, or dominated by, one or a few functions within the wide range available.

The literature survey on the “non-MEGA” urban system in Europe which is the content of this task will also serve as a main input to the WP 3 (typology) but first of all feed the description of the major roles of SMESTOs with (analytical, historic and geographic) evidence within the following two tasks.

**Socio-demographic roles (task 2.2)**

Within this task the role of SMESTOs with respect to their dynamics in terms of population is analysed by drawing on policy oriented and academic literature. The issues relate to the population decline in many SMESTOs and to their function as population growth poles in a number of other cases stand in the center of this task. Also the repercussions of aging and other changes in the structure of the urban population will be elaborated.

Besides the role of providing (sub-urban?) living space of generally high quality and besides forming obstacles to an ever faster decline of some smaller towns the SMESTOs play quite different roles along the continuum from centre to periphery.

Population changes – positive or negative – within the SMESTOs are cause and effect of the new spatial (re)organisation of many public sector activities, of provision of public amenities and other centrally provided services. This is mainly due to technological changes referring to Information Society and to transport, but also reflects the necessity for many SMESTOs to react to declining efficiency of service provision caused by population decline and to limitations in their financing power.

The balance between enhanced inertia in some places and circumstances and the increased mobility of urban population in others has yet to be found – at least in theory.

**Economic roles (task 2.3)**

Economic spatial theory identifies a number of economic benefits and drawbacks of cities. (Agglomerating and congesting forces)

Basically these two forces balance the developments and sprawling of cities in a sense that has produced life cycle models\(^3\) of city development (i.e. urbanisation, de-urbanisation and re-urbanisation)

The new development of the **sustainable city**\(^4\) **movement** tries to put these forces into the context of city size and urban development thresholds which makes them relevant for the research question at hand. Basically they build a correlation between city size and its sustainability. In other words it is assumed that there has to be an optimal city size where the above mentioned agglomerating forces counterbalance the congesting forces in such a way that a general long term equilibrium could be achieved. Empirical observations suggest that this “optimal size” will be found within the range of SMESTOs.

The range of performance differences among the SMESTOs, the degree of specialization in the spatial division of labor and contemporary “Central Place” theory will come into focus of this task.

**Specific potentials and challenges for SMESTOs (task 2.4)**

In a concluding step of the survey this task identifies the potentials and challenges of SMESTOs in the future spatial development of Europe. This comprises economic and demographic function but also has to take into account institutional aspects.

\(^3\) see Van den Berg L., Burns L.S., Klaassen L.H. (1987): Spatial Cycles; Aldershot; Gower

\(^4\) see e.g. Capello R., Nijkamp P., Pepping G. (1999): Sustainable Cities and Energy Policies; Springer; Berlin, Heidelberg
Kearns\(^5\) and Keating et al.\(^6\) discuss local governance approaches which involve a transfer of power away from elected local authorities towards other organisations. This offers a new dimension in the city typology discussion namely new modes of regulation in space. This implies the rise of new territorial frameworks for action on the local and regional level. Self-organising processes include new patterns of partnerships which imply new spatial models.

The governance aspect has to be seen as a particular potential of SMESTOs allowing them to be closer to the citizen and more flexible to react on the citizens needs.

**Workpackage 3: Typologies of Small and Medium-sized Towns and their Respective Regions**

**Typologies for SMESTOs on European Level (task 3.1)**

Taking the findings of WP1 and WP2 as starting points the identification of appropriate typologies of SMESTOs is based on three main elements:

- **A multi-disciplinary approach** able to capture the different hard and soft factors in play that define the role and the dynamics of SMETOS: spatial, economic, social, demographic, cultural and geographic.

- **A well integrated approach** that identifies the linkages, complementarities and dynamics of SMESTOs both reflecting the different aspects (geo-physical/socio-economic/functional etc.) and their different role within the spatial dynamics (local/regional/national/European).

- **A multi-sourcing approach** that will be based on theoretical analysis as well as evidence documented in task 1.2. (data availability) and also from the case-studies (see WP 4).

At a first level of analysis the functions of a SMESTO and its functional linkages to other towns or cities will form the focus of this task

- Spatial analysis of the functional linkages existing between SMESTOs and their territories: urban density, flows between them, function in respect to housing, service supply, labour market centre, economic base, etc.


Existence or not of major cities within their territory and functions: SMESTOs surrounding large urban agglomerations and consequently forming a hierarchy of SMESTOs vis-à-vis the core of the agglomeration.

The functions and the relations between rural areas and SMESTOs.

This can draw to some extend on the results of ESPON 1.1.2 which under a different heading has proposed a number of regional typologies with regards to the urban rural divide.

The various types of indicators to be used in this analysis will include:

- Geo-physical and location aspects
  (peripherality, remoteness, difficult accessibility, e.g. in the case of islands, enclaves, mountains regions, etc.; distance from major centres)

- Economic and Social characteristics

- Demographic trends

- Infrastructures Development

The analysis of the existing typologies and conceptions related to the role and types of SMESTOs in their own regions in the various members states, including the new members, will represent the departure to identify some of the fundamental specificities due to country historical and urban policy evolutions and characteristics.

**Typologies of regions regarding SMESTOs (task 3.2)**

Diverse types of criteria will be applied for the identification of the territory where SMESTOs are located, mainly on NUTS 3 and NUTS 2 levels, in order to capture the complexity of the factors in play and their wide diversity.

A first issue is to which extend the existing typologies used by individual member states can be completed and revised for gaining a more general and well based methodology for the whole ESPON space, encompassing all the diverse empirical situations as outlined in task 3.1.

Any such typology has to be cross-checked with the proposals made in earlier ESPON studies with typologies as a main result, these are especially 1.1.1, 1.1.2, 1.1.4, 1.2.1, 2.1.3, 2.2.2, 3.1. Secondly the findings from task 1.2 – data availability – have to be taken into account when designing typologies that eventually will have to be empirically underpinned.
Workpackage 4: Case Studies on European SMESTOs

Objectives of this WP 4 are

- to deepen the insight in the potentials and challenges for SMESTOs in the ESPON space
- to test the feasibility of proposed typologies and definitions and
- to enrich the abstract analyses with vivid images of concrete towns and their regions.

To a certain extent the case studies are intended to make up for the impossibility to indulge into statistical analysis for the whole ESPON area within this preparatory study.

Selection of Case Study Towns and Regions (task 4.1)

The case studies will be performed by each of the 8 partners, in order to capture a widespread variety of regional cases and also to be able to cover a great variety of European languages and – connected to this – of different historic and cultural background, though of course no full coverage can be provided. (see 4.1 for the cases selected)

Methodology for Case Studies (task 4.2)

The case studies will differ considerably in content and scope depending on the material available for the selected regions and the particular situation in respect to SMESTOs. All the more one needs to develop a sort of template or grid which can guide the description and allow a thematic oriented comparison of the individual cases.

For details see chapter 4.2.

Conducting Case Studies

Each of the partners will conduct two case studies, which will follow three steps:

- Provision of data (including maps) and literature sources about the selected region and the selected SMESTOs (regional and national level)
- Reviewing of this material (in a free format)
- Reporting according to the template developed in task 4.2

The results of each individual case study (review and filled-in template) will be provided as inputs to the ongoing WP 2 (Analyses of roles) and WP 3 (Typologies) but above all in the Conclusions and Recommendations (WP 5)
Workpackage 5: Conclusions and Recommendations

Further Research Needs (task 5.1)

The scope of this project does not allow for a comprehensive and exhaustive study on SMESTOs. Particularly the possibilities for quantitative testing and description of the phenomena analyzed within the workpackages is very limited.

The TPG will present a research concept to close the gap between

a) the discussed hypotheses on the roles and functions of SMESTOs and the quantitative evidence related to them

b) the multitude of national definitions (lists), the proposed definition of European SMESTOs and the actual denomination and geo-coding of these European SMESTOs, and

c) to test the typologies proposed for the whole ESPON space

A number of issues which have emerged as important and little investigated will be proposed for further research. Among those could be

- the relationship between individual and groups of SMESTOs situated in different regions,
- the relationships between the node of a SMESTO and its hinterland in terms of governance and co-operation
- detailed analyses of the challenges particular types of SMESTOs are facing
- etc.

The research concept and the additional proposals will be presented in a form that it can serve as a basis of terms of reference for future ESPON projects.

Policy recommendations (task 5.2)

Given that this project is the first European level investigation into the matter and that its scope is rather limited one should be cautious with possibly pre-mature policy recommendation – except for the field of additional information gathering and research.

Nevertheless the TPG will recommend a first rough framework for policies oriented towards SMESTOs and list some of the most pressing areas of need for action as perceived by the literature reviews and the case studies.
The framework will identify simultaneously

- the policy areas affecting considerably (many kinds of) SMESTOs, e.g. population decline, migration, public transport, infrastructure etc.
- the level of policy which is addressing and/or which should address the issue (local, multi-local, regional, …European),

thus giving a first overview of the options for policy makers.

1.3 Methods applied

Large parts of the study have to be covered by literature surveys, including the analysis of relevant ESPON reports.

A second source of information has been tapped by sending out a questionnaire to all project partner and to all ECP, gathering information on national definitions of SMESTOs and on data availability. Filled in questionnaires were received from:

- Questionnaire 1: France
- Questionnaire 2: Spain
- Questionnaire 3: Austria
- Questionnaire 4: Italy
- Questionnaire 5: Hungary
- Questionnaire 6: Germany
- Questionnaire 7: Greece
- Questionnaire 8: Finland
- Questionnaire 9: Poland
- Questionnaire 10: Cyprus

The case study methodology is described in chapter 4 in detail.
1.4 Timeline

Until the drafting of this interim report, the following tasks and/or milestone have been delivered:

19.4.2005 Kick-off workshop with all core partners in Vienna
28.4.2005 Kick-off Meeting in Brussels with CU
10.5.2005 Questionnaire sent out
30.6.2005 Questionnaires collected and analysed
20.8.2005 Case Study Handbook (see 4.2) sent to all partners
08./09.09.2005 Workshop of all partners in Stockholm
30.09.2005 Delivery of Interim Report

For the up-coming project period the timeline is as follows:

15.10.2005 Presentation of IR at Lead Partner Seminar in Luxemburg
15.12.2005 First draft of Case studies
15.12.2005 First draft of report on WP 3
01.03.2006 Internal draft of final report
15.03.2006 Workshop for core partners in Bologna
30.04.2006 Second draft of Final Report circulated internally
30.05.2006 Delivery of Final Report
2. DEFINITIONS (DRAFT REPORT ON WP 2)

Before one can analyse Small and Medium-sized towns (SMESTO), one first has to distinguish urban areas from rural ones. The first objective of the present note is therefore to review statistical approaches of “urban areas” currently implemented in a selection of European countries. As described in chapter 2.1, a number of different approaches co-exist, often in the same country. In our pan-European perspective, we therefore need to choose the approaches that are best fitted to our analytical objective. From the definition given in chapter 1, it is then important to distinguish our object of interest for the study: the Small and Medium-sized towns (SMESTO). Chapter 2.2 will then be focused on the possible criteria used for the identification of the SMESTO. Following the results of chapter 2.1 and 2.2, chapter 2.3 will intend to suggest a two-step method for defining SMESTO, and therefore serve as a basis for future pan-European study of the SMESTO.

2.1 Different approaches of defining urban areas in Europe

Previous studies have described the different standards that are used in order to define what is a city in the different European countries. In each country, the definition of the town that came up has been in accordance with “the nature and history of its urban population, as well as its political and administrative structures for land-use control” (Eurostat, 1992). Any international comparison needs to carefully consider these differences.

Those standards can be regrouped in three main approaches:

- The “administrative approach” defines urban area based on the legal or administrative status of municipalities. This approach corresponds to the city as instrument used by the state to structure, organise and control a country.

- The “morphological approach”, defines urban areas based on the extent and/or continuity of the built-up area, the number of inhabitants, proportion of the the municipal area covered by urban settlements. This approach corresponds to the city or town as a physical or architectural object.

- The “functional approach” defines urban area based on interactions between a core area, which may be defined according to morphological criteria, and the surrounding territories. Daily commuting flows are the central parameter in this respect, as they reflect the existence of a common labour market. This approach corresponds to the city as an economic and social entity.
The three approaches are complementary, as they are describing the multiple facets of the urban object.

One or more of the approaches of urban areas described above are applied in European countries. Some approaches are actively used by public authorities for urban policies, and thereby have an official status. Others can have an official status only as statistical entities. Finally, some are used only for research purposes, and have not been validated by national authorities.

As a first step in this study, we will define the basic notions that are the most used when defining urban areas in Europe. The aim is less to provide an exhaustive listing of the parameters taken into account than to raise the awareness, in view of providing the basis for a possible definition of our main object of consideration in this report: the Small and medium-sized towns of Europe.

The terminology can be confusing, as some countries use similar terms to describe different approaches; it is therefore important to settle on some generic European terms and to define what their equivalents would be in each country.

2.1.1 Administrative approaches to urban areas

In some European countries, municipalities are classified as urban or rural, based on their total population (irrespective of the spatial organisation of the settlements), their administrative role, their historical rights or simply a decision by national authorities.

Municipal population thresholds

In some countries, a municipality is considered urban when its reaches a certain threshold of population, and it is thus considering the administrative boundaries of the municipality as the formal delimitation of the town, notwithstanding the actual structure of the settlements. By reaching this threshold, the municipalities are then guaranteed to have a town (city) status, which can give them special rights and duties towards the rest of the national (or regional in case of federal states) territory.
The table here below summarizes some of the most interesting cases:

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Definition of the agglomeration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>Ville isolée</td>
<td>More than 10,000 inhabitants</td>
</tr>
<tr>
<td>Austria</td>
<td>City by statute</td>
<td>More than 20,000 inhabitants</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>X</td>
<td>More than 2,000 inhabitants</td>
</tr>
<tr>
<td>Spain</td>
<td>X</td>
<td>More than 10,000 inhabitants</td>
</tr>
<tr>
<td>Italy</td>
<td>X</td>
<td>More than 10,000 inhabitants</td>
</tr>
<tr>
<td>Slovakia</td>
<td>X</td>
<td>More than 5,000 inhabitants (combined with function as a centre)</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>X</td>
<td>Population of communes with an administrative centre of more than 2,000 inhabitants</td>
</tr>
</tbody>
</table>

**Town status by governmental decision**

Municipalities can become a town (or city) by decision of the government when the town has a certain administrative status, such as a regional capital for instance. This way of defining the city stresses its importance in the political system and as a centre for the decision-making structure.

In Poland\(^\text{14}\), the decision of granting a municipality the status of town rests in the competence of the Prime Minister, and is made on a case-by-case basis. The decision is made based on criteria such as population size and density of the built-up area, but there are no quantitative criteria.

In Italy\(^\text{15}\), the government has lately taken steps towards a better definition of the urban phenomenon. In 1990, the suburban areas of the largest cities, called metropolitan areas, were included in the law concerning administrative units. In 2001, a new administrative unit, called *metropolitan cities*, was included in the legislation, as a complement of the other administrative levels (Regions, Provinces and Municipalities). However, the enforcement of those laws has not been realised so far.

In Germany, the Länder are in charge of delegating town ordinances and privileges, which is one of the three parameters used in the country to define towns (besides size and centrality).

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\(^7\) From the *Office Fédéral de la Statistique*, Switzerland
\(^8\) Questionnaire 3
\(^9\) From (ESPON 1.1.2., 2003)
\(^10\) From (Eurostat, 1992)
\(^11\) Ibid
\(^13\) Ibid
\(^14\) Questionnaire 9
\(^15\) Questionnaire 4
Thus, the German urban population is limited to the population resident in the 1408 Gemeinden Städte and the 88 Kreisfreie Städte (Eurostat, 1992).

In Hungary16, two types of towns can be distinguished (with the exception of the capital-city of Budapest that have a special status): first, the towns of county right regroup the county capitals as well as all the settlements of more than 50,000 inhabitants, the granting of the status is a decision of the parliament; second, other settlements are granted the status of town (or urban area) by the Presidency on the basis of multiple factors such as functional, morphological, institutional or cultural.

However, in some countries, a municipality that is granted the status of town needs to fulfil some particular duties such as hosting local or regional administration. This is the case for the statutory cities of Austria17.

The urban system of Ireland (Central Statistics Office, 2002) is strongly shaped and influenced by government decisions. Indeed, there are two main categories of towns, three in fact if we consider the strong dominance of the city of Dublin on the Irish urban system. The first category consists of Towns with legally defined boundaries. Those urban areas represent the greatest share of the Irish urban system. The limits of towns with legally defined boundaries are drawn using the census results in the built-up areas. However, the update of the limits cannot match the rapid urban development of some areas, and thus some settlements (delimited by the built-up area) are going beyond the legal boundaries. The main purpose for this legal definition of urban areas is to be able to compile data on an object that can be comparable in time. The second category of towns is the census towns, which are basically defined as a built-up area.

However, the administrative process of defining the limits of the town is slower and rarer than the pace of urban development itself, and this stresses the need to have complementary new and innovative methods for defining it (Eurostat, 1992).

**Historical towns**

The complexity of defining the town as an urban object is quite recent, and can be roughly dated from the Industrial Revolution that occurred in Europe in the nineteenth century (Eurostat, 1992). Indeed, in the Middle Ages, the town was delimited by a physical boundary, the ring-wall. The town was the area inside this limit, and the countryside was lying outside. Before the industrial revolution, the town was corresponding to the boundaries of the municipality, which lay at the centre of the urban area (Eurostat, 1992).

16 From Central Statistical Office, Hungary
17 Questionnaire 3
Nowadays, the notions of municipality and town are most of time separated, as discussed earlier in this chapter. However, in some countries, the weight of history is still an important condition for defining towns. In Germany, for instance, the *town ordinances and privileges* delegated by the Länder are mostly related to historical rights. In Poland, historical factors are one of the qualitative criteria used by the government to define urban areas.

However, in the United Kingdom, the use of historical towns as a basis for the definition of modern towns is put into question for two main reasons. On the one hand, historical freestanding towns have grown into large built-up areas, extending beyond the historical boundaries. On the other hand, some historical freestanding towns have lost of their influence and can no more be considered as a place of central importance (Denham & White, 1998).

### 2.1.2 Morphological approaches in European countries

In many countries, the definition of a continuous built-up area is the first step of differentiating urban areas from rural ones. The use of the continuous built-up areas can be explained by the need to measure the geographical progression of urban types of settlements (Le Gléau *et al.*, 1997).

**Continuous built-up area**

When defining the urban built-up area, two parameters are usually used: First, the distance between the buildings must be below a given threshold; second, the total population of the agglomerated dwellings must exceed a minimum threshold. However, there is not a common definition of these thresholds in Europe. In some countries (e.g. Greece), the distance between the dwellings is used as a parameter to delimit urban areas, but there is no explicit quantitative...
criterion in terms of demographic mass (Le Gléau et al., 1997). Finally, some countries are using a qualitative approach to the concept of "continuous built-up area". In these cases, it is used as a parameter to define an urban area, without reference to any clearly defined threshold values.

The first parameter taken into consideration is the maximum distance between buildings. This parameter is intended to measure the density of the settlements and to delimitate the condition for a building to be included in a larger settlement. In the European countries, it ranges from 50m in the United Kingdom\(^{20}\) (minus Northern Ireland) and Norway to 250m in Belgium (Decrop, 2002). But most of the countries have applied the threshold of 200m (France, Denmark, Sweden, Finland, Ireland and Greece), which is recommended by the United Nations for the definition of urban areas (Le Gléau et al., 1997).

It is interesting to note that different types of land-use are not taken into account in the same way across Europe. While areas used for public, commercial and industrial purposes are excluded from the morphological urban area in France, other countries such as Ireland, Belgium and the Nordic countries include them. Consequently, urbanised areas in France can appear to be more fragmented and less extensive than in these other European countries for methodological reasons (Le Gléau et al., 1997).

The continuous built up area can usually lay claim to being “urban” only if its population exceeds a certain threshold. The values used differ widely between the European countries. Some countries also use proxies rather than actual population figures. In Ireland (Central Statistics Office, 2002), for example the indicator used is the number of occupied dwellings (50 in this case), when actual population figures are used, the figures used range from 200 inhabitants in Belgium and the Nordic countries (Le Gléau et al., 1997) to 3,000 inhabitants in Scotland (called ‘urban settlement’) (Scottish Executive, 2004), around 1,000 inhabitants in England and Wales (Denham and White, 1998) and, 2,000 inhabitants in France\(^{21}\) and 10,000 inhabitants in Austria\(^{22}\) and Greece\(^{23}\).

Other countries are either not taking the population of continuous built-up areas into account at all (e.g. Poland), or do not have a unified national definition, like in Spain, Italy or Germany.

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\(^{20}\) From Statistics UK
\(^{21}\) From Institut National de la Statistique et des Etudes Economiques (INSEE)
\(^{22}\) Questionnaire 3
\(^{23}\) Questionnaire 7
Synthesis continuous built-up area

<table>
<thead>
<tr>
<th>Country</th>
<th>Distance threshold</th>
<th>Population threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>200m</td>
<td>200 inh.</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>50m</td>
<td>200 inh.</td>
</tr>
<tr>
<td>Wales</td>
<td>50m</td>
<td>1,000 inh.</td>
</tr>
<tr>
<td>England</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scotland</td>
<td>50m</td>
<td>3,000 inh</td>
</tr>
<tr>
<td>(Urban settlement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>200m</td>
<td>10,000 inh</td>
</tr>
<tr>
<td>Ireland</td>
<td>200m</td>
<td>50 occupied dwellings</td>
</tr>
<tr>
<td>Belgium</td>
<td>250m</td>
<td>200 inh.</td>
</tr>
</tbody>
</table>

Morphological urban area

In countries using a morphological approach, the continuous built-up area is usually not used as such to delimit the urban geographical sphere. In most cases, the delineation of continuous built-areas is approximated to administrative or statistical boundaries.

In a first group of countries, a morphological urban area is defined by readjusting the built-up areas to the municipal boundaries. The method used to carry out this approximation varies. In France, a municipality belongs to a morphological urban area if more than 50% of its population belongs to a continuous built-up area which has more than 2000 inhabitants in total (within the municipality and in neighbouring municipalities). In Austria and Greece, a municipality is considered as an urban area if it has on its territory a built-up area following the above mentioned criteria, irrespective of the share of the municipal population or territory which is concerned. In Scotland (Scottish Executive, 2004), localities having a permanent population of more than 1,000 inhabitants are described as urban settlements. If the built-up area is spreading over several municipalities, these are all considered to belong to the morphological urban area.

24 From (Le Gléau et al., 1997)
25 From Statistics Norway
26 From (Denham and White, 1998)
27 Ibid
29 Questionnaire 7
30 Op. Cit (1997); and (Central statistical Office, 2002)
31 Op. Cit. (1997); and (Decrop, 2002)
32 From Institut National de la Statistique et des Etudes Economiques (INSEE)
33 Questionnaire 3
34 Questionnaire 7
A second group of countries use territorial division below the municipal level in order to delimit urban areas. Those divisions have often a statistical purpose and are used, for instance, for the population censuses: in England and Wales, it is the Enumeration Districts, and in Ireland, the Electoral Divisions. In the Irish case, the Aggregate Town Areas are defined as the aggregation of the Electoral Divisions whose continuous built-up areas has a total population of more than 1,500 inhabitants (Le Gléau et al., 1997).

Finally, a third type of approach of built-up areas is found in the Nordic countries (Sweden, Finland, Denmark and Norway). In those countries, there is no readjustment of the built-up area to any administrative or statistical division of the territory. Instead, the built-up areas are considered as a statistical area in their own right. Different cases can then come up: there can be either several urban localities in one municipality, or one urban locality spreading over several municipalities.

**Population densities**

Some of the countries that do not have a formal definition of urban areas, like Germany or Poland, are using density of population as a side indicator when delimitating the extent of urban areas.

For instance, in the German case (ESPON 1.1.2, 2003), NUTS 3 regions with a population density of more than 150 inh/km² are considered urban. In Poland35, the density of population is used as a qualitative parameter, i.e. it is taken into consideration but without any formal quantitative threshold.

In the Netherlands, the Statistical Office has defined 5 possible degrees of urbanisation. The spatial unit used is the municipality, and the parameter is the number of addresses per square km. The repartition of the municipalities in the 5 categories is as defined in the following pattern:

- Extremely urbanised: 2,500 addresses or more
- Strongly urbanised: 1,500 to 2,500
- Moderately urbanised: 1,000 to 1,500
- Hardly urbanised: 500 to 1,000
- Not urbanised: fewer than 500

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35 Questionnaire 9
The urban areas of the Netherlands are then defined by the two first categories, the rural areas being defined by the two last, and the “moderately urbanised” category representing a semi-urban environment.

In Scotland, the density of 5 residents/hectare is used as a minimum threshold for urban areas (as an alternative to the previously continuous inhabited areas of more than 500 inhabitants) (Denham and White, 1998). Different types of densities are used in order to define the urban object. Densities, whether in population or in jobs, are also used in order to define their functional areas, as it will be developed in the next section.

**Densities: People, Jobs... and Addresses**

2.1.3 Functional approaches

As described in the section here above, the morphological approach is often used in order to define the types of areas that can be considered as urban. But in many countries, this only approach is not considered sufficient to properly represent the complexity of the urbanised areas.

Thus, most of the European countries have adopted a functional approach when defining the urban object. These functional approaches generally divide in roughly three main parts:

- The **urban core** is defined as the very heart of the town,
- The **inner ring** corresponds to the urban areas that are adjacent to the core,
- The **outer ring**, which corresponds to the outer limits of the town, with often more spread settlements than in the other two parts.

The area defined by those three parts will be designated as an **Urban Region** from this point in the present paper.
The definition of Urban Regions is stressing the relative functional and economic role that each of these three different divisions has in the city pattern. In some countries, such as France, Belgium and the Netherlands (Eurostat, 1992), there is an official definition of the urban regions (for example: Aire urbaine in France, Région urbaine in Belgium, Agglomération in Switzerland).

In many other countries, the concept of “urban regions” has been developed and applied empirically by research institutes or national agencies in order to promote this new approach of dealing with the urban object. It is the case in the United Kingdom, Ireland, Spain and Germany.

The functional approach is based on the exchanges between the different parts of the urban region, and could be roughly described as the delimitation of the zone of influence of the central core by studying:

- The total population size of the central core,
- The size of the working population in the central core or its density of jobs,
- The labour market areas and the commuting pattern to the cores,
- The proportion of employment in specific sectors, ...

The above is a non-exhaustive list of the type of indicators used to define either the central, the agglomeration or the suburban areas of the urban regions. In the following, we will discuss more in detail more specific examples. In the first section, we will discuss the cases where the functional approach is used to define urban areas, in countries that do not use the morphological approach in doing so. The three following section will be dedicated respectively to the definition in functional terms of the central core, the agglomeration and the suburban areas.

The notion of “ring” around an urban core should be taken as an image and not as a strict territorial reality, as the three parts of the urban region can have varied forms and extents. In fact, the idea is to define the urban region constituted of three main parts that are concentrically organised overall.

**The urban core**

The urban core represents the most central part of the urban region. Depending on the country, it can have different definitions, which are due to the national context.

In the table below are summarized some of the most interesting definitions.
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Definition of the urban core</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Pôle urbain</td>
<td>Urban area with at least 5,000 jobs and not belonging to any other agglomeration</td>
</tr>
<tr>
<td>Belgium</td>
<td>Ville centrale</td>
<td>Statistical divisions of the territory with a density of population over 50 inh per hectare and three other parameters linked to the share of housing in the city centres.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Commune-noyau</td>
<td>Municipality (or group of municipalities) with at least 2,000 jobs, and the ratio of the number of persons working in the municipality to the number of active persons is higher than 0.85</td>
</tr>
<tr>
<td>Austria</td>
<td>X</td>
<td>Municipality? with a minimum of 10,000 inhabitants, at least 5,000 local employees (not working in agriculture)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Metropolitan Economic Labour Areas</td>
<td>At least one municipality with a minimum of 20,000 jobs + adjacent municipalities with a job density of 1235 jobs/km²</td>
</tr>
</tbody>
</table>

The functional importance of the urban core is usually defined in the different countries as a matter of size, whether considering the total population size or the size of the pool of jobs in this very area. The threshold in itself differs from one country to another and can range from 2,000 jobs as in Switzerland to 20,000 jobs in the United Kingdom. Some countries applies the two threshold, as in the Austrian example, stressing the importance for the urban core to be both a population and economic centre.

The table here above displays the large array of definitions that are used for defining the urban cores in Europe. However, the parameter that seems to be used quite systematically is the number of jobs or employed persons present in this core.

**Inner ring**

The inner ring area can be described as an urban ring that is directly surrounding the urban core as described above. It is often described as an area that is adjacent and contiguous to the urban core, that is urbanised and that has particular exchanges, especially in terms of daily commuting and pooling of labour market resources.

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36 From the Institut National de la Statistique et des Etudes Economiques (INSEE)
37 Extracted from (Decrop, 2002)
38 From the Office Fédéral de la Statistique
39 Questionnaire 3
40 Extracted from (Eurostat, 1992)
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Definition of the inner ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>France⁴¹</td>
<td>Banlieue</td>
<td>Municipalities outside the urban core belonging to the urban area</td>
</tr>
<tr>
<td>Belgium⁴²</td>
<td>Agglomération</td>
<td>Contains the urban core and its adjacent divisions defined by the continuity of the built-up areas and a high density of population (no threshold mentioned)</td>
</tr>
<tr>
<td>Switzerland⁴³</td>
<td>Agglomération</td>
<td>Surrounding municipalities with at least 1/6 of the working active population working in the urban core, plus 3 out of 5 parameters defined by built-up area continuity, density of population and jobs, population growth and maximum number of persons employed in the primary sector.</td>
</tr>
<tr>
<td>Austria⁴⁴</td>
<td>X</td>
<td>Adjacent municipalities with 30% of the active population working in the urban core.</td>
</tr>
<tr>
<td>United Kingdom⁴⁵</td>
<td>Inner ring</td>
<td>Adjacent municipalities with 15% of the active population travelling to the urban core. Urban core and the inner ring shall have a total population of at least 70,000 inhabitants.</td>
</tr>
<tr>
<td>The Netherlands⁴⁶</td>
<td>X</td>
<td>Continuous built-up area adjusted to local administrative boundaries, as well as substantial size in terms of jobs (50,000) and public facilities potential users (150,000). The agglomeration shall also preferably have at least 100,000 inhabitants.</td>
</tr>
</tbody>
</table>

The inner ring is the natural continuation of the urban core and there shall not be large breaks into the urban fabric between the urban core and its surrounding agglomeration. Most of the definitions of the inner ring gathered in the table here above are using a threshold in the share of the active population of the agglomeration municipalities that are commuting daily in order to work in the urban core. The threshold varies from 15% in the United Kingdom to 40% in France.

However, in some countries, the definition stresses the fact that inner ring are an area of high concentration of both persons and economic activities (jobs is an example): in the United Kingdom, the urban core and the inner ring shall have more than 70,000 inhabitants. But this is especially true in the Netherlands, which defines three different thresholds for an area to be an agglomeration: 100,000 inhabitants, 50,000 jobs and 150,000 potential users of public facilities. The latter is particularly interesting as it refers to the agglomeration as the place for central functions linked to the society. This will be further developed in this section, especially with the use of the German example.

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⁴¹ From the Institut National de la Statistique et des Etudes Economiques (INSEE)
⁴² Extracted from (Decrop, 2002)
⁴³ From the Office Fédéral de la Statistique
⁴⁴ Questionnaire 3
⁴⁵ Extracted from (Eurostat, 1992)
⁴⁶ From (Vliegen, 2003)
The outer ring represents the very edge of the urban region. It is often the limit between what can be called urban and rural.

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Definition of the outer ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Couronne péri-urbaine</td>
<td>Municipalities belonging to the same urban area than the urban core, and with 40% of the dwelling population working in the urban core</td>
</tr>
<tr>
<td>Belgium</td>
<td>Banlieue</td>
<td>Strong dependence of the suburban areas towards the agglomeration in terms of daily commuting</td>
</tr>
<tr>
<td>Switzerland</td>
<td>X</td>
<td>Not defined</td>
</tr>
<tr>
<td>Austria</td>
<td>X</td>
<td>Not defined</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Outer ring</td>
<td>Municipalities whose active population travel to work in the agglomeration in question more than any other agglomeration</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>X</td>
<td>Analysis of the commuting data between the agglomeration and the surrounding municipalities as well as the interrelation of the housing markets.</td>
</tr>
</tbody>
</table>

The outer ring do not seem to be as precisely defined as the urban core and the inner ring, as most countries do not use accurate figures to define the extent of those suburban areas.

In Belgium, the Netherlands and the United Kingdom, the outer ring is defined by the dependence upon the agglomeration as regards daily commuting. In France, the couronne péri-urbaine, is defined by ways of continuity with the urban core and the inner ring, as well as by using a certain threshold in the commuting pattern (40% of the active population).

In Italy, the national authorities have defined Metropolitan Areas, which intent to define the agglomeration area around the biggest Italian cities. However, the delimitation is still not clear and is decentralised to the Italian Regions. Each region will then delimit its metropolitan area according to the regional territorial configuration.

47 From the Institut National de la Statistique et des Etudes Economiques (INSEE)
48 Extracted from (Decrop, 2002)
49 Extracted from (Eurostat, 1992)
50 From (Vliegen, 2003)
51 Questionnaire 4
In Poland\textsuperscript{52}, almost the same process is under way. 11 Metropolitan Areas have been identified in the framework of the National Spatial Development Concept and the conclusions on the delimitation of those areas is due in 2005, and will use criteria such as commuting, intensity of housing development and migration.

In Hungary\textsuperscript{53}, the Central Statistical Office is using the concept of \textit{agglomeration} in order to describe the urban influence area phenomenon. There are four of such agglomerations in the country. The definition of those agglomerations is based on morphological (continuity of settlements, intensive land-use, population density…) and functional (daily commuting, share of employees in certain sectors…) criteria. Two other types of urban spatial entities are commonly used: \textit{agglomerating areas} and \textit{settlement groups of large towns}, which can be described as early stages in the process of becoming an \textit{agglomeration}.

Based on the previously defined spatial entities within the urban region, one could define the \textbf{urban influence area} as the total area covered by the urban core, the inner ring and the outer ring. In most countries, this urban influence area would be defined by the combination of the suburban and periurban areas around the urban core. The urban influence area therefore represents the area that is polarized by the urban core.

\textbf{Labour Market Areas}

Some countries refer to Labour Market Areas rather than urban regions when they delimit functional urban systems.

The Labour Market Areas are based on the commuting pattern of workers travelling daily from one municipality to another. It is assumed that if the active population of a municipality is substantially travelling to a certain municipality more than any other municipality, those entities are in fact part of the same functional entity: the Labour Market Area. In some cases, such as in Finland, the core-municipality of the Labour Market Areas is defined \textit{a priori} by the authorities, and then the proportion of the active population which travels to the defined core-municipality for its daily working activity. Each country using the Labour Market Areas applies a specific threshold. A surrounding municipality having a commuting pattern above the threshold, that is to say that more than X% of the municipality’s active population is travelling to the core-municipality is said to be part of labour market. The gathering of all those municipalities creates the Labour Market Area.

\textsuperscript{52} Questionnaire 9

\textsuperscript{53} Partly from Questionnaire 5
In other cases, the core-municipality is not decided in an administrative way (See next chapter) and the Labour Market Areas are only formed thanks to the analysis of the commuting pattern. Such cases include Italy, Norway and Sweden, among others.

In Norway, the first stage when defining the Labour Market Areas is the identification of the centres spread out over the Norwegian territory. This identification is made by using municipal commuting data for 1990 and 2000, as well as a travel time matrix between municipalities. Depending on how the commuting pattern evolves, some new centres can appear while others some can be included in the commuting area of another centre. Once the centres have been defined, surrounding municipalities where at least 10% of the labour force commute to the centre municipality(ies) will be included in the Labour Market Area of the centre municipality. In addition, municipalities from which it takes less than 30 minutes to commute to the centre municipality are also included in the Labour Market Area (Juvkam, 2002). In Sweden, the Swedish Agency for Economic Development, NUTEK, has defined Labour Market Areas in a similar way. The centre municipalities have been identified by using two parameters: first, less than 20% of the municipality’s active population shall be commuting outside the municipality for work; and the commuting to any other specific municipality shall be below 7.5% of the total municipal out-commuting pattern (Lindblad, 2003). The other municipalities are included in the Labour Market Area of the centre municipality to which the commuting flows are the highest. Chains of commuting are identified, as in the Finnish case. There are two interesting comments that can be made on both the Norwegian and the Swedish cases: the whole national territory is covered, that is to say that all municipalities belong to the Labour Market Area of some centre; inversely, no municipality belongs to multiple Labour Market Areas.

In the United Kingdom, the commuting pattern, available at the ward level, is the basis for the definition of the Travel-To-Work Areas (TTWA). The delimitation is the responsibility of Statistics UK and it uses two main criteria: the commuting pattern itself, that is to say 70% of the active population living in the area are working there and 70% those working in the area are living there, and a threshold for the total number of the working population (20,000). However, in the areas with lower population densities, other figures are used, respectively 75% and 3,500.

As described above Labour Market Area are delimited based on commuting patterns between municipalities. However, this definition takes only into account the driving forces of the private sector. In that respect, an interesting definition would be the French “Bassins de vie” as defined by a consortium of major French national institutes (INSEE, 2003).

54 From Statistics UK
The “Bassin de vie” is identified as the smallest territory in which the inhabitants have access to jobs and services (hospitals, schools, retail centres...). The intention is to divide the national territory in entities that have a meaning for the daily life of the inhabitants. An important parameter that differentiates the “bassins de vie” from the previously described labour markets, first, that they are not based on local administrative boundaries, and second that they take into consideration the accessibility to the public services, thus taking into account the “non-professional” side of the daily life (INSEE, 2003).

**Synthesis, morphological, functional and administrative approach of the definition of urban areas in Europe**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Morphological approach</th>
<th>Functional approach</th>
<th>Administrative approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Continuous built-up area</td>
<td>Density</td>
<td>Urban Regions</td>
</tr>
<tr>
<td>E: Existing definition</td>
<td>N</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>N: No definition found</td>
<td>N</td>
<td>E</td>
<td>N</td>
</tr>
<tr>
<td>France</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>Sweden</td>
<td>E</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Germany</td>
<td>N</td>
<td>E</td>
<td>N</td>
</tr>
<tr>
<td>Austria</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>Finland</td>
<td>E</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Norway</td>
<td>E</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Italy</td>
<td>N</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>Spain</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>Poland</td>
<td>E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>Hungary</td>
<td>N</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>Ireland</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>N</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>Greece</td>
<td>E</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Belgium</td>
<td>E</td>
<td>N</td>
<td>E</td>
</tr>
</tbody>
</table>

The table here above is the synthesis of the different notions that have been described and developed in chapter 1. It displays how those notions are been applied in some of the countries of the European Union, plus Switzerland and Norway.

The table here above displays the multiple potential definitions of urban areas that can be found in the European countries. In fact, the table also shows that a wide array of definitions is used within each country. The delimitation of the urban phenomenon is highly dependent on the
perspective, i.e. on the issue that is under scrutiny, the purpose of the classification (statistical, political, economic) and the territorial level of interest (Regional or national).

Consequently, it does not seem appropriate to choose one definition rather than another, as each of them can be relevant within a certain analytical perspective or territorial strategy.

The common approach of SMESTOs in all ESPON countries that will be suggested at the end of this WP will therefore be dependent on the perspective taken. In other words, multiple spatial definitions must be taken into account. Each of them must be connected to a certain type of urban issues. They must also be classified according to a unified European terminology, in order to avoid confusion due to the use of similar concept to describe different types of urban areas in ESPON countries. Finally, the SMESTOs must also be analysed in relation with other territorial units, such as NUTS 3 regions.

### 2.2 Differentiating SMESTOs from other urban areas

In the first section of this report, dedicated to the definition of the Small and Medium-sized Towns (SMESTO) of Europe, the chapter 1 is the necessary first step, by describing and explaining the different methods used in the European countries when defining urban areas.

Chapter 2 starts with a description of the main issues linked to the identification of the SMESTO and their possible definition. From this description, we will intend to analyse the statistical methods that could be the most suited when defining the SMESTO.

#### 2.2.1 SMESTO: Current state of the affairs

The first questions that are worth raising in this chapter are the following: Are SMESTO defined in European countries? And, if yes, what are the criteria used?

The questionnaire that was sent to different national experts has been interesting in order to have a broad overview of how a SMESTO are defined.

First of all, SMESTO are not always defined as particular entities of the national urban systems in Europe. Indeed, most countries define urban areas or towns/cities as such, but do not have a precise definition of the small and medium-sized entities. It seems that there is somehow a clear distinction between the large agglomeration and the SMESTO, but precise, quantitative criteria are not always explicitly referred to.
In a first sub-chapter, we will discuss the extent of the definition of the SMESTO in selected European countries by way of quantitative criteria. Then, we will focus on the qualitative criteria that are currently used in Europe when defining the hierarchy of urban centres.

Quantitative definition of SMESTO

In most countries, SMESTO are first and foremost defined by the demographic size of their urban area. Indeed, the number of inhabitants is regularly the basis for separating the SMESTO and the larger urban agglomeration, as SMESTO and rural areas have already been delimitating by when defining urban areas.

The use of size threshold is not surprising because it is the direct consequence of the appellation of the SMESTO (Small and Medium-sized Towns). 3 thresholds are commonly used: the upper limit for a town to be called Medium-sized, the bottom limit for a town to be called Small, and finally the limit that distinguishes small towns from medium-sized towns.

![Quantitative definition of SMESTO](image)

The thresholds displayed in the figure here above are official, or unofficial but widely used when describing the state of the art of the SMESTO in those countries. The figure also stresses the wide disparity of quantitative definition of the small and medium-sized towns in Europe. By paraphrasing the title of a paper on the definition of towns (Le Gléau, Pumain & Saint-Julien, 1997), one could state: “SMESTO of Europe: to each country its definition”.

Source: Data gathered via the questionnaire sent to the ESPON 1.4.1, project’s national experts

* For Hungary, only the upper limit for medium-sized towns was given.
Indeed, the quantitative understanding of the small and medium-sized towns is very dependent upon the national urban systems. It is therefore not possible to use the national criteria of size in order to compare SMESTO of Europe. Indeed, a large town in France (more than 50,000 inhabitants) is considered a medium-sized town in Spain or Poland. The quantitative definition of SMESTO is not either dependent on the total size of the national population, as for instance, the definitions in France or Germany are more restrictive than in Greece.

The figure above clearly states that the bare comparison of the size of the SMESTO as defined nationally would be biased, and it points at the fact that a better pan-European comprehension of the SMESTO would need common definition based on the same criteria. Those criteria are very much linked to the definition of the urban areas as described in chapter 1.

**Qualitative definition of SMESTO**

As described earlier, the town is also the place where different functions are gathered. Those functions can be economic, cultural, political, administrative or even financial, and the town seems to be shaped by the combination of those functions, which makes it of importance for the rest of the territory (Roncayolo, 1997).

Analysing the SMESTO through this lens would lead us to focus on them as intermediate functional centres.

An interesting example in that regard is the very qualitative ranking of German cities using centrality as a parameter when defining centres of more or less importance.

A ranking realised by Gatzweiler (Bundesministerium für Verkehr, Bau- und Wohnungswesen, 2004) delimitates German SMESTO as such:

- **Big medium-sized towns:** Central places of higher-order or central places of medium-order, from 50,000 to 100,000 inhabitants,
- **Small medium-sized towns:** Central places of higher-order or central places of medium-order, below 50,000 inhabitants,
- **Small town:** Possession of town ordinances and privileges, often centre of low level,

In his ranking, Gatzweiler uses the centrality of the town as a main criterion for definition which towns can be considered as medium-sized or small. The centrality criterion takes into account the proximity or not of some essential functions (hospitals, universities...) on the town’s territory.

The reference to centrality can be traced directly from the central place theory by Christaller, which has intended to formalize the relationship between the size of a town and the rareness, number, level and extent of the functions gathered in that place (Pumain, 1993).
This combination of other indicators beside the mere size of the town stresses the need for a more nuanced classification of towns in the urban hierarchies (Pumain, 1993).

This definition emphasizes that the SMESTO have an important place in the functional pattern of the national territory, and especially with regards to their hinterland.

Besides Germany, other countries are also using other types qualitative criteria for defining or qualifying SMESTO. In Poland for example, some medium-sized towns are defined as growth pole centres, and the importance of the SMESTO is often linked to the application of the concept of polycentricity in Poland.

The Polish experience could also be prolonged with the Centres of Expertise (CoE) of Finland. Indeed, this programme is aiming at “creating a network of thriving centres of top level know-how” and therefore, “cities and functional urban regions are more clearly seen as the driving forces of regional development and the national economy” (Committee for urban policy, 1999). This vision of the city is stressing its functional importance on its territory.

Another example can be found in Italy, where each region has its own approach and strategy when it comes to small and medium-sized towns.

However, in most other European countries, the definition of the SMESTO, if it exists, lacks this type of functional analysis. Moreover, SMESTO are often defined by exclusion from the category of “large towns and agglomerations”.

### 2.2.2 SMESTO in their territorial context

One of the decisive visions that can be drawn from the previous section dedicated on the current state of the affairs in terms of the definition of the SMESTO is the importance of their relationship with their wider territory. In this sub-chapter, we are taking into consideration three main possible territorial contexts for the SMESTO.

The first type of context displays SMESTO that are located at the fringe of a large agglomeration, that is to say a major city and its functional area. The functional area of the different SMESTO and the one of the large agglomeration are overlapping. This is the typical situation for the periurban towns.

The second illustrated concept stresses the context of a network of SMESTO. In that case, the functional areas are seldom overlapping and are covering a great share of the territory. In fact,
different territorial configurations can be distinguished in practice. The fundamental aspect within this category is the high level of interaction between SMESTOs of comparable size. However, the nature of this interaction can vary depending on the density of such SMESTOs – sub-categories could therefore be envisaged.

Finally, the last illustration puts the emphasis on few SMESTO as poles for rural areas. Rural development poles of this sort may also be part of the network configuration, mentioned above, but their importance in a more isolated and rural context justifies a separate type of context.

However, the importance of the SMESTO is very dependent on this territorial context, as SMESTO in rural areas are more likely to work as a pole for essential functions than one very close to large urban areas. Indeed, the application of some theories (Growth pole theory) for rural development has been focused on the issue of how to use small towns as sub-poles of (rural economic) development (Courtney & Errington, 2003). This could be linked with the example of the Finnish Centres of Expertise briefly described in the previous section.
The fundamental importance of the SMESTO with respect to its territory has been well outlined in the Ireland’s National Spatial Strategy (DELG, 2000). Indeed, the differences in the level of functions that are attributed to an urban centre are highly dependent on the territorial localisation itself.

Some smaller urban centres do have a higher level of services provision in excess in comparison with what their size could indicate (DELG, 2000). Those centres serve relatively large rural catchments. This functional significance on its territory is often emphasized by the granting by national authorities of administrative responsibilities (DELG, 2000). Those smaller urban centres can predominantly be found in rural areas, and would correspond to our third illustration. However, some other smaller urban centres “develop as commuter settlements to larger centres” and have therefore a lesser range and extent of functions that their size would have suggested (DELG, 2000). Those centres can be found in the direct vicinity of larger cities (DELG, 2000) and can be linked to our first illustration in the figure here above.

Other previous studies in Europe have also stressed the importance of the towns, and especially the SMESTO, as an engine for the development of their territory. In Portugal, a study, entitled Medium-sized cities and territorial dynamics, is putting the emphasis on cities in the context of their territories. In their analysis of the Portuguese urban system, SMESTO could be regarded as “centres fostering the development of the surrounding territories”, and are called anchor cities (DGOTDU, 2002). With such a definition, the anchor city should be highly integrated with its surrounding territory, and be able to work as a catalyst for the development of both the city and its territory, by fully taking advantage of the regional resources (DGOTDU, 2002).

2.2.3 Towards a functional definition of the SMESTO

In the first sub-chapters of chapter 2, we have described that the definition of SMESTO in Europe is currently made by using either a morphological (above all) or administrative (sometimes) approach. In most cases, SMESTO are defined as urban areas comprised in the range of an upper and bottom thresholds. However, this type of approach does not put enough emphasis on the significance for the wider territory of the functions that are being located in the SMESTO.

Indeed, SMESTO are often acting as the centre for the provision of services, whether public or private. It is then of interest when defining them, to take into account this very functional significance.

An interesting example on that regard can be found in the National Spatial Strategy of Ireland (NSS). In this report, two important notions are being described in order to define and visualize the functional significance of the urban centres of more than 5,000 inhabitants (See chapter 2.1
for an idea on the definition of urban areas in Ireland). The definition of a function, made in the NSS, is a "specific activity or service provided in an urban centre, serving the resident population and the population of the centre’s hinterland" (DELG, 2000). The functions considered are the ones that are located inside the urban centre.

*Functions are divided in seven categories (DELG, 2000):*

- Financial services,
- Retail services,
- Business services,
- Social and administrative services,
- Educational services (second and third level),
- Tourism and leisure services, and
- Agricultural services.

First, an index of service provision quality is calculated with respects to each the functions. The aggregated index is then obtained by averaging these seven indexes. This aggregated index, called Functional Index, serves as the basis for describing the functional significance of the urban centres. By comparing the functional ranking of the urban centres with their ranking in terms of total population, it is possible to analyse if an urban centre has more or less functions than its size would have presupposed (DELG, 2000).

The second notion of interest developed in the National Spatial Strategy of Ireland is the definition of the urban fields associated to the seven urban functions of the urban centres. For each function, the shape of the urban field associated depends on (DELG, 2000):

- The proximity of urban centres with the same function,
- The nature and pattern of the transportation system,
- The topography of the hinterland, and
- The extent and size of the function itself.

The overall urban field of each centre is created by the combination of the seven functions’ urban fields. The visualisation of the urban fields is also based on the extent of the urban areas or semi-areas (described as “Peri-urban areas” and “Very strong areas” in the rural typology defined for the NSS), the proximity to cities and the degree of remoteness using the distance to urban centres of different sizes (NSS, 2000).
The definition of the urban fields is interesting because it stresses the functional importance that the urban centres do have on their hinterland. However, it does not consider the extent and size of the functions that are located within their sphere of influence, which would stress their centrality.

The definition of centrality in Germany is similarly based on the inventory of predefined functions that are available on the municipal territory (in Germany, towns are urban municipalities). As there is no national definition of what is centrality in Germany, we will take the example of Bavaria. In that Länder, the centrality criterion distinguishes medium-sized from small towns, for instance, by regarding the type of services that are located (or not) in the municipality, according to an exhaustive list of public or private services.

**Definition of functions in small, medium-sized and big towns in Bavaria**

<table>
<thead>
<tr>
<th>Einzelteilung der zentralen Orte in Bayern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zentralitätskriterien</td>
</tr>
<tr>
<td>Einzelhandelszentralität</td>
</tr>
<tr>
<td>Einzelhandelszentralität (nach M ü., z.)</td>
</tr>
<tr>
<td>Anzahl der Einwohner</td>
</tr>
<tr>
<td>Sozialversicherungspflichtig beschäftigte Erwerbstätige</td>
</tr>
<tr>
<td>Definition</td>
</tr>
<tr>
<td>Allgemeine Dienste</td>
</tr>
<tr>
<td>Post, Telefone</td>
</tr>
<tr>
<td>Krankenhaus, Arzt, Apotheke</td>
</tr>
<tr>
<td>Grundschule, Mittelschule, Oberschule</td>
</tr>
<tr>
<td>Beamte, Angestellte</td>
</tr>
<tr>
<td>Gemeindeverwaltung</td>
</tr>
<tr>
<td>Landratsamt</td>
</tr>
<tr>
<td>sozialen</td>
</tr>
<tr>
<td>kommunalen</td>
</tr>
<tr>
<td>Dienstleistungs</td>
</tr>
<tr>
<td>Einrichtungen</td>
</tr>
<tr>
<td>Alding</td>
</tr>
<tr>
<td>Grundschule</td>
</tr>
<tr>
<td>Hauptschule</td>
</tr>
<tr>
<td>Berufliche Schulen, Berufliche Schulen, Berufliche Schulen</td>
</tr>
<tr>
<td>Fachhochschule</td>
</tr>
<tr>
<td>Universität</td>
</tr>
<tr>
<td>Wohnungs</td>
</tr>
<tr>
<td>Gebäude</td>
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<tr>
<td>Gesamt</td>
</tr>
</tbody>
</table>

The Irish and German approaches are interesting first steps towards a functional characterisation of SMESTOs. These approaches however presume that activities and services which are relevant to characterise a given SMESTO are necessarily organised around it. As a second step, it would be interesting to characterise the SMESTO not only by the functions it has inside its own hinterland, but also by the functions present within neighbouring areas. SMESTO could then be characterised not as a destination for some specific urban functions, but as a hub to some specific functions.

The classification of municipalities according to their urban endowment and context in Norway offers a good example of how the territorial context can be taken into account. Four categories have been defined based on this analysis (Blekenause, 1999):

- **Centrality 3**: Municipalities with towns with at least 50,000 inhabitants, and municipalities with less than 75 minutes travel time to such towns (Oslo 90 minutes),
- **Centrality 2**: Municipalities with towns with a population between 15,000 and 50,000 inhabitants, and municipalities with less than 60 minutes travelling time to such towns,
- **Centrality 1**: Municipalities with towns with a population between 5,000 and 15,000 inhabitants, and municipalities with less than 45 minutes travelling time to such towns,
- **Centrality 0**: Municipalities that fulfil none of these demands.

In fact this type of classification uses the complementarities between the morphological and functional approaches. It is worth reminding the reader that urban areas in Norway are defined on purely morphological grounds using the continuous built-up areas as a criterion (See chapter 1.3).

A Scottish study published in 2002 and dedicated to the availability of services in rural areas offers an interesting example of how one could take into account functions situated in the wider territorial context of each SMESTO. The study first divides the territory into three main categories, namely ‘Urban Scotland’, ‘Small towns’ and ‘Rural Scotland’. It then analyses the proximity to different services (20 listed) from these each type of territory. Using the driving time by car to each identified service, the study looks at the areas that are within 5, 15 or more minutes from the selected facilities. The proximity to certain services is then used to characterise towns.

From the four examples described in this sub-chapter, it is possible to draw two main conclusions. First of all, centrality can be defined with different types of criteria (proximity to

56 insofar as this concept of "own hinterland" makes sense in areas with dense networks of SMESTOs.
large/medium/small towns, proximity to services…), and the choice of those criteria depends on the purpose of the study itself. Second, combining morphological and functional approaches improves the accuracy of the analysis, especially when it comes to SMESTOs.

2.3 A Framework for the analysis of European SMESTOs

The scientific and official materials gathered in a selection of European countries highlight the fact that urban areas as they are defined in different countries are incomparable entities. It is therefore necessary to redefine the urban objects in a common European approach. The second chapter reviewed the criteria most commonly used to identify SMESTOs in some selected countries. These criteria were subdivided in two broad categories: quantitative and qualitative. The two last sub-chapters of chapter 2 gave some indication of possible functional approaches for the identification of SMESTOs, especially with respect to the relationship to its hinterland and wider territorial situation.

The objective of the present is to sketch a definition of SMESTO that could be used on a pan-European scale. Before doing so, it is essential to focus on the notion of “small-” and “medium-sized”, in order to identify SMESTOs within the general urban system. Then, the different steps to be followed in order to reach a comprehensive and relevant definition of SMESTO are described. The final sub-chapter will be dedicated to the type of data that should be available for such a potential study.

2.3.1 Why are SMESTO “small” or “medium-sized”?

A necessary first step for the definition of SMESTO would be to respond to the following basic question:

■ What are the notions of “small-” and “medium-sized” referring to?

■ Which are the most relevant criteria for differentiating what is a small or medium-sized town from big cities?

Obviously, “small-” and “medium-sized” generally refers to the size in terms of population of the towns. However, these are highly subjective qualifications, whose concrete meaning depends on the large towns and cities present in the considered urban system. The need to consider city sizes relative to the urban context is illustrated by Pumain (1999) who suggests constructing cartographic representations where the circles representing the size of cities and towns do not correspond to absolute population figures, but to the population in relation to the largest city in the urban system. Through this method, one can represent differences in the structure of different urban systems. Because of contrasts in terms of population mass these differences are generally hidden by traditional maps.
The second important notion when classifying cities is centrality, which is for example widely used in Germany, and is based on the identification of each city or town’s functions (see sub-chapter 2.2.3). The assessment of a city or town’s functional importance is however confronted with a dilemma: as the account of the functions present is based on a certain delimitation of the city or town, while this delimitation should ideally be based on the hinterlands of these very functions. Looking at functions within the administrative or morphological boundaries of a city can indeed create a significant bias in the analysis. Commercial functions, universities or research centres situated outside a given city and towns may for example not be taken into account. One would therefore need to design an assessment method which considers the immediate territorial context of each urban area, rather than trying to characterise it as such.

A third interesting criterion for defining SMESTO would be to focus on territorial influence (or rayonnement in French). For instance, two towns having the same size and the same degree of centrality can have territorial influence areas of different extents depending on their geographical (and territorial) situation: if one situated in a rural area and the other within a denser network of towns, the former will certainly have a larger influence on its territory than the latter. Specific functions may also be relevant at a national or even international scale. Some industries or research activities may be situated in a small- or medium-sized town, but function as part of a wider network. The organisation of a widely recognised cultural event may also increase a specific SMESTOs’ territorial influence.

The project team’s strategy for the definition will be developed in two distinct action stages: identification and characterisation.

This will be developed in the next sub-chapters.

### 2.3.2 Identification

The first stage would be focused on the identification of the Small- and Medium-sized towns. From the previous chapters, it seems that the town should first be described as a way of living (Eurostat, 1992) and a territorial reference. This implies that what mainly differentiates a town from other spatial entities is a morphological approach with a continuous built-up area, a good access to wide array of networks (tangible or intangible) and a typical urban architecture.

In order to avoid the previously described dilemma, one would in other words consider the population of the morphological area as the main criterion for identifying Small- and Medium-sized towns among other urban objects.

It is worth noting that such morphological approaches are already widely used in European countries and that the criterion of continuous built-up area is recommended by the United Nations for the definition of urban areas. Using such a method for delimitating urban areas...
would therefore bolster the possibility for a pan-European study. Moreover, using a morphological approach enables to capture the idea of the town as a living object, which can either grow or shrink or stagnate, but cannot be bound overtime within a fixed perimeter.

In countries where population figures for morphological entities are not available, one would consider the population of administrative subdivisions considered as urban. This is in line with our understanding of urban areas as territorial reference points.

### 2.3.2 Characterisation

The second step for the identification of the small and medium-sized towns in Europe would be to characterize them in functional terms. As described in chapter 2, there is a strong symbiosis between the SMESTO and their territory, as there are often mutually dependent.

The functional characterisation of the SMESTO can be described in two ways. First of all, it is necessary to link the potential sphere of influence with the situation of the SMESTO within the national urban system. Another step would be to characterise the town by the proximity with specific functions. However, for doing so, it is necessary to list the urban functions and to weight them. For instance, a hospital would be rated higher than a retail centre, even if they are situated at the same distance from the town. The figure below intends to illustrate this approach.

![Diagram showing the sphere of influence of towns A, B, and C]

The towns A, B and C have approximately the same size. Nevertheless, town B has a larger sphere of influence because it is closer to important functionalities (here an airport and a University) than the other two cities. The town A has the smallest sphere of influence because it the furthest from all three functionalities.
In that case, the town is considered as a hub for services and “small” and “medium” would be used for characterising the functional importance of each hub.

Moreover, SMESTO are also often described in terms of economic or industrial specialisation, as the increasing global economic competition forces the SMESTO to adapt and to turn their economic apparatus towards highly specialised, but more risky, industries (Pumain, 1999). Thus, the degree of economic specialisation could also be an interesting criterion to take into account when characterising the SMESTO.

2.3.3 Availability of data

The previous sub-chapter is suggesting a new way of defining the small and medium-sized towns in Europe, notwithstanding the already existing national definitions. By doing so, it becomes more conceivable to work on a pan-European study of the SMESTO. However, this type of analysis would be very dependent on the availability of the certain kind of data throughout Europe.

In order to assess the potential feasibility of such a project, the project team has decided to add to the questionnaire sent to the national experts a list of indicators that are seen as being of fundamental importance if a thorough study of SMESTOs were to be performed.

The indicators have been gathered in four main categories for a total of 17 indicators: Geography and Positioning (3 indicators), Demography (5), Economy (8) and Infrastructure (1).

Table below summarizes the responses received for the project’s national experts. The main purpose of the table is twofold: first, it is possible to assess which type of indicator is the most easily (or difficultly) available, and which countries have the most complete set of indicators that would enable a in-depth analysis.

In the category ‘Geography and positioning’, only three times an indicator is given as easily available. The rest of the indicators in this category are either not available (or not answered by the national expert) or difficult and/or costly to get. This first category is central to the delimitation of the SMESTO by a morphological approach, as described in subchapter 3.1, as part of the ‘identification’ phase. However, with respect to the responses received in that category, it looks difficult to be able to do such a gathering of data, on a European basis.

The demographic and economic indicators seem to be the most easily available, with some few exceptions. These indicators are essential for the second step of our definition of the SMESTOs, the ‘characterisation’ one. The indicators listed are aiming at giving a better insight on the socio-economic situation and trends in the SMESTOs but also in their wider territorial context (for instance, NUTS 3/2 region). In these two categories, the indicators that seem to be
the most problematic to gather are the ones dealing with the commuting pattern, which is essential for the functional characterisation of the SMESTOs.

For a more refined characterisation of the SMESTOs, the infrastructure (hospitals, airports, universities…) indicators should be available as points, so that it is possible to measure the proximity of the SMESTOs to such infrastructure. It could then be interesting to picture the isochrones around the facilities (in a similar way as done by the ESPON 1.1.1 team) and assess proximity. The transport infrastructures such as road and rail are also important in assessing the connectivity inside the SMESTOs’ region. As regards, the accessibility of the region in the wider European perspective, the use of the multi-modal accessibility and other indicators produced in the framework of the ESPON 1.1.1. project are good indicators for assessing the global accessibility of the regions.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Geography / positioning</th>
<th>Demography</th>
<th>Economy</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>G_01</td>
<td>Delimitation of the urban areas</td>
<td>Easily available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_02</td>
<td>Positioning of the urban centres</td>
<td>Available with some efforts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_03</td>
<td>Delimitation of the functional areas</td>
<td>Difficult to obtain or Costly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D_01</td>
<td>Total population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D_02a</td>
<td>Number of birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D_02b</td>
<td>Number of death</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D_03a</td>
<td>Number of in-migrants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D_03b</td>
<td>Number of out-migrants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_01</td>
<td>Total number of unemployed persons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_02</td>
<td>Total number of persons in employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_03</td>
<td>Total number of persons working in the primary sector (agriculture, fishery, forestry, mining and quarrying, exploitation of natural resources)</td>
<td>2000 Closest year available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_04</td>
<td>Total number of persons working in the services sector</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>E_05</td>
<td>Total number of persons working in the manufacturing sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_06</td>
<td>Total number of persons working in the business services sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_07a</td>
<td>Number of city-dwellers working outside the city limits (out-commuting)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E_07b</td>
<td>Number of persons working in the city but living outside its limits (in-commuting)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I_01</td>
<td>List of secondary establishments</td>
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3. ROLES AND FUNCTIONS OF SMESTOS (DRAFT REPORT ON WP 3)

3.1 Introduction

As apparent from the preceding work package which deals with the definitions of SMESTOs there is no European-wide consensus about the meaning of small and medium sized towns. First, the terms city and town have different meanings but this should not be subject of this work package and they will be used interchangeably. Second, the term small and medium sized towns is generally rarely used within a political or scientific context. More commonly used is the term small urban area or small agglomeration. Additional terms are only used for large scale cities, such as the terms metropolis, megalopolis or global cities.

This chapter and workpackage describes the specific roles and functions of SMESTOs, whereby the terms role and function are widely synonymously. Thereby we try to identify diverse perspectives from which roles of SMESTOs can be viewed. We describe these roles as “the actions and activities assigned to or required or expected of the cities under observation”.

In the last years and decades the urban scientific focus was directed to large urban agglomerations. With increasing globalisation and social-economic structural changes their importance was immensely growing. However, have an increasingly difficult standing within regional development. As they have lost much of their role and vitality over time, they are increasingly representative of problems such as “shrinking cities” and “urban decline”. Therefore, research is increasingly directed towards the weaknesses of such smaller urban places.

Urban decline has had major consequences for metropolitan regions such as environmental problems, social segregation, unemployment etc. For this reason, interest in smaller urban units has been increasing. However, SMESTOs do not only represent problems, but offer alternatives for metropolitan regions in terms of quality of life; SMESTOs can combine the advantages of a natural and an urban environment. As the “golden middle” they could be model cases for sustainable urban and regional development. A new approach values SMESTOs for their benefits and advantages, soliciting further scientific interest in the subject.

Furthermore, homogenous regional development is considered as an important development goal within the European context; polycentric urban development is the aim of European regional policy makers. Therefore, focus needs to be redirected to declining rural areas and the repositioning of SMESTOs.
3.2 Revaluation of SMESTOs in Europe

Regional attractiveness refers to characteristics and resources that a region has to offer to attract companies, residents and tourists (Bataini et al., 2002). A region consists of a material and an immaterial environment, its historical product (see the following chapter) and dynamic change or something that is in constant evolution. Therefore, both exogenous and endogenous factors determine regional economics and furthermore the role of SMESTOs.

3.2.1 Exogenous factors of regional attractiveness

Most studies refer to the perspective of exogenous development and examine location-related factors for industry, service and high-tech activities. They try to show what attracts and keeps companies and residents in a region, and therefore where public investments could and should or could not and should not be made (Bataini et al., 2002). The location-related factors are generic (airport, schools, affordable land etc.) and with political determination they can be developed. Although these factors serve to compare regions, their underlying economic strategies have only superficial links to the local economic environment. While the focus is on lowest costs for business investment, specific local and regional characteristics are neglected. Territory has a passive role and the land is only seen as a place where activities take place and resources can be exploited. Like that the region and its SMESTOs remain at an economic disadvantage.

3.2.2 Endogenous factors of regional attractiveness

A more qualitative approach to assessing the attractiveness of SMESTOs refers to the specific characteristics of a region. Hereby a region’s image and role is defined by its centrality and specialisation. Centrality structures a region between a centre (urban unit) and its hinterland (see the chapters “Role of SMESTOs within spatial and settlement development in Europe” and “The role of SMESTOs from a functional perspective”). In this context it is important to point out that SMESTOs fulfil important actions for their region and therefore the centrality-angle is of prime importance.

A region is said to be specialised when a significant share of its labour pool is involved in economic export activities. Centrality and specialisation complement each other and determine the quality of the region.

The success of regional development is based on a combination of exogenous and endogenous factors. This is even more valid for SMESTOs as their attractiveness depends on the capacity of the production system to generate specific resources and new activities to establish an interface with its exterior surroundings. Cities are places where social structures and industrial services develop, reinforcing the vital role of centrality and specialisation.
3.3 Historical review of SMESTOs in Europe

There are many sources within the European urban literature describing the development of small and medium sized towns in Europe. Some representative authors will be named/sourced to give a brief overview of the past of SMESTOs in order to understand their current position within the European urban system. The different sources look at historic urban functions of SMESTOs (see 4.1), the urban planning history of European towns (see 4.2) and further the different phases of economic productive development and its implications on SMESTOs in Europe (see 4.3).

3.3.1 Historic functions of SMESTOs in Europe

In urban history we distinguish between genetic city types, which range from Roman cities to market places in the middle ages, cities of the nobles and administrative cities (17th/18th century) to industrial cities in the 19th and 20th century and finally new towns in the second half of the 20th century.

Hofmeister (1999) and others speak of functional historic aspects of European towns. In the pre-industrial town in Europe sales, retailing, trade and craft as well as (secondary) religious and administrative functions were of importance. The pre-industrial town was relatively homogenous and functional and spatial divisions, as they can be observed in the modern city were not prevalent.

Nowadays, the concentration of retailing functions in small towns is located in central areas. With the growth of a city these functions expand spatially until this process leads to functionally urban areas. The consequences of this phenomenon (intra-urban functional differentiation) will also be covered later (see chapter 3.4).

3.3.2 Urban planning history of SMESTOs in Europe

Basically, SMESTOs are marked by a similar development process as bigger urban agglomerations. The difference is that smaller and medium sized towns did not have the enormous growth of extraterritorial zones and the formation of urban centres beyond the city core centre, as in big agglomerations. In the last decades, however, the same has been happening in inner and outer urban development within many SMESTOs: Inner city habitants have been replaced by tertiary uses, resulting in the decay of spatial and social structures. Functions have been shifting – with the consequence of the decay of city centres and suburbanisation.

The city planning of SMESTOs happened as follows: After World War 2 many European towns were marked by functionalism. This development had its peak in the 1970s. The development of
SMESTOs was similar to the development of big cities. The erection of huge infrastructural projects was only one aspect. Dense tertiary quarters with car accessibility and scaled commercial centres were constructed. The resulting dependence of urban policy-makers on private investors and the low sensibility of planning offices for SMESTOs had major lasting consequences.

In the late 1970s the special development potential and the specific flair of SMESTOs were rediscovered by city planners. The increasing sensibility for such towns was reinforced by growing protest movements due to the increasing dissatisfaction of citizens. Qualitative growth and the renewal of historic centres were some new tendencies until in the last decade SMESTOs again lost importance and planning was refocused on big urban agglomerations in Europe (Leimbrock, 1992).

3.3.2.1 Phases in the economic productive system of SMESTOs

Messerli (1998), who analyzes the roles of SMESTOs in Europe with a special focus on alpine regions, identifies three phases in the development of European towns.

In the **historic phase**, which lasted until the 1950, the towns were still agriculturally marked, but gained new traffic, administrative and tourist functions and saw the beginnings of an industrial establishment. The growing city slowly became independent from its agricultural hinterland.

The historic phase turned into the **“Fordist” model** lasting until the 1980s. With it came the invention of standardized mass production, implying that urban growth was based on economies of scales, relying on localisation and urbanisation advantages Industrial centres shifted from the centres to the periphery. The hierarchy of urban systems remains stable, because innovation and diffusion processes emanate from large urban centres.

This was followed by the **“Postfordist” economic development model** in the 1980s. In this new model economic growth had little to do with urban size – flexible specialisation and strongly localized production replaced the mass production system. City size and growth dynamics were replaced by flexible specialisation and the degree of integration in urban systems (Capello, 1992, Maillat, 1998). That way SMESTOs gained a new significance as places for high-ranking economic functions. Necessary conditions were the existence of required resources and modern communication infrastructure. Further consequences of the new economic model are described in the following chapter “The economic role of SMESTOs”.

The debate about Fordism and Postfordism is a scientific field in itself, which is strongly politicized and which will not be further analysed in this paper.
3.4 Today’s roles of SMESTOs in Europe from different perspectives

This literature review analyses the roles of small and medium sized towns in today’s spatial development. While that research field is quite untouched and there is limited literature available on the subject, various roles from different perspectives have been gathered and are described below, using a common methodology.

3.4.1 Methodology of illustrating different roles of SMESTOs

In each of the following subchapters – analyzing roles of SMESTOs – the used perspective is explained and where possible reinforced by general theories from state-of-the-art literature.

Second, where applicable, the strengths and weaknesses of small and medium towns viewed from the respective perspective are pointed out. In some cases the strengths outweigh the weaknesses and vice versa. Where strong or weak points are undetermined a sole description of the role is given.

Third, the role of small and medium sized towns is explored with regards to its possible threats and opportunities. For this categorization the same limitations are applicable as for strengths and weaknesses and therefore step 2 and 3 are closely related. Where no strengths and weaknesses can be identified, it is hard to determine threats and opportunities.

The following section represents a possible typology of roles of small and medium sized towns in Europe. It follows a common analysis pattern but is only an attempt to broadly demonstrate the different roles of SMESTOs by using a proposed typology based on currently available material on the subject. The different roles are:

- The role of SMESTOs within spatial and settlement development in Europe
- The socio-demographic role of SMESTOs in Europe
- The socio-cultural role of SMESTOs in Europe
- The role of SMESTOs according to city size, urban growth and urban hierarchies
- The economic role of SMESTOs in Europe
- The role of SMESTOs from a functional perspective
- The role of SMESTOs from a regional, national and European perspective
- The role of SMESTOs according to their accessibility
- The role of SMESTOs in Europe from an urbanistic perspective
- The role of SMESTOs in Europe from a politico-administrative perspective
3.4.2 The role of SMESTOs within spatial and settlement development in Europe

Small and medium sized towns represent quite a no man’s land in the scientific world. Neither city experts nor experts for rural areas and regional development feel responsible for the development of SMESTOs. But these towns build a very important link between metropolises and rural areas.

The explanation of the standing of smaller scale urban entities within an urban hierarchy leads back to an old theory with an economic background, called “theory of central places” by Christaller (1933). As was already mentioned in the introduction, centrality is a very important attribute for the attractiveness of small and medium sized towns.

According to Bataini et al. (2002), centrality refers to the extent of an area for personal service activities (culture, retailing, etc.) offered within a town centre. The wider the city’s expansive area, the more of a regional anchorage it has, the more service activities may develop, which in return strengthens centrality and creates a central hub.

Back to the theory of central places: Christaller analyzed economic patterns of the distribution, localisation and impact of urban settlements. He made the assumption that regions are homogenous without topographic barriers and that they are ruled by rational consumer and supplier behaviour, i.e. they try to maximise their utility considering the price of goods plus transport costs.

The suppliers try to maximise their profits by making their sales area as big as possible. The region where goods are offered has to be as extensive as possible for a break even to be achieved. Different goods and services are therefore demanded and offered within a certain space – basic goods in smaller scale centres and specialised goods and services in higher ranking centres.

Imagining these facts graphically the famous hexagons of Christaller’s theory comes to mind. Christaller’s theory has its weaknesses but the concept of centrality continues to be valid today. Two different perspectives of centrality can be identified. First, centrality can be seen from a functional perspective, which means that a centre fulfils functions for its surrounding hinterland. This spill-over of a centre’s significance for its region will be discussed further in the section of the functional roles of SMESTOs. Secondly, centrality can also be viewed from a spatial-geographic perspective. This means that a centre is situated right in the middle of a region as it can be seen in the mentioned hexagons wherein the consumers try to minimize their distances.

Analyzing current settlement structures and associated issues in regional development, the uncontrolled growth of big agglomerations has led to the well-known spatial effects of
suburbanisation. The growth in many European metropolises is already limited and SMESTOs continue to fulfil a compact structure without dispersed growth in their hinterland. Therefore the claims in regional development planning consider decentralisation policy.

Thus, central places may play an important role for settlement planning oriented towards sustainability. Smaller scale centres are supporting decentralised concentration as the sum of all transports (of persons or goods) builds a minimum. Originally only transport costs where considered but if we look closer negative externalities are involved too (of traffic etc.). Settlement structures require long term strategies and adequate concepts for densely populated areas to reduce suburbanisation. Therefore, a flexible innovative adaptation of the central place theory is required.

If we comprise strengths and weaknesses of SMESTOs within spatial and settlement development it can be seen that smaller and medium cites are on the one hand more sustainable because of their compact structure and shorter travelling distances. On the other hand some SMESTOs already show characteristics of bigger cities with inner city differentiation and the separation of functions. Suburbanisation is bound to occur in the secondary and tertiary sector (e.g. huge retailing spaces in the outskirts).

This means that the following threats are possible: Suburbanisation and “peri-urbanisation” in peripheral regions, as it is already occurring in the Alps. This can lead to a damaging instead of a stimulating relation to the hinterland and does not secure functional expansion spaces, which are ecologically important.

On the other hand SMESTOs have the opportunity to revaluate rural areas and present “the golden middle” in spatial planning, combining advantages of cities and rural areas. For this to happen, however, communities must be willing to accept inter-communal and regional cooperation. Targets are to reduce the polarisation between premium cities and the periphery, building networks of SMESTOs and reinforcing sustainable regional development.

3.4.3 The socio-demographic role of SMESTOs in Europe

The socio-demographic role of small and medium sized towns is strongly connected to other roles and functions, such as the economic and the spatial functions of SMESTOs. As pointed out before, for businesses a region’s attractiveness depends on its centrality and specialisation; likewise for private individuals looking for housing.

As these two factors increased in importance over time and reinforced competition amongst cities and regions, small and medium towns in Europe experienced a very difficult development: The structural changes in the world, driven by globalisation and the effect of tertiary specialisation, increased the competition between urbanities. During this process the
differences between big agglomerations and small and medium cities increased significantly. Some authors even speak of a de-connection of metropolises and global cities, which follow their own laws and are disconnected from national and regional levels. This process is analysed in more detail in section 5.6., the economic role of SMESTOs.

The described gap led to a heavily researched phenomenon, called urban decline, also sometimes referred to as the debate on “shrinking cities”. It occurred predominately in smaller and medium sized cities with a former industrial background.

The socio-demographic weaknesses of smaller and medium sized towns are as follows:

When centres of a lesser-scale get destabilised economically, it can lead to severe effects on their socio-demographic structure. International companies may close their plants and branches in former industrial areas of peripheral smaller scale locations, resulting in high unemployment rates. The local workforce cannot be absorbed easily by other industries, leading to a growing amount of socially disadvantaged, welfare recipients and unemployed and reinforces negative demographic and social trends.

Another consequence is that people who can leave the impacted area may move to bigger agglomerations. Predominately the loss of educated people – mobile human capital – affects smaller and medium sized towns because of a deficit of jobs, unattractive living- and working conditions, and related social disparities. This represents a vicious circle and the urban government’s ability to react is decreasing as we see in section 5.12., the “Politico-administrative role of SMESTOs”.

Small and medium sized towns often do not react to changing socio-demographic needs, such as for the growing older population, single households, and professionals without children etc.

Highly mobile people choose certain cities over others – they prefer places that are innovative, diverse and tolerant (Florida, 2002). Bigger cites can offer more opportunities to different socio-demographic groups. They have always been seen as “cauldrons of diversity and difference, fonts for creativity and innovation” (Jacobs 1969/1984).

The socio-demographic strengths of small and medium sized towns are: Besides local special resources, such as cultural values, traditions and localised know-how, there is the so-called social capital: Different aspects of community life (Putnam (2000), are still stronger established in smaller scale and in peripheral regions than in bigger agglomerations, where people are less engaged in civic groups, such as political, religious, leisure institutions. Conversely, Florida (2002), says in his book “Rise of the creative class” that these strong ties are irrelevant. Today weak ties are important because the ways in which communities create economic growth has
been transformed. A strong social capital base can easily shut out newcomers, raise barriers to entry and delay innovation.

According to these facts the following threats for small and medium sized towns -especially with an industrial background- can be derived: Social erosion and social distress will increase further as well as depopulation, aging population and growth of unemployment. On the one hand the reliance on state budget transfers will increase enormously, on the other hand the remaining local firms and administration will have limited opportunities of selecting and hiring appropriate staff. Furthermore, increased nationalist thinking, the losing of local know-how and experiences as well as traditions can be possible consequences.

This implies the need for local action in order to realise some of the following opportunities: SMESTOs should concentrate on local rather than national or global solutions and build on their endogenous potential, including the strengthening of their social and cultural networks (Bataini et al., 2002). Moreover, new public infrastructure according to the changing demographic profiles should be established, including health care centres, hospitals, schools, parks, etc., places for residents to meet

This would renew the position of SMESTOs as places providing a high quality of life with a humane living environment.

### 3.4.4 The socio-cultural role of SMESTOs in Europe

SMESTOs within Europe are very different from one another and build a highly heterogeneous group of urban entities. Their different character is not only marked by their size or their economic background. They are also marked by their built substance but also by cultural traditions and the region surrounding them. The social and economic connection of a city and its hinterland are expressed in patterns of road systems and land use.

**Strengths** of smaller and medium sized towns are their rich and diverse cultural heritage for Europe – their image reflects a change of culture and economy (Dower, 1998). SMESTOs in different regions are also seen as local innovative centres, featuring heterogeneity of people, organisations and institutions. This leads to social, technical and cultural innovations contributing not only on a regional but also national scale.

Rich in their patrimony and built natural environment SMESTOs offer a high quality of life. SMESTOs combine the advantages of country and city living and by forming a continuum between the town and surrounding landscape, they eliminate their juxtaposition. Such towns are marked by their cultural landscape, i.e. winery towns, health resorts, port towns, etc. and there are rigid personal ties and connections to these cultural landscapes. This is why in smaller and
medium sized towns people are perceived as romantic and straightforward, and the towns as cosy and comfortable.

On the other hand SMESTOs are confronted with their weaknesses of being perceived as underdeveloped places, while bigger cities are seen as places of hope, emancipation, and freedom.

In the last 50 years the vitality of many SMESTOs has been gradually disturbed due to the trend to centralisation. It came to a retreat from smaller towns.

The threats are that more and more people are leaving SMESTOs and predominantly in remote areas local cultural heritage as well as customs and traditions are vanishing.

On the other hand SMESTOs create opportunities: if they have a historically founded urbanity, they represent a bundle of societal functions in the centre of rural land. This makes it important to give value to regional products, keep local services and traditions alive, and increase the quality of the built historical heritage by reducing local traffic.

A seeking for balance between local and global means seeking for local roots. Smaller and medium sized towns are attractive if they have a historical tradition and if they provide good education, social and cultural infrastructure (Schaffer, Ruile et al., 1984).

Even shrinking cities have opportunities to reevaluate their position by reinforcing soft factors of urban development. For example the most sub-cultural music scenes emanated from cities in urban decline. Cities are the cultural expression of our society and a platform for cultural production independent of their size.

3.4.5 The role of SMESTOs according to city size, urban growth and urban hierarchies

Apart from the finding that, mainly due to globalisation and structural changes, the gap between smaller cities and metropolises is rising -on the one hand we have the effects of urban sprawl, on the other hand the phenomenon of urban decline-, the following inter-relationships of smaller towns and metropolises should be considered.

There is some reasoning for strong urbanisation, i.e. the process in which the number of people living in cities increases compared with the number of people living in rural areas. There are also reasons why there are smaller and medium sized towns on the one hand and big metropolises on the other one. These correlations are described below.
The theory of the “Primate City” says that a country’s leading city is always disproportionately large and exceptionally expressive of the national identity and feeling. The primate city is commonly at least twice as large as the next largest city and more than twice as significant (Mark Jefferson, 1939). The theory was intended to explain the phenomenon of huge cities that capture such a large proportion of a country's population as well as its economic activity. These primate cities are often, but not always, the capital cities of a country. An excellent example of a primate city is Paris, which truly represents and serves as the focus of France. Primate cities dominate the country in influence and are the national focal-point. Their sheer size and activity becomes a strong pull factor, bringing additional residents to the city and causing the primate city to become even larger and more disproportional to smaller cities in the country. However, not every country has a primate city

Another theory is so-called “Rank Size Rule” (or Zipf’s Law) which tries to explain the size of cities in a country. Zipf explained that the second and therefore smaller cities should represent a proportion of the largest city. For example, if the largest city in a country contained one million citizens, Zipf stated that the second city would contain 1/2 as many as the first, or 500,000. The third would contain 1/3 or 333,333, the fourth would house 1/4 or 250,000, and so on, with the rank of the city representing the denominator in the fraction. While some countries' urban hierarchy somewhat fits into Zipf's scheme, later geographers argued that his model should be seen as a probability model and that deviations are to be expected. It is a simple concept to explain the connection of a city’s rank by its population, without considering the spatial location of that city.

Both theories are strongly connected to Christallers “Central Places” and are important for the explanation of the “Theory of city systems”. It says that cities are interrelated subsystems in a complex hierarchy. The theory not only covers economic indicators (such as the transaction costs) but also social, demographic and geographic connections and communication and information flows.

Critics say that Europe has a big number of cities within a very close distance – this leads to weaknesses of smaller and medium sized cities, because of competition and accelerated transport making fewer cites necessary. But according to the theory of city systems it is not the physical distance between cities that counts but the hierarchical distance, indicated by the number of steps in the central place hierarchy, which is applied in most public regional planning strategies of European nations (Maier/Tödtling, 1992).

Therefore strengths and opportunities of European SMESTOs could be, interpreting Sassen (2000), the widespread growth of small cities in Europe in earlier decades, which is a strong indication of how balanced the urban system of western European nations is. It is the most balanced urban system in the world, and its difference to US American urban hierarchies is
tremendous. SMESTOs in Europe may reinforce their strengths and functions by cooperating with other cities.

But the weaknesses and threats are also evident: in Europe, when the major cities began to gain in population and experience significant economic growth. Urban sprawl, the uncontrolled growth of urban centres, poses a serious threat to the natural environment and our quality of life.

It should be noted further that differences within urban hierarchies in Europe are also immense. While the “Parisian model” shows the strong importance of a primate city, incorporating a lot more urban functions than all SMESTOs in France together, the “Rhineland model” shows a big number of large metropolises with equivalent functions, while for example in some Eastern European countries in more remote areas, SMESTOs are still the predominant city type. This shows clearly that a very careful and targeted approach has to be applied when evaluating Europe’s SMESTOs (Pumain, Rozenblatt, 1999).

3.4.6 The economic role of SMESTOs in Europe

This is a key section for understanding and describing the current roles of SMESTOs in Europe, as many other roles are closely related to the economic implications of small and medium sized cities.

As we already discussed, many smaller and particularly medium sized towns have strong roots in the secondary sector and have an industrialised past. Due to globalisation of the world economy and a shift from secondary to tertiary economic activities, many SMESTOs are in an economic downturn.

The structural changes to tertiary activities favour big cities and metropolises. Specialised financial production services have grown considerably and tend to concentrate around major urban centres. These world cities form their own production system, based on face-to-face exchanges and intensive use of urban space.

This has led to a de-connection of local activities: Many areas only have branch plant productions, which do not generate a social or civic environment attractive to professional workers. These regions often lose key private sector stakeholders (Erickcek, 2004), which is seen for example in the break-up of economic leadership: A company goes from a private-owner to foreign investors, who have no emotional binding to a certain region or city. Global enterprises are not locally rooted – they chose locations worldwide, identifying the most profitable supply networks.
Have smaller places, competing for location factors to attract global companies, a role in today’s global economy?

Glaeser (1998/2000) identifies, as mentioned before, agglomerating forces and the reduction of transaction costs as key advantages of big metropolises. The reduced transportation costs and the higher division of labour is as important as spill-overs (positive externalities) of spatial proximity. Also industrial clustering based on Porter (1990) is a well-rated concept. Another point, which Glaeser (1998/2000) as well as Florida (2002) support, is the importance of human capital, which in its heterogeneity and high-qualification can only be found in bigger agglomerations.

On the other hand, there are congesting forces, such as traffic, pollution and crime, which outweigh the advantages of metropolises. Smaller cities are often considered to be more sustainable.

Another economic problem of SMESTOs is that smaller areas have fewer resiliencies against economic down-turns and plant closings or major-downsizing. A private leadership pool disappears and smaller cities lack economic capacity to weather shutdown or closings of major employers. They not only lack growth facilitating amenities especially for professional workers (e.g. cultural entities such as theatres, major sport leagues etc.) but they lack also a manufacturing heritage of tolerance and diversity – much different from the breadth of production base and capital mobility in metropolises.

As much as the concept of centrality is important, specialisation is another instrumental against economic downturn, representing opportunities for SMESTOs:

Specific resources have the capacity to attract investments. SMESTOs and their government should try to be different and reinforce high-value added economic activities (Bataini et al., 2002). The city size alone does not matter – the problem is often a lack of an economic structure and networks.

Corporate research centres can be a key to growth, as well as universities (which smaller cities are less likely to have; however, 2 of Europe’s 3 best rated universities are in smaller towns, Cambrige and Oxford) – a dense intellectual infrastructure can lead to knowledge spill-overs.

But this is not the only necessity: As their location is vulnerable, SMESTOs have to concentrate on local potentials and ideas. Only a local innovation scheme can lead to local innovation and find ways to stimulate the locally rooted economy (Lang, 2004). This is not about clustering but about diversification and entrepreneurial innovation.
Innovation and specialisation pose threats to small and medium sized towns:

These aspects alone reinforce selected industries, which may not be in demand in the future and a mono-structural imprinted infrastructure may be useless. There is the danger that this will hinder innovation of foreign investors and not support them. Specialisation of a limited number of production branches could create an obstacle concerning the adaptation to the new economic environment. An over specialised city is vulnerable to the idea of territorial and urban competition.

Rather, it is important to support existing urban milieus and infrastructure and to establish networks within rural areas. Urban socio-economic regeneration, re-gaining of economic activity and the restoration of functions (economically, socially, environmental) is a key to a diversified, differentiated development of SMESTOs. Together, a city and its’ hinterland can strengthen each other, provide highly specialized employment and build a regionally functional entity, as for example in rural development poles.

According to Erickcek (2004) there are economic challenges for small cities: Out-of-date infrastructure, dependence on traditional industry, obsolete human capital base, declining regional competitiveness, weakened civic infrastructure and capacity, as well as limited access to resources.

3.4.7 The role of SMESTOs from a functional perspective

When the spatial and settlement role of SMESTOs was discussed, we analyzed the centrality from a geographic perspective. In this section the role of SMESTOs will be looked at from a functional perspective, including the concept of centrality.

The role of small and medium sized towns is determined by service flows stimulated by higher ranking centres. This should create impulses for growth of rural areas from up to down and global integration from periphery to the centre.

According to Elsasser (1998) and other authors SMESTOs fulfil the following functions:

- Supply function – this means the provision of a region’s population with necessary goods and services.
- Labour market function – whereby an aim is to keep small structures and renew local economic entities.
- Housing function – which corresponds to the provision of sufficient habitat and building grounds.
Cultural functions – which include leisure and tourism. They can be reinforced by city marketing and branding.

Concerning the supply function Winkel (2001), Elsasser (1998) argue that these functions shall secure the existence of rural areas. From a functional perspective, centrality describes a surplus or spill-over of functions and tasks of towns, enriching their region and hinterland.

As there are new tendencies in the tertiary sector, central places lose importance because metropolises absorb functions from smaller and medium sized cities. Due to suburbanisation and the diversion of functions and in order to ensure a minimum supply of goods and services for remote areas, a redevelopment of the central place theory is necessary. Supply networks for the rural hinterland have to be reestablished. Some SMESTOs were able to ameliorate their position within urban hierarchies, others have lost influence as central places. There is the danger of increasing retailing structures in the grasslands. It is crucial, to preserve the city centre as an important modern and attractive place.

The labour market function has to cope with considerable problems within many SMESTOs. These towns often date back to the middle ages followed by a strong industrial phase. Because of the growth of the tertiary sector in metropolises and a highly mobile population as well as new forms of employment, smaller centres are suffering job losses. Moreover there is more office space available in big agglomerations and the number of commuters is increasing.

The housing function in SMESTOs plays an important role to avoid suburbanisation. Therefore enough apartments and building ground has to be provided.

Because of a growing separation of housing and employment functions (horizontal division), mobility gets more important.

That is why Hofmeister (1999) identified the functions described above also as transport functions of SMESTOs. Furthermore he listed administrative and special functions depending on regional characteristics.

In the post-modern city cultural functions such as leisure, tourism etc. show also increasing significance. In order to remain competitive, cities need to work on their image. By city branding and city marketing a growing number of places are transforming their ad hoc economic campaigns into sophisticated marketing strategies, designed to build tourism and attract outside investors. By creating a strong identity, they target specific buyers and make places more suitable.
Place marketing and branding are relatively new – hereby it is difficult to develop a brand that convinces everyone – from local citizen to potential foreign investors. City types are shifting and SMESTOs are searching for new roles and identities (Smidt-Jensen, 2004).

SMESTOs are strongly influenced by external development; their population as well as the local government have few influences on most of these changing variables. On the other hand there are possibilities to ameliorate the functional base of small and medium sized towns:

Supporting the local economy, sensitive urban planning, adequate traffic and environmental policy, improving housing, improving leisure and cultural offers and reinforcing regional cooperation are only some measures to be named.

According to Bataini et al. (2002) medium sized towns with an industrial background but also SMESTOs in general have the following functions:

- **Institution-objectification function** which views the city as a social system and claims to institutionalise codes and rules of a city.
- **Anchorage in built up area function** which signifies the relationship of a city with its surrounding space.
- **Symbolisation function** which argues that cities have a symbolic dimension, an urban culture, which is shaping the image of a town.
- **Productive combination function** which views the city as a place with a sectorial logic: Various services such as communication, marketing, advertising etc. are linked to several sectors. As for the relations between players, it appears that a degree of redundancy in cities creates the possibility of choosing partners.

### 3.4.8 The role of SMESTOs from a regional, national and European perspective

In this short section the role of small and medium sized towns shall be described in a typical ESPON typology. The role of SMESTOs at a regional, national and European level was already partly described in earlier sections but will now be discussed in further detail.

**Regional perspective**

SMESTOs are important regional intermediaries between rural areas and large-scale cities. They build centres of urban hierarchies and supply specialised services to companies and urban services to the region’s population. Its specific resources have the capacity to attract investments. As it was analyzed within the theory of central places, SMESTOs fulfil a supply
function and build relations to their hinterlands. They furthermore help establish a regional identity.

SMESTOS as cultural aggregations are a mirror of society and the cultural landscapes in a state of transformation. Moreover, they represent spiritual and intellectual centres of regions. Regional city types are determined by historical-genetically, architectonical, built and other criteria.

Comprising these facts, the regional context is very important for evaluating the role of small and medium sized towns. If specific functions can be bundled in appropriate towns, it can lead to impulses for a whole region.

**National perspective**

SMESTOs are marking any national urban system – they are at least potential locomotives within the development of national area. This point is even more valid in times of globalisation and global structural and economic changes. Big metropolises of European countries are already disconnected from the national level and operate almost separately from national markets. SMESTOs have an important role to avoid that national urban hierarchies become disintegrated. They provide soft factors for urban development and present development reserves for metropolises with their growth constraints. SMESTOs may hence impulses on a national level.

**European perspective**

On a European level it is a predominant aim of regional development to conserve a polycentric urban structure. As Europe still has a balanced urban system compared to other regions in the world, the concept of polycentrality has a high significance in European regional policy. In order to maintain a system of decentralized urban concentration, modern urban networks have to be spawned. Within these networks SMESTOs play a major role in preventing urban sprawl and in showing suburbanisation processes of Europe’s big cities and metropolises.

### 3.4.9 The role of SMESTOs according to their accessibility

Small and medium sized towns in Europe are a highly heterogenous group of urban entities. They are not only differentiated by their size and historical or economical backgrounds, they also differ tremendously in their spatial location. This section analyzes whether there are different roles of SMESTOs depending on how accessible they are.
The three main differences of these roles are:

- **SMESTOs in the catchments of densely populated areas and agglomerations**
- **SMESTOs in regions dominated by medium sized cities and with a good connection to European traffic networks**
- **SMESTOs in remote and peripheral areas**

The strengths and weaknesses as well as threats and opportunities within these three different roles are discussed below:

- **SMESTOs in the catchments of densely populated areas and agglomerations**

At a time, where polycentric development is commanded by European regional development, small and mainly medium sized towns represent an important development reserve for urban development. They are places where an alternative and attractive lifestyle could be realised and their strengthening could reduce traffic and other problems of big metropolises – although there is a trade-off between decentralisation and the reduction of traffic.

*Kroner and Pinning (1984)* argue that small and medium sized cities at the entrance of agglomeration regions fulfil absorption and release functions for big metropolises as their growth and development potential is also limited.

*Perlik (1984)* says that there are differences in the value added between the cities and rural areas. The scenarios of SMESTOs near agglomerations can differ: These cities may be incorporated in the agglomeration sooner or later, or lose their significance totally. Another possibility would be that they are restructured as local centres, allowing them to remain in the urban hierarchy.

- **SMESTOs in regions dominated by medium sized cities and with a good connection to European traffic networks**

These towns may profit from inner- and intraregional migration from rural areas. If they are centrally located they are at an advantage, because many SMESTOs fulfil the advantages of agglomerations without their negative aspects. This type of SMESTO can bring new impulses to rural spatial development.

*Gatzweiler (1993)* on the other hand argues that centralisation weakens the role of SMESTOs whether they are located in the periphery or not. Therefore it is important to find economic niches and foster specialisation, which can be difficult and risky. These towns can only keep their place in the urban hierarchies with political support and esteem by society.

Likewise, *Pumain (1999)* argues that small and medium sized centres require political support with consideration of the complementarities between cities and their hinterland. Rural areas
should be revaluated with a focus on building own networks of SMESTOs, also referred to as horizontal cooperation. The influence of big agglomerations should be reduced.

**SMESTOs in remote and peripheral areas**

Remote areas need alternative concepts of development – they often lack integrated strategies of social and economic regeneration due to their new place on the periphery in a global context. Especially in the periphery, SMESTOs tend to lose their importance. They fulfil only a minimum of supply functions for their region (administration, education, health etc.), but only with a certain economic size these functions can be properly realised.

Bätzing (1999) argues that the relationship between agglomerations and peripheral SMESTOs has changed. Stating the example of alpine regions he claims that alpine regions have been transformed into suburbs and are no longer central places. He also criticizes the suburbanisation of the European transit axis developing along a long line. Per urbanisation, the transformation of remote areas into housing regions of centrally agglomerated regions, is another major problem.

The image of peripheral regions – especially the Alps- no longer represents an isolated development – a consensus has to be established on the maintenance of structures and functions of SMESTOs.

**3.4.10 The role of SMESTOs in Europe from an urbanistic perspective**

The regional urban development of SMESTOs from an outside perspective, was already discussed when we analyzed spatial and settlement structures. This section deals with the inner development of small and medium sized towns and their respective roles.

The concept of centrality is also important from an inner development point of view. The goal is to halt dispersed urban growth, to preserve ecological recreation spaces; providing safe and efficient public transport systems, etc. It implies a focus on the specific attractiveness and the reinforcement of an inner city’s economic power.

Tagliaventi (1999), who focuses mainly on Mediterranean cities, argues that cities are fragile. Therefore it is necessary to preserve traditional urban spaces and to enrich them. He further says that SMESTOs are desperately seeking a new model of sustainable development. Despite their difficult position in terms of budget control, urban renaissance is a true option. That includes the reconstruction and conservation of historic centres and further means generating new local small businesses.

Preserving and developing small commercial units in town goes hand in hand with maintaining a significant residential presence in the city centre. The increasing problems of traffic and
congestion and public transport are the main urbanistic **weaknesses** within small and medium sized towns. The creation of pedestrian areas is one possible measure to improve the living conditions in such towns.

Another weakness is that the rise of the tertiary sector and its selective demand can not resolve the built and functional deficits in the city centre. Retailing and other industries are continuously heading toward peripheral zones of the city. This leads to built-spatial and also social erosion within SMESTOs.

Concerning the urbanistic **strengths** of SMESTOs it can be stated that these towns have a historically founded urbanity and a density of societal functions. According to Krejs (1999,) SMESTOs have also similar functions as metropolises despite their different character. According to him, the success of SMESTOs depends on preserving historical heritage and letting in new influences at the same time. Further, it is important to also set an architectural focus outside the city centre. To avoid uncontrolled growth it is necessary to revitalise desolate and monotone urban milieus and run a dialog between the old and the new.

**Threats** are the loss of importance of manifold industries leading to new functional laws within the city. The core density disappears and the centre becomes stripped of its importance. This horizontal functional broadening results in a separation between housing and working making new mobility necessary.

Sometimes the shrinking of cities is seen as an opportunity. This is not realistic, however, because the phenomenon leads to the emptiness of city centres and the uncontrolled growth of new buildings in outer areas. A shrinking population and a reduced economic infrastructure has lead to abandoned places which are un- or underutilized. This raises the question of the future of public spaces and how to avoid public life taking place in shopping malls in small cities .

**Opportunities** concerning the urbanistic role of SMESTOs are the following:

Increasing the density of the urban fabric, using environmental concern to recreate mixed cities and to avoid mono-functional ones.

The rehabilitation process of the city centre goes hand in hand with large-scale problem resolving strategies in inner city areas (Leimbrock, 1992). A problem herby is the existence of strongly delineated communal borders.

For SMESTOs urban rehabilitation is more important than for metropolises. It means carefully modifying inner city market processes. Thereby a dependence on private investors with special, sometimes short-time interest, is prevailing. However, long-term protection is necessary in order to secure systematic communal planning of supply functions.
3.4.11 The role of SMESTOs in interdependence with Metropolises

As mentioned above, many functions of SMESTOs have been taken over by metropolises. Due to globalisation mainly SMESTOs with an industrial tradition were affected.

On the other hand, within a regional production system, the various cities have various roles to play. Specialised services must be supplied and places of interaction must be provided. Within this system it is important to stand out and be different from other urban entities.

SMESTOs are not reduced metropolises: it is impossible to imitate large-scale actions of large-scale cities. The aim must be to strengthen positive aspects of each small and medium sized town and to develop appropriate urban actions within the available cultural and economic resources to increase their strategic position.

If smaller and mainly medium sized centres are to play an eminent role at national levels, it is counterproductive to follow the direction of metropolises. In an urban system each urban type has its functions and is interdependent with others.

Agglomerations, on the one hand, need SMESTOs in order to compete on an international scale. Their competitiveness is based on having access to efficient networks; for that the whole city and its settlement network is important.

SMESTOs, on the other hand, need metropolises: although agglomerations are growth centres, SMESTOS while being situated on a lower level of the central place structure are parts of a connected urban system.

The SMESTOs’ significance in urban networks depends also on their rural hinterlands, which is most evident in the case of (potential) rural development poles.

3.4.12 The role of SMESTOs from a politico-administrative perspective

Cities are political decision centres with the concentrated power of decision makers. This is mainly valid for big agglomerations. Smaller areas are at a disadvantage in their ability to apply adequate policies to reshape their economies.

Local governments of smaller and medium sized towns, which are affected by globalisation, structural change and urban decline, have difficulties in managing them. Local governments have fewer financial resources at their disposal to deal with the issues of depopulation, the closing of important industries, unemployment, etc.. Therefore the following weaknesses are apparent in local governance of SMESTOs:
If urban institutions are affected by urban decline, public institutions frequently take the role of private actors, but their financial situation does not allow public institutions to intervene adequately. Funds coming from government are often insufficient and to obtain additional funding is generally very difficult.

As a consequence it is hard for local governments to maintain the basic supply of functions and the provision of basic goods and services, as a minimum of economic resources is necessary to maintain the infrastructure, the health and educational system etc. But exactly these are vital for smaller and medium sized towns.

Another problem is the type of governance in smaller urbanities. Governance is the method of regulation between public and private urban actors. In many SMESTOs a type of governance is predominant, which is oriented on exogenous development strategies. That type of governance makes it difficult to launch projects or new initiatives that require selectivity and innovation.

Another issues with local governance are that small cities have a centralised economy with a federalist political administration lacking local lobbying groups.

Contrarily to these weaknesses, local policy and administration show a few strengths: Decision making processes are more manageable and faster. The proximity to citizens is very close – therefore participation processes can be facilitated much easier.

The threats of local governance of SMESTOs include a further deterioration of already described negative circumstances. Besides external factors endangering their situation, a main threat is their acting uncooperatively and on a wrongly geared competitive basis.

There are a lot of opportunities for local policy and administration systems to develop both potential and necessary measures:

Smaller and medium sized towns should aim to have a voice – programs of lobbying and opinion forming are helpful. City marketing and city branding (already discussed) are possible means.

In the future local governance must develop new spatial regulation models, including new territorial frameworks for action at local and regional levels within self-organising processes. In addition, new partnership patterns between the public and the private sector have to be established.
Quevit and van Doren (2000), outline the following governance initiatives for medium sized cities in decline:

- **Burying the past** – decisive resources of the past are no longer necessarily those that make it possible to set up new projects.

- **Subsidiary actions**: This describes a situative type of public intervention. Local government accompanies private initiatives to re-launch local development and to help mobilise resources of all local actors.

- **The role of a city** can be defined by its resources but also in relation to the urban systems to which it belongs.

- **Development** must act in a partnership-oriented manner – for the benefit of the community. This is based on differentiation from other regions rather than on conformity.

- **To take on own identity** among others and develop coherent strategies and projects using characteristics of the local context.

### 3.5 Conclusion

To summarize this literature review it has to be stated that identifying roles and functions of Europe’s small and medium sized towns is a difficult task. Hardly any up-to-date research exists on SMESTOs – unique sources are case studies, often conducted in countries where smaller urban units are predominant (e.g. Switzerland). Information about roles have to be derived from general findings about urban development in Europe.

Nevertheless, an attempt was made to give a broad overview of existing tendencies concerning roles of SMESTOs in Europe. To that end, the available European literature (but also some from other countries) was scanned with an aim to give a balanced factual view.

Common findings are not repeated here as they are presented in a quite compact form within this paper. It should be stated, however, that current roles of SMESTOs are strongly influenced by socio-economical tendencies such as globalisation, the rise of the tertiary sector and ensuing structural changes. Therefore many of these towns are losing in importance and have to fight problems like urban decline.

Key words for revitalising SMESTOs are **centrality** and **diversified specialisation** of local economies. Urban and socio-economic regeneration goes hand in hand with the re-growth of economic activity. This can further lead to the restoration of social functions and of the town’s
environmental quality in order to strengthen the strategic position of SMESTOs. If we look closer at these measures, they fulfil exactly what the sustainable city movement is demanding.

We can deduce that SMESTOs have the potential to be sustainable cities, but only if urban networks are developed between these smaller urbanities and also among them and the larger metropolises. In other words, a key factor for the future existence of SMESTOs is cooperation and new and more efficient types of governance and urban policy. In this context the future of SMSTOs does not only depend on national governments who have to provide an adequate legal framework for SMESTOs but also on supranational institutions such as the European Union, who play a decisive role in determining regional and urban development in Europe.
References


4. CASE STUDIES

4.1 Introduction

The work so far within the SMESTOs project has been to collect as much information as possible on the following issues:

Definition of small and medium sized towns – i.e. the major task of WP 1.

Analysis of the role of small and medium sized towns in spatial development – i.e. the first preparatory task within WP 2 which consisted in a first literature review on the topic.

Based upon these findings the Terms of Reference of the project (ToR) state the following next working steps to be envisaged (own emphasis):

“Having defined small and medium sized towns, their role in spatial development needs to be further analysed. The role might differ regarding the geographical context of a town (being linked with a big city or part of a functional cluster of towns or the only town in a region), the economic performance, the function and size a town has or other aspects such as accessibility or socio-economic specialisation in a certain sector.

For this analysis of roles, the 3-Level-Approach developed by ESPON should be applied, i.e. the analysis should differentiate roles in spatial development regarding (a) regional, (b) national/ trans – national, and (c) European context. At present for each geographical context various working hypothesis (!) can be identified, such as cities as motors for regional development, or the importance of second tier cities in national urban systems etc. The main hypotheses in the field should be identified and assessed when analysing the role of small and medium sized cities. The analysis should be based on literature studies as well as on case studies (!) and possibly statistical and spatial analysis. With regard to the decisive role of the national context it is considered important to not only review literature available in English, but also other national literature for selected countries. Certainly, the analysis as well as the selection of suitable case studies need to reflect the European diversity in the field.

The analysis should also pay attention to existing spatial typologies and assess whether the role of cities differs in different types of areas. For this purpose the typologies provided by other ESPON projects should be taken into account, such as functional urban areas, rural-urban distinction, accessibility etc. Furthermore, typologies widely used in the field of European spatial policies should be employed, such as mountain areas, island, coastal areas, areas eligible for different types of Structural Funds support etc.”
As could be seen the role of the case studies to be conducted is just roughly defined as identifying and assessing the working hypothesis on roles of SMESTOs. In our tender document we have tried to specify the aim of the case studies more precisely:

The objective of the conducting of the case studies will be:

- to deepen the insight in the potentials and challenges for SMESTOs in the ESPON space
- to test the feasibility of the proposed working hypothesis and definitions (together with the identification of possible additional ones)
- to enrich the abstract analysis with vivid images of concrete towns and their regions

The case studies will try to capture a widespread variety of regional cases and also to be able to cover a great variety of European historic and cultural backgrounds – though of course no full coverage can be provided.

Following all these intentions we have provided this preparatory document which simply states the working hypothesis we have identified so far based upon the findings of our literature studies on the roles of SMESTOs. Together with information from the definition of SMESTOS, we have then tried to translate these hypothesis into selection criteria for the case studies. This means we set up combinations of these criteria and allocate them to the single case study countries. The final selection of which region(s) and case study cities to choose was made by the TPG in the workshop in Stockholm on the basis of suggestions from each country expert.

### 4.1.1 First working hypothesis on the roles of SMESTOs in spatial development

The following list of hypothesis is based upon a thorough literature review on the topic. Generally it has to be stated that the roles of small and medium sized cities are hardly referred to explicitly. Therefore the literature body of urban research had to be analysed as well.

It is clear however that this list of working hypothesis will be far from complete and thus this list will have to be discussed and maybe completed during the rest of the case study phase.

The terms small and medium sized town are rarely used within a political or scientific context. Neither in German speaking countries nor in other European countries these terms are very common. The term small urban area or small agglomeration is commonly used, other distinctions are only made for large scale cities, such as the terms metropolis, megalopolis or global cities.
In order to follow the suggestion from the ToR, we clustered the following hypothesis along the ESPON 3-level approach (regional/national; trans-national/European).

4.1.2 Regional context

Hypothesis 1
The success of regional development is based on a combination of exogenous and endogenous factors. This is even more valid for SMESTOs as their attractiveness depends on the capacity of the production system to generate specific resources and new activities to establish an interface with the exterior. Cities are the places where personal and industrial services develop, reinforcing centrality and specialisation. SMESTOs are rather struggling with the aspect of specialisation due to the relative disadvantage compared with larger cities.

Hypothesis 2
SMESTOs are more dominantly determined by exogenous factors (e.g. regional decline, urban systems in the vicinity, regional attractiveness) than by endogenous factors (e.g. urban planning, cultural heritage conservation).

Hypothesis 3
SMESTOs (in an exogenously determined setting of regional decline) are to be affected most by the “shrinking cities” phenomenon – followed by social problems (de-population, ageing population, unemployment).

Hypothesis 4
Rich in built patrimony and natural environment, SMESTOs offer a high quality of life. SMESTOs combine the advantages of land and city, eliminating its contradictions. Towns and landscape can often still be seen as a unit and SMESTOs are the ecological continuum of the landscape. These towns are marked by its landscape (cultural landscape – vinery towns, health resorts, etc.) and there are rigid personal ties and connections to these cultural landscapes.

Hypothesis 5
An economic problem of SMESTOs is that small areas have fewer resiliencies against economic down-turns and plant closings or major-downsizing. A private leadership pool disappears and smaller cities lack economic capacity to weather shutdown or closings of major employers. They not only lack growth facilitating amenities especially for professional workers (e.g. cultural entities such as theatres, major sport leagues etc.) but they lack also a manufacturing heritage of tolerance and diversity – apart from the breadth of production base and capital mobility in metropolises.
Hypothesis 6
Innovation and specialisation alone pose threats to small and medium size towns. These aspects alone reinforce selected industries, which may not be demanded in the future and a mono-structural imprinted infrastructure may be useless. There is the danger that this will hinder innovation of foreign investors and not support them. Specialisation to a limited number of production branches could create hazards concerning adaptation to new economic environment. An over specialised city is vulnerable to the idea of territorial and urban competition and is non-diversified.

Hypothesis 7
SMESTOs can be successful when finding production niches (Porter theory) embedded in an innovation scheme which enforces the advantages of low transaction costs and thus facilitates knowledge spill-over. On the other hand it outweighs the potential disadvantages of a lack of growth facilitating amenities.

Hypothesis 8
SMESTOs face the following economic challenges: Out-of-date infrastructure, dependence on traditional industry, obsolete human capital base, declining regional competitiveness, weakened civic infrastructure and capacity, limited access to resources.

Hypothesis 9
SMESTOs show generally a mix of the following basic functions:
- Supply function – this means the provision of a regions population with necessary goods and services.
- Labour market function whereby an aim is to keep small structures and renew local economic entities.
- Housing function which corresponds with the provision of enough habitat and building grounds.
- Cultural functions which include leisure and tourism. They can be reinforced by city marketing and branding.

Hypothesis 10
SMESTOs are (either loosing or) gaining attractiveness if the following circumstances hold true:
- SMESTOs being embedded in agglomerations with raising economic performance (preferably service oriented) – especially the housing and supply functions will dominate
- SMESTOs being embedded in a rural spatial context with raising economic performance (e.g. through specialisation) – the labour market function and cultural function will dominate
**Hypothesis 11**
In SMESTOs cultural functions such as leisure, tourism etc. show increasing significance. In order to be competitive, cities need to show their best face. By city branding and city marketing tourism shall be supported and outside investors should be attracted. City types are shifting and SMESTOs are searching for new roles and identities.

**Hypothesis 12**
Mainly in the periphery SMESTOs loose their importance. They fulfil only a minimum of supply functions for its region (administration, education, health etc.) but only at a certain economic size these functions can be realized.

**Hypothesis 13**
Local governments of smaller and medium size towns are more likely affected by globalisation, structural change and urban decline – as a consequence it is difficult for local governments to maintain the basic supply of functions and the provision with basic goods and services, as a minimum of economic resources is necessary to maintain infrastructure, health systems.

**Hypothesis 14**
In respect of governance SMESTOs show the following advantages: On the one hand decision processes are more manageable and faster. On the other hand the proximity to citizens is very close – therefore participation processes could be facilitated.

**4.1.3 National/trans-national context**

**Hypothesis 15**
SMESTOS are incorporating an “optimum size” – i.e. a balance between the negative externalities of agglomerations (pollution, security, isolation) and the positive externalities of cities (low transaction costs, innovation spillovers)

**Hypothesis 16**
SMESTOs are more prone to a “brain drain” of the workforce (to be expressed by the amount of highly qualified jobs within its region) than bigger cities.

**Hypothesis 16a**
On the other hand SMESTOs are more likely the residential area of persons with higher household incomes (especially in SMESTOs located in larger agglomerations and/or in rural SMESTOs).
Hypothesis 17
The exogenous setting determines also the socio-demographic character of SMESTOs:

- SMESTOs in agglomeration areas are characterised by weak social ties and weak local identification with the SMESTO by their inhabitants – “Sleeping Towns”
- Rural SMESTOs are characterized by strong social ties of their inhabitants – leading to social networks.

Hypothesis 18
SMESTOs in different regions are also seen as local innovative centres, with heterogeneity of people, organisations and institutions, which leads to social, technical and cultural innovations contributing not only on a regional but also national scale.

Hypothesis 20
Small and medium cities at the entrance of agglomeration regions fulfil absorption and release functions for big metropolises as their growth and development potential is also limited.

Hypothesis 21
The relation between agglomerations and peripheral SMESTOs has changed. The suburbanisation of European transit axis has developed in long line. Periurbanisation – i.e. the transformation of remote areas into housing regions of centrally agglomerated regions, is the ultimate result.

4.1.4 EU-context

Hypothesis 22
SMESTOs are increasingly confronted with competition between cities of their own size but also with bigger urban units within specific roles (e.g. culture, tourism). This competition is partly sought for actively and successfully.

Hypothesis 23
Smaller and medium sized towns present a rich and diverse cultural heritage for Europe.

Hypothesis 24
Europe has a big number of cities in a very close distance – this leads to weaknesses of smaller and medium cities, because of competition and accelerating transport makes fewer cites necessary.

Hypothesis 24a
But according to the theory of city systems it is not the physical distance between cites that counts but the hierarchical distance, indicated by the number of steps on the central place hierarchy, which is introduced in the most public regional planning strategies of European nations.
Hypothesis 25
SMESTOs are the most vital part of the European urban system – thus supporting and enforcing the European metropolises – to be seen in the strong inter-linkages (exchange of labour and goods).

Hypothesis 25a
SMESTOs are endangered to be dominated by the tier one cities of Europe – to be seen in loosing functions (administrational, social) and economic power.

Hypothesis 26
SMESTOs show an increasing willingness and self-organisation to set up international networks and enforce political lobbying in order to strengthen their position vis-à-vis the metropolitan areas.

4.1.5 Outline for selection of Case Study areas

Following the list of working hypothesis the next analytical step has been to translate these hypothesis into a criteria set which will allow for an identification of the case studies to be conducted with the aim of testing the feasibility of the proposed working hypothesis. It will – of course – not be necessary to test all of those hypothesis within a single case study. – In other words the list of hypothesis will be just an information basis for the single country expert to gather some general orientation.

When setting up the criteria for case study selection we had to face the problem which has been briefly mentioned in the section before: the selection and the amount of criteria will be following the trade-off between complexity and practicability:

- If we try to picture the whole complexity of the roles and functions of SMESTOs by setting up numerous criteria trying to describe as many aspects as possible – we will end up with an amount of different classes of SMESTOs which will be difficult to handle: on the one hand the amount of case studies is rather limited and we would therefore have the problem to conduct case studies for all of the classes identified. On the other hand the ultimate goal of the project at hand is to set up typologies of SMESTOs which should then be used in a larger thematic ESPON project. Thus our intention should be primarily to identify criteria and characteristics of SMESTOs which will be able to classify them in an operational and in a political context practicable way, which calls for a rather simple easily reproducible classification.

- If we reduce the complexity of the picture of SMESTOs too much we will end up in a set of criteria which will not allow for any differentiation between the single SMESTOs – or even worse – between SMESTOs and bigger cities.
In order to guarantee a broad coverage of different types of regions with SMESTOs project following criteria were chosen in order to finally select the case study area.

<table>
<thead>
<tr>
<th>Size (pop)</th>
<th>Dominant socio-economic orientation</th>
<th>NUTS level/ SF classification</th>
<th>Morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small town (roughly &lt; 70 000) (A)</td>
<td>Industries (C)</td>
<td>II/objective 1 (E)</td>
<td>Region dominated by one urban centre (G)</td>
</tr>
<tr>
<td>Medium sized town (roughly 70-150,000) (B)</td>
<td>Services, administrative centre (D)</td>
<td>III/other/no objective area (F)</td>
<td>Region with two or more urban centres of similar size/rural area (H)</td>
</tr>
</tbody>
</table>

Therefore a combination of the four mentioned criteria will be necessary to select the two case study cities per country represented by the TPG: Austria, Germany, Spain, France, Hungary, Italy, Poland and Sweden. The result is shown in the table and in the map below.

<table>
<thead>
<tr>
<th>Size (pop)</th>
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<th>NUTS level/ SF classification</th>
<th>Morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small town</td>
<td>Industries</td>
<td>II/objective 1</td>
<td>Region dominated by one urban centre</td>
</tr>
<tr>
<td>– Vic (ESP)</td>
<td>– Vic (ESP)</td>
<td>– Mielec, Rzeszów (PL)</td>
<td>– Lleida (ESP) – isolated</td>
</tr>
<tr>
<td>– Carpi (IT)</td>
<td>– Carpi (IT)</td>
<td>– Sollefteå, Örnsköldsvik (SWE)</td>
<td>– Saumur, Győr (HU)</td>
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<tr>
<td>– Saumur (FR)</td>
<td>– Laval (FR)</td>
<td>– Sárvár, Győr (HU)</td>
<td>– Mielec, Rzeszów (PL) – Sollefteå (SWE) – isolated</td>
</tr>
<tr>
<td>– Mielec (PL)</td>
<td>– Mielec (PL)</td>
<td>– Hallein (AUT)</td>
<td>– Salzburg, Hallein (AUT) – Witten, Herdecke (GER)</td>
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<tr>
<td>– Sollefteå (SWE)</td>
<td>– Örnsköldsvik (SWE)</td>
<td>– Witten, Herdecke (GER)</td>
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<td>– Salzburg (AUT)</td>
<td>– Salzburg, Hallein (AUT) – Witten, Herdecke (GER)</td>
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<table>
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<th>Medium sized towns</th>
<th>Services, administrative centre</th>
<th>III/other/no objective area</th>
<th>Region &gt;2 urban centres of similar size</th>
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</table>

Please note that this criterion should rely on the classifications used within your country – therefore the figures mentioned should be seen as rough orientations.

This classification is up to expert knowledge – please justify your decisions.
4.2 Case Study template

The objective of the case study work is

- to support to find typologies of the regions regarding small and medium sized towns on the NUTS 3 or 2 level
- to deepen the insight into the specific potentials and challenges of SMESTOs
- to enrich the abstract analysis and inquiry with vivid images and concrete towns and their regions

Purpose of the case study template is to gather more detailed information about the functions and roles of small and medium-sized towns within the selected regions. Therefore the template consists of three sections, a descriptive, an analytical and a policy section. Furthermore we would like to collect photos, maps or film material available for the case study region in order to have enough demonstration material for our reports and presentations.

Please note that the working hypothesis listed in the section above shall be seen as background which sets the content which should be found within the sections of this case study report. I.e. it will not be necessary to deal with specific hypothesis in the case study elaboration but take care to touch the contents dealt with in the list of hypothesis.

Therefore for each case study city the following three sections will have to be completed. The overall length of the single case study should not be more than 15-20 pages.

4.2.1 Descriptive section

Please provide qualitative statements about your case study SMESTO on

- Geographic position 0,5 pages
  Please describe the position of the region in a wider perspective (regional, national, European)? Location: border/gateway cities, port cities, …. and its specific features (e.g. accessibility and main transport infrastructure, etc).

- Pattern of urbanisation 1 page
  - Urbanisation process/level
    Please describe the history, city sizes, hierarchies, patterns (like spatial polarisation, functional specialisations,…).
  - (Poly)centricity of the region 1 page
    Polycentricity consists of two dimensions which are described below:
    - morphological dimension
      Description of the city structure – the observation of a system of cities in a region
implies the observation of several nodes and centres. The urban pattern can be strongly or weakly hierarchical whereby the two extreme patterns are mono-nuclear pattern (one dominant city and several peripheral/dependant cities) and poly-nuclear pattern (no dominant city, cities with similar size).

How far are sustainable settlement development or sub-urbanisation topics within your region.

– relational dimension

Relations are regarded as flows or co-operations going on in different ways between centres. The two extreme patterns of relations which can be identified are mono-oriented (relations are preferentially oriented towards one centre) and poly-oriented (relations have no obvious orientation).

Please describe as far as possible the situation within your region with respect to this topic.

For both dimension (morphological and relational) a differentiation should be made between different spatial scales like regional, national, European because with the different view-points the pattern may change.

Historic and recent developments 0,5 page

Which kind of background and recent developments are going on in the region and the individual SMESTO? – N.B.: note especially the contents mentioned in the hypothesis.

Roles and functions 5 pages

Please describe qualitatively the following roles of the case study SMESTO – i.e. describe briefly the current situation and rate its relative importance in respect of determining the overall situation of the SMESTO at hand.

As starting point describe briefly the socio-demographic, economic structure and performance of the surrounding region (NUTS II or III). Then give short statements on the SMESTO itself:

Socio-demographic role (population development, brain drain, ageing population, social exclusion, know-how, culture,....)

Role of SMESTOs in relation to urban growth – i.e. are there urban sprawl phenomena within the SMESTO & is there an urban system nearby influencing with its growth the SMESTO

Functions of the individual SMESTOs within the surrounding region and beyond (national/European) – within the following functional dimensions

- Supply functions, labour market function, housing
- Socio-cultural dimension: high quality of life, cultural offers
- Accessibility – transportation node
- Political-administrative function
- Socio-economic structure and performance
Please describe specific know-how or resources, structural changes (within the SMESTO and its hinterland), unemployment and GDP developments (also compared to national level), dependencies of specific sectors, specialisations, FDI & public support (e.g. EU and/or national funds acquired)

Intra-regional social disparities, tourism, role of universities and other educational institutions

As a summary of this section please set up a **SWOT** (Strength/Weaknesses; Opportunities/Threats) analysis of region and individual SMESTO!

Please look in the annex where the typologies developed within the ESPON 1.1.1 (the role, specific situation and potentials of urban areas as nodes in a polycentric development) and 1.1.2 (urban rural relations in Europe) are described and mapped. Please reflect on them from your case study region’s point of view.

### 4.2.2 Analytical section

Rather than actually characterising the cases statistically, the aim with the analytical section is to define the different ways in which the SMESTOs can be approached quantitatively.

In a first phase, we would like to consider the following four categories:

- 1 – Administrative area (e.g. urban municipality)
- 2 – Continuous settlement area (e.g. area with group of houses with less than 200 m between them and more than 2000 inhabitants or possibly areas dedicated to urban functions according to zoning regulations)
- 3 – Functional Urban Area (e.g. commuting area)
- 4 – Urban influence area (e.g. strategic planning cooperation area, wider commuting area or hinterland for specialised services situated in the SMESTO)

For each of them, we would first like to know whether they are implemented. If yes, in what policy respect could they seem relevant for the delimitation of the town? What type of urban realities do they correspond to, and for what strategic purpose could they be used?

Secondly, we would like to know at which of these levels there are data available for the city. When considering individual cases, trend data are obviously of major importance. What type of the trends can be analysed, and within which timeframe? How has the geographical extent of each type of area evolved over time, and how should this be taken into account in the analysis of the trend data?
Finally, we would like to know whether a map delineating each of the 4 types of concerned areas is available (in paper format, GIS format)?

In a second phase, a review of available demographic, social and economic data available for the city will be done. This data will be provided by the ESPON database on Nuts V level and will be forwarded to each partner as soon as OIR receives it in order to check it on the individual case study level.

### 4.2.3 Policy section

Please give verbal statements on the following aspects:

- **The governance aspect:**
  - What are the main actors in the region and in the individual SMESTO?
  - What are the dominant area of action and influence (competences) of the region and of the individual SMESTO? (areas of influence: land use, economic policy,… in the own territory – for the region)?
  - Information about the institutional setting and co-operation activities going on

- **The aspects of prevailing challenges and options of development on the level of the individual SMESTO within the region and on the regional level**

Please deal with this aspect from the point of view of policy – i.e. paying attention to endogenous development options rather than exogenous (those should be included in Section A of the case study report within the SWOT analysis!).

- Pictures
- maps
- photos
- films of your case study towns

Please note that the mentioning of the pages at the margin of the chapters should only be a rough indication.
In addition to the description of the cases as outline above the set of hypothesis formulated in the chapter 4.2 will be screened as to how far the hypothesis can be confirmed/not confirmed/information cannot be given from the case study point of view, rendering a table like the following for each case study.

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<th>Not confirmed</th>
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</tbody>
</table>
1. Definition of the cities and towns

- How are the cities and towns defined and delimited in your country?
  
  - In morphological terms?
    (For example: a settlement area of more than 2000 inhabitants with a maximum distance between the settlements of 200m)
  
  - In functional terms?
    (For example: on the basis of commuting patterns?)
  
  - In administrative terms?
    (For instance: the definition of a municipality as urban or rural, on a purely legal basis or with predetermined quantitative criteria on selected issues)

Please feel free to make comments or to develop the points that haven’t been mentioned and that you think are of importance for the definition of cities.

- Suburban areas / urban influence areas:

Have suburban or urban influence areas been delimited in your country?

What are the criteria for this delimitation?
(For instance: contiguity of the settlements around a city node or belonging to the commuting area)

According to the definition in your country, can a city (as defined earlier) be part of the suburban area or influence area of another city?

2. Definition of the Small and Medium-sized towns (SMESTO)

After having defined the cities and towns, the objective of the following questions is to provide a definition of the SMESTO in your national context.

- Having in mind the definition of the cities and towns above, what are the criteria used when defining SMESTO in your country?

(For instance: in Sweden, a definition of a medium-sized town is a municipality between 20 000 and 50 000 inhabitants, with more than 70% of the total population living in the urban area, as well as less than 40% of the inhabitants employed in the manufacturing sector)

- How are the functional areas defined in the case of the SMESTO?

- How has the definition of the SMESTO been used in terms of concrete policies in your country?
3. Availability of data concerning the SMESTOs

In our project, we are interested in measuring the availability of data concerning the SMESTOs in Europe. We wish to remind you that the purpose of these questions is not to actually collect the data sets, but to assess their availability and to gather information on them.

We have defined 4 families of indicators that are covering the most relevant issues concerning the SMESTO: Demography, Geography, Economy and Infrastructure. The objective for us is to have a better idea of the kind of indicators that are available in each country, making the comparison of the SMESTOs on a European scale possible.

G_01 and G_03 correspond to GIS maps. They should preferably be in formats such as ArcView (.shp), ArcInfo export (.e00) or ArcGIS. Other GIS formats (e.g. Mapinfo) also acceptable. Indicator G_02 can be a list with latitudes and longitudes of SMESTO centres in any digital format, or a GIS file in any of the previously mentioned formats.

Here is the list of indicators:

**Geography and Positioning**
- Delimitation of the urban areas G_01
- Positioning of the urban centres G_02
- Delimitation of the functional areas G_03

**Demography**
- Total population D_01
- Number of birth D_02a
- Number of death D_02b
- Number of in-migrants D_03a
- Number of out-migrants D_03b

**Economy**
- Total number of unemployed persons E_01
- Total number of persons in employment E_02
- Total number of persons working in the primary sector (Agriculture, Fishery, Forestry, Mining and Quarrying, exploitation of natural resources) E_03
- Total number of persons working in the services sector E_04
- Total number of persons working in manufacturing sector E_05
- Total number of persons working in the business services sector E_06
- Number of city-dwellers working outside the city limits (out-commuting) E_07a
- Number of persons working in the city but living outside its limits (in-commuting) E_07b

**Infrastructure** (in the functional area of the SMESTOs)
- List of secondary education establishments I_01

This list of indicators is non-exhaustive and we would appreciate if you could give us more information on possible other indicators that could be useful when studying the SMESTO. You can use the following tables as template for the new indicators.
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<thead>
<tr>
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<th>Indicator code: G_01</th>
<th>Category: Geography</th>
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<td>Indicator definition: Delimitation of the urban areas (Extent of settlement areas – GIS map with “polygon data”)</td>
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</tbody>
</table>

**Example of representation of urban areas**
Here, the settlement areas are displayed in orange colour.

Source: SSB
Country: xxx
Indicator code: G_02
Category: Geography

Indicator definition: Positioning of the urban centres
(GIS file with points, or list of latitudes and longitudes)

Description of the data: xxx

Data source(s): xxx

Original data format(s): xxx

Overall degree of confidence, reliability: low medium high

Year available:
2002 yes no
If not, closest available year:

Comments:
xxx

Other contact persons/institutions:
xxx

For example, positioning of the cities of Scania, Sweden
Here, the cities are displayed as grey dotes.

Source: Kartbolaget AB
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**Indicator definition:** Delimitation of the functional areas (GIS map with “polygon data”)

**Description of the data:** xxx

**Data source(s):** xxx

**Original data format(s):** xxx  
**Price:** xxx

**Overall degree of confidence, reliability:** low  
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high

**Year available:**

- 2002  
  yes  
  no

If not, closest available year:

**Comments:**

xxx

**Other contact persons/institutions:**

xxx

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**Example of representation of functional areas:**

![Example of representation of functional areas](source: INSEE)
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**Indicator definition:** Total population

**Description of the data:** xxx

**Data source(s):** xxx

**Original data format(s):** xxx

**Price:** xxx

**Overall degree of confidence, reliability:** low medium high

**Years available:**
- 2002: yes
- 1993: yes

If not, closest available year:
- 1993: yes

Please specify what part of the year the data refers to:
- Beginning of the year
- End of the year
- Yearly average

**Comments:** xxx

**Other contact persons/institutions:** xxx
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**Other contact persons/institutions:**

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**Indicator definition:** Number of in-migrants  
Sum of foreign and domestic in-migrants, independently of origin

**Description of the data:** xxx

If necessary, please specify the type of in-migrant not taken into account:  
foreign  
domestic

**Data source(s):** xxx

**Original data format(s):** xxx  
Price: xxx

**Overall degree of confidence, reliability:** low  
medium  
high

**Years available:**  
| Historical data: |
|------------------|------------------|
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| 2003 yes no     | 1998 yes no     |
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| 2000 yes no     | 1995 yes no     |
| 1994 yes no     | 1993 yes no     |
| 1992 yes no     | 1991 yes no     |
| 1990 yes no     | 1990 yes no     |

**Comments:** xxx

**Other contact persons/institutions:** xxx
**Country:**

**Indicator code:** D _03b  
**Category:** Demography

**Indicator definition:** Number of out-migrants  
*Sum of foreign and domestic out-migrants, independently of destination*

**Description of the data:** xxx

If necessary, please specify the type of out-migrants not taken into account:  
- foreign  
- domestic

**Data source(s):** xxx

**Original data format(s):** xxx  
**Price:** xxx

**Overall degree of confidence, reliability:** low  
medium  
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**Years available:**

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<td>1993 yes [ ] no [ ]</td>
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<td>(if possible, 10 years before year indicated to the left)</td>
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<tr>
<td>Beginning of the year [ ] End of the year [ ] Yearly average [ ]</td>
<td>Beginning of the year [ ] End of the year [ ] Yearly average [ ]</td>
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<td><strong>Comments:</strong></td>
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<td><strong>Category:</strong> Economy</td>
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</table>

**Indicator definition:** Number of persons in employment (Sum of self-employed and employed persons)

**Description of the data:** xxx

**If necessary, please specify the type workers NOT included:**
- wage earner
- independent and self-employed persons
- other:

**Data source(s):** xxx

**Original data format(s):** xxx

**Price:** xxx

**Overall degree of confidence, reliability:** low medium high

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<tr>
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<td>2002  yes  no</td>
<td>1993  yes  no</td>
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If not, closest available year:
- If not, closest available year: (if possible, 10 years before year indicated to the left)

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Comments:** xxx

**Other contact persons/institutions:** xxx
**Country:**  
**Indicator code:** E_03  
**Category:** Economy

**Indicator definition:** Total number of persons working in the primary sector  
(Agriculture, Fishery, Forestry, Mining and Quarrying, exploitation of natural resources)  
(Sum of self-employed and employed persons)

**Description of the data:** xxx

If necessary, please specify the type of activities are NOT taken into account in these data sets:
- Agriculture  
- Fishery  
- Forestry  
- Mining and Quarrying  
- Exploitation of other natural resources  
- Other  
- All are included

If necessary, please specify the type workers NOT included:
- wage earner  
- independent and self-employed persons  
- other:

**Data source(s):** xxx

**Original data format(s):** xxx  
**Price:** xxx

**Overall degree of confidence, reliability:** low  
medium  
high

**Years available:**  
|  
|  
|  
|  

**Historical data:**  
|  
|  
|  
|  

If not, closest available year:  
|  
|  
|  
| (if possible, 10 years before year indicated to the left)

Please specify what part of the year the data refers to:  
- Beginning of the year  
- End of the year  
- Yearly average

Comments:  
xxx

**Other contact persons/institutions:**  
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</table>

**Indicator definition:** Total number of persons working in the services sector (Sum of self-employed and employed persons)

**Description of the data:** xxx

**If necessary, please specify the type workers NOT included:**
- wage earner
- independent and self-employed persons
- other:

**Data source(s):** xxx

**Original data format(s):** xxx  |  **Price:** xxx

**Overall degree of confidence, reliability:** low medium high

**Years available:**
- 2002  yes no
- If not, closest available year:

**Historical data:**
- 1993  yes no
- If not, closest available year:

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Comments:** xxx

**Other contact persons/institutions:** xxx
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<th>Category: Economy</th>
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**Indicator definition:** Total number of persons working in the manufacturing sector (Sum of self-employed and employed persons)

**Description of the data:** xxx

**If necessary, please specify the type workers NOT included:**
- wage earner
- independent and self-employed persons
- other:

**Data source(s):** xxx

**Original data format(s):** xxx | **Price:** xxx

**Overall degree of confidence, reliability:** low | medium | high

**Years available:**
- 2002: yes | no

**Historical data:**
- 1993: yes | no

If not, closest available year:
If not, closest available year: (if possible, 10 years before year indicated to the left)

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Please specify what part of the year the data refers to:**
- Beginning of the year
- End of the year
- Yearly average

**Comments:**

xxx

**Other contact persons/institutions:**

xxx
**Country:***  
**Indicator code:*** E_06  
**Category:*** Economy

**Indicator definition:** Total number of persons working in the business services activity (Sum of self-employed and employed persons)

**Description of the data:** xxx

**If necessary, please specify the type workers NOT included:**  
- wage earner  
- independent and self-employed persons  
- other:

**Data source(s):** xxx

**Original data format(s):** xxx  
**Price:** xxx

**Overall degree of confidence, reliability:** low medium high

**Years available:**  
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**Historical data:**  
| 1993 | yes | no |

If not, closest available year:  
(If possible, 10 years before year indicated to the left)

**Please specify what part of the year the data refers to:**  
- Beginning of the year  
- End of the year  
- Yearly average

**Other contact persons/institutions:** xxx
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<td><strong>Data source(s):</strong></td>
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<tr>
<td>2002 ڤ yes ڤ no</td>
<td>1993 ڤ yes ڤ no</td>
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<td>If not, closest available year: (if possible, 10 years before year indicated to the left)</td>
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<td>Number of persons working inside the city but living outside its limits (in-commuting)</td>
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<td>Country:</td>
<td>Indicator code:</td>
<td>Indicator definition: Number of secondary education establishments</td>
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</table>

Comments:

xxx
4. Further contacts

This questionnaire is the first step for our gathering of information. We would appreciate if you could give us more information concerning institutions (and persons) that could be of assistance for us if we want or need more information about the definition of the Small and Medium-sized towns or the data availability.

<table>
<thead>
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<th>Name of the Institution</th>
<th>Address</th>
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</tbody>
</table>

Thank you for your co-operation!!!