

European Strategy for regional responses to demographic changes

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European Strategy for regional responses to demographic changes

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Authors:

Zoltan Dorogi (ADAPT2DC Strategic Expert, Észak-Alföld Region)
Prof. Dr. Matthias Gather (ADAPT2DC Strategic Expert, the Thuringia Region)
Jolanta Perek-Białas, PhD (ADAPT2DC Strategic Expert, the Małopolska Region)
Francesca S. Rota, PhD (ADAPT2DC Strategic Expert, Piedmont)
Katarzyna Tarnawska, PhD (ADAPT2DC European Expert, the Małopolska Region)
Michal Tomčík, (ADAPT2DC Strategic Expert, the Usti Region)
Martin Šimon, PhD (Institute of Sociology of the Academy of Sciences of the Czech Republic)

Contributors:

Klaus Bongartz, PhD (Thuringian Ministry for Construction, Regional Development and Transport)
Diana Borowski (Thuringian Ministry for Construction, Regional Development and Transport)
Katarzyna Opoczka (Malopolska Region)
Adam Polko, PhD (University of Economics in Katowice)

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European Strategy for regional responses to demographic changes

We treat **demographic changes as a challenge** that needs to be addressed by **regions and cities** in a harmonised and **integrated way** and with respect to cultural values, social expectations and a subsidiarity principle to offer all Europeans attractive spaces to live, work and spend leisure time **in order to maintain or improve the development opportunities of regions** and the whole European economy.



Demographic change is not a political fad, but a tangible social challenge for Thuringia and Europe. The decline in population, the growing share of older citizens and strong differences in regional development create challenges, which we need to tackle, but also opportunities that we should seize.

In the future, the maintenance and improvement of technical and social infrastructures will be a central issue, particularly in rural regions. However, these issues do not only concern individual regions or countries, but the entire European continent. The “EU 2020” Strategy as a broad framework shows goals and tools, which shall help prepare European countries for the future.

On this basis the Thuringian Ministry for Construction, Regional Development and Transport has developed the ADAPT2DC – “Adaptation to Demographic Change” project – together with nine partners across Central Europe.

This international network has set itself the goal of compiling a “European Strategy for regional responses to demographic changes”: a set of recommendations and ideas for how to adapt infrastructures to demographic changes. The present study indicates both the risks and needs of shrinking regions but above all it provides an overview of workable regional measures and solutions that can be applied by regional actors. Thematically, the recommendations range from health care all the way to public transport.

As you can see, the issues addressed in this project touch upon the daily lives of Europeans in many ways. One thing has become clear in recent years: we can only shape change if all actors are willing to accept challenges, to call into question outdated structures and to courageously test new ideas.

I thank the partners of the ADAPT2DC project for their work and wish you an informative and inspiring read!

A handwritten signature in blue ink, which appears to read 'Christian Carius'. The signature is stylized and fluid.

Christian Carius

Thuringian Minister for Construction, Regional Development and Transport



The dynamic development of the modern world gives rise to a number of challenges faced by local communities from almost all regions, which make an attempt at counteracting negative trends and taking advantage of opportunities and positive circumstances. Such challenges include demographic changes, which cover both ageing and all forms of migration, and thus have a strong economic, social and, above all, developmental dimension. Hence they significantly affect the comfort and quality of residents' lives.

For several years, the Małopolska Region has considered active preparation for demographic change effects as one of the priorities of its regional policy. Such approach is expressed in strategic documents – both at the level of the *Development Strategy of the Małopolska Region* and Poland's first regional strategy of actions in the face of an ageing population. That is why the possibility of coordinating the work on the *European Strategy for regional responses to demographic changes* within the frameworks of the ADAPT2DC project has been an extremely creative challenge for Małopolska and, at the same time, it was an opportunity to continue the work conducted consistently in our region already for several years. The results will help both Małopolska and now also other Central European regions to adapt to a less favourable demographic situation.

The recommendations included in the *European Strategy for regional responses to demographic changes* may constitute a valuable tool for public policy makers in Central Europe both at the regional and local levels. The implementation of the said recommendations will allow the ensuring of a better quality of life for citizens even in the face of population shrinkage in towns and regions. That is why, with great satisfaction, I would like to strongly encourage you to read this document.

A handwritten signature in black ink, reading "Roman Ciepiela".

Roman Ciepiela

Vice Marshal of the Małopolska Region

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Executive Summary

Demographic change is one of the most important challenges for economically, socially and environmentally sustainable development in many regions of Central Europe. Population losses due to low fertility rates, migration and population ageing have already been experienced in many parts of regions, cities as well as some metropolitan areas. It is crucial to realize that population shrinkage and ageing is and will be important both for urban and rural areas in Central Europe. All forecasts state that these processes will continue for the next decades and will widen the gap between a prosperous core and a shrinking periphery all over Europe.

The aim of this *European Strategy for regional responses to demographic changes* as part of the **ADAPT2DC – Adaptation to Demographic change** project implemented within the **Central Europe Programme** was:

1. to identify the risks and challenges for shrinking regions
2. to provide an overview over positive regional solutions and practices and finally
3. to give recommendations for regional actors on how to successfully and cost effectively respond to the threats those regions are facing.

As ADAPT2DC is a transnational inter-regional project, it has been decided to mainly address the regional level. The most important fields of political intervention we concentrated on were:

- Health care
- The provision of social services
- Transport and mobility
- Public buildings and housing
- Other technical infrastructure

One **common challenge** for all fields of public infrastructure and service provision taken into account is the problem of securing the existing level of services in the face of a shrinking and ageing society. As a consequence, less public income *per capita* is available. The decreased financial potential hits low-density areas worst as in many cases they have already suffered from poor supply and economic inefficiencies. Citizens from low-density areas may face a higher risk of social exclusion. Other common challenges in many public policy fields include higher expecta-

tions due to a changing societal demand. The mere securing of the status quo is insufficient in many cases. Often regions should do better than now to improve living conditions and thus contribute to their own stabilisation for interregional competition.

The overview of **good regional practices** shows that, in fields taken into consideration by the project, many good solutions already exist. Many regions – within and outside of Central Europe – have already gained experience with demographic change and reacted to it in an exemplary manner. With respect to their transferability, these good and successful practices constituted, in many cases, grounds for the policy recommendations given in this Strategy. However, they should be disseminated more widely among the Central European policy makers.

The recommendations provided by this European Strategy should be treated as an inspiration for actions by authorities at various levels, mostly regional and local, and seen in short, medium, and long perspectives.

The challenge for **health care** is chiefly associated with population ageing and methods for securing the growing demand for health care services for increasingly older inhabitants. In order to support the healthcare sector new, innovative, and technologically advanced methods could be used mainly to decrease costs of providing health care services. Besides, there is a need to attract medical staff to work in this sector, especially in rural and low-density areas.

The challenge for providing social services is to manage providing them at an adequate level of quality adjusted to the needs of inhabitants, especially in shrinking areas with decreasing population and demographic imbalance. The recommended solutions advise regions to utilise the resources of the civil society (involving voluntary work) to diversify financing of the needed services. Flexible and combined organisations can preserve the quality of the supply system, and provide responsive social care services.

The challenges for **transport and mobility** lie in the provision of public transport in low density areas for inhabitants. Successful and recommended solutions for regions consist, above all, in integrated public transport planning on a regional scale, the bundling of demand of different user groups, flexible and demand-responsive public transport in areas of very low demand, and finally the encouragement of civil and/or market-driven solutions.

Challenges within the scope of **public buildings and housing** are related to several problems. Firstly – the reduction of operating costs of managing public buildings. This problem can be solved, for example, through the multiple use of existing infrastructure or by carrying out energy audits of public buildings. Secondly – adapting the current housing to the needs of the elderly. It is recommended to use preliminary measures such as barrier-free housing or the provision of sustainable health and social services.

In regions affected by demographic change, the challenge for the management of **technical infrastructures** in the fields of **water, sewage and energy** principally lies in the implementation of new management solutions that guarantee their availability in the condition of economic convenience for the society and service providers. Above all, in declining rural and isolated areas, existing large infrastructures such as water pipelines and sewers, electric networks, power stations and plants, etc. face the risk of under-utilisation, which eventually determines obsolescence and increasing costs for users and providers. These trends can be mitigated by cost-saving solutions to be pursued by decisions of territorial planning and management, cooperative agreements among operators, and the development of a more decentralised system of units, operators, and channels.

Introduction

There are many various strategic documents at the European, national and even regional¹ and local levels across the whole continent, which attempt to deal with demographic change. Similarly, many recommendations on what should be done and why (at least for some countries in Europe) have been developed. Nevertheless, in many places in Central Europe, policy makers still lack awareness about demographic change and possible solutions and strategies which they can use immediately. Such documents should open the mind up to new activities which are necessary due to demographic changes instead of treating the demographic change as a problem but rather as a challenge or opportunity.

Many projects or initiatives dealing with demographic change address a limited number of topics. ADAPT2DC is unique in the sense that it addresses a wide variety of topics. It investigates the adaptation to demographic changes at the local/regional level in Central Europe in the fields of social and health care, public buildings, transport and technical infrastructure. Dealing with demographic change requires a holistic, integrated and multidisciplinary approach in order to be able to make sound evidence-based decisions and find cost-effective solutions. But there is also a need to take into account the fact that economic crises and/or even worse economic situations can influence policy decisions, also those having an impact on adaptation to demographic changes.

The aim of this document is to provide a better understanding for necessary changes in regional policies both in the short- (up to 2020) and long-term (beyond 2020, at least until 2030). The recommendations aim to suggest solutions that could be used from today to be better prepared for future demographic changes. The transnational Action Plan² and the related Regional Action Plans³ will provide more detailed and concrete solutions on what could be done and by whom, taking into consideration all countries engaged in the project.

However, when formulating recommendations for future policies dealing with demographic change in different areas, cities, villages and rural regions, one always needs to consider the respective levels of governance. Consequently, national policies, regional policies, or local policies may be created. As ADAPT2DC is a transnational project funded by the Central Europe Programme⁴, it has been decided to focus on the regional level (see the explanation provided in the Annex).

1 See: The Transnational Review of European and Regional Strategic Documents on Demographic Changes (Appraisal of advantages / disadvantages – 5.2.10). www.adapt2dc.eu

2 See www.adapt2dc.eu

3 Regional action plans are prepared in the native languages of each country. A short summary in English is available. See www.adapt2dc.eu

4 <http://www.central2013.eu/>

In spite of statistical classification (e.g. NUTS-1, NUTS-2, NUTS-3), there are still many regions that fail to be easily categorised due to the different levels of governance. Moreover, the geo-administrative criteria followed in each country have produced a wide variety of regional sizes (in terms of both population and surface area)⁵. The NUTS system is not sufficient to mirror the diversity and heterogeneity of the European regions and the NUTS levels are not identical with actually existing regions. In the EU, there are diverse in political structures that can be observed in the different existing forms of state or government, i.e. there are unitary, federal, and quasi-federal states. According to these different specifications, the allocation of governmental activities between the central government and regional units is also different. This is an additional challenge for such documents as one transferable European strategy applicable to all regions that should simultaneously consider the unique characteristics and specific problems of the regions.

Therefore, in order to recommend good solutions and analyse the possibilities of policy implementation, current legislative and executive powers of various governance levels must be taken into account. Common rules are very difficult to implement and in some cases can interfere in internal arrangements regarding decentralisation in different member states. The impact is experienced at different levels – executive, legislative or political – depending on the particular system of decentralisation of each member state. Despite the aim of ensuring that regions of comparable size appear at the same NUTS level, each level contains regions that differ greatly in terms of area, economic strength, administrative powers, and even population (see Table 2 and Annex).

It has been, therefore, decided to concentrate on NUTS 2 und NUTS 3 in all involved countries as the most important levels for successful regional measures and policies, but it will also be indicated how the state can help the lower levels to introduce necessary solutions that are beneficial for citizens and at the same time cost-effective. **However, in spite of assessing European, national, and regional documents and policies, these recommendations should be linked to local ones and should exercise joint impact on the policies which will finally be implemented at the local level.**

5 Pavía, José M.; Larraz, Beatriz, *Regional Size, Wealth and EU Regional Policy* Investigaciones Regionales, núm.23, 2012, Asociación Española de Ciencia Regional Alcalá de Henares, España, p. 128.

Chapter 1: Demographic change in Central Europe and related policy response

1.1 Demographic facts⁶

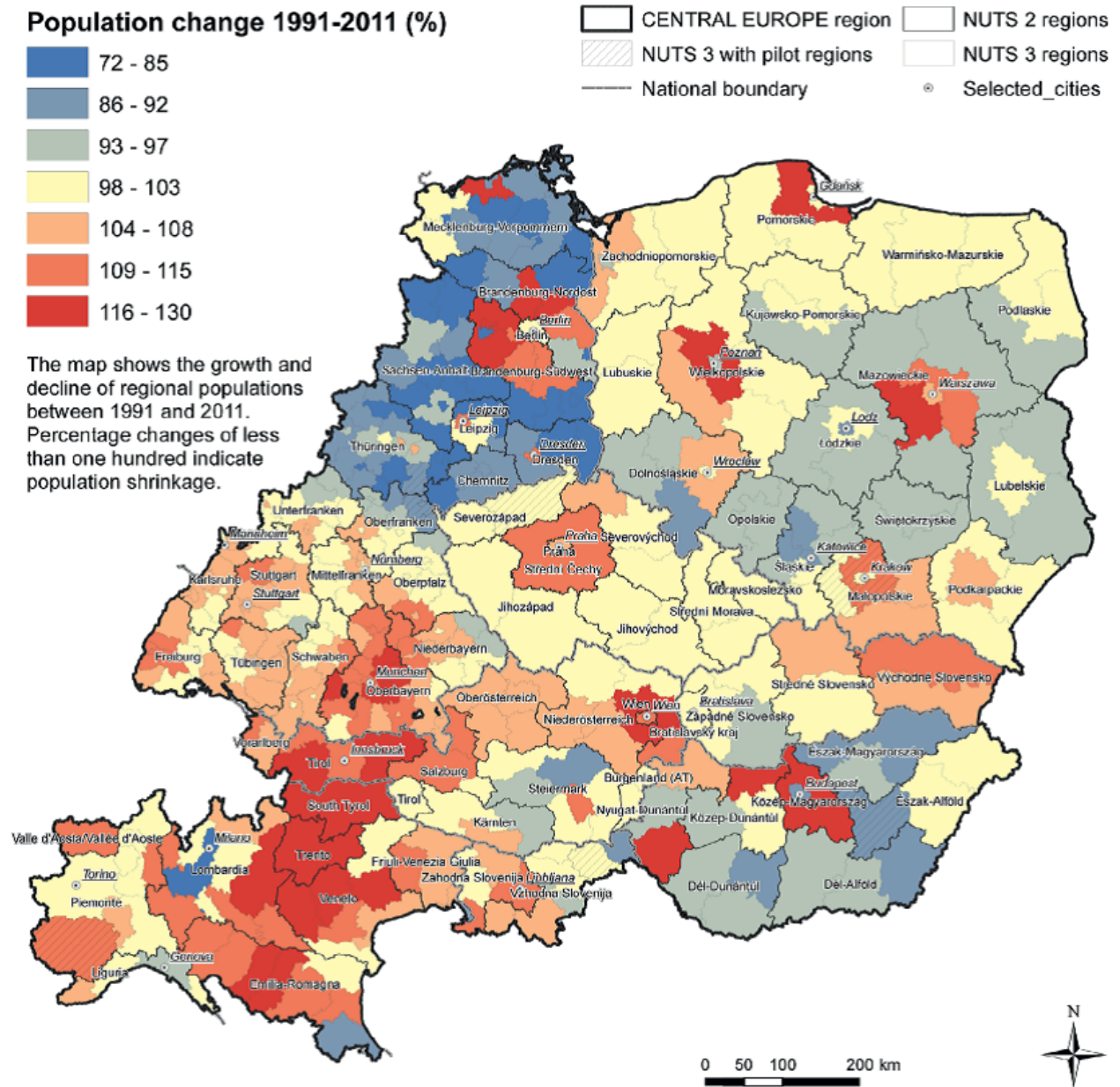
Key trends in the demographical development of Central Europe include above all an increase in longevity, persistence of low fertility levels, continuing population ageing and shrinking. The positive increase of **longevity**, which reflects more quality life conditions of past generations, means longer life expectancy but also changing demands. The **fertility** levels are below replacement level in all Central European member states in the medium-term perspective. The insufficient reproduction of the population will inevitably lead to a reduction in total population over the coming years. **In-migration** from other countries has occurred for many reasons, including the low level of attractiveness of labour market opportunities, living conditions, and insufficient quality of life. Thus, migration is limited owing to various financial and integration issues. But this in-migration has a limited mitigating impact on demographic change. Migration within Central Europe cannot balance population change; traditional source regions of migration are facing the same or more serious demographic challenges as target regions. Under such conditions, population ageing and the shrinking of the total population is to be expected.

The **spatial dimension** of demographic change plays a crucial role in demographic development *per se* and also in the related policy response. Population **ageing** measured by the value of mean age is widespread in almost all regions in Central Europe (see Map 1). There is a convergence trend in ageing as the regions with a currently younger population will experience faster population ageing over subsequent decades. The continuous decline in the number of young cohorts together with parallel population ageing will create more pressure on the redistribution of the welfare system and reproduction of human capital in general.

⁶ More information and a detailed analysis can be found in the Output 3.1.5: *Demographic change in Central Europe. A socio-economic background analysis.*

Population **shrinkage**, which is defined as a relative decline in total population size in a region over a ten year period, is more spatially selective than population ageing (see Map 2).

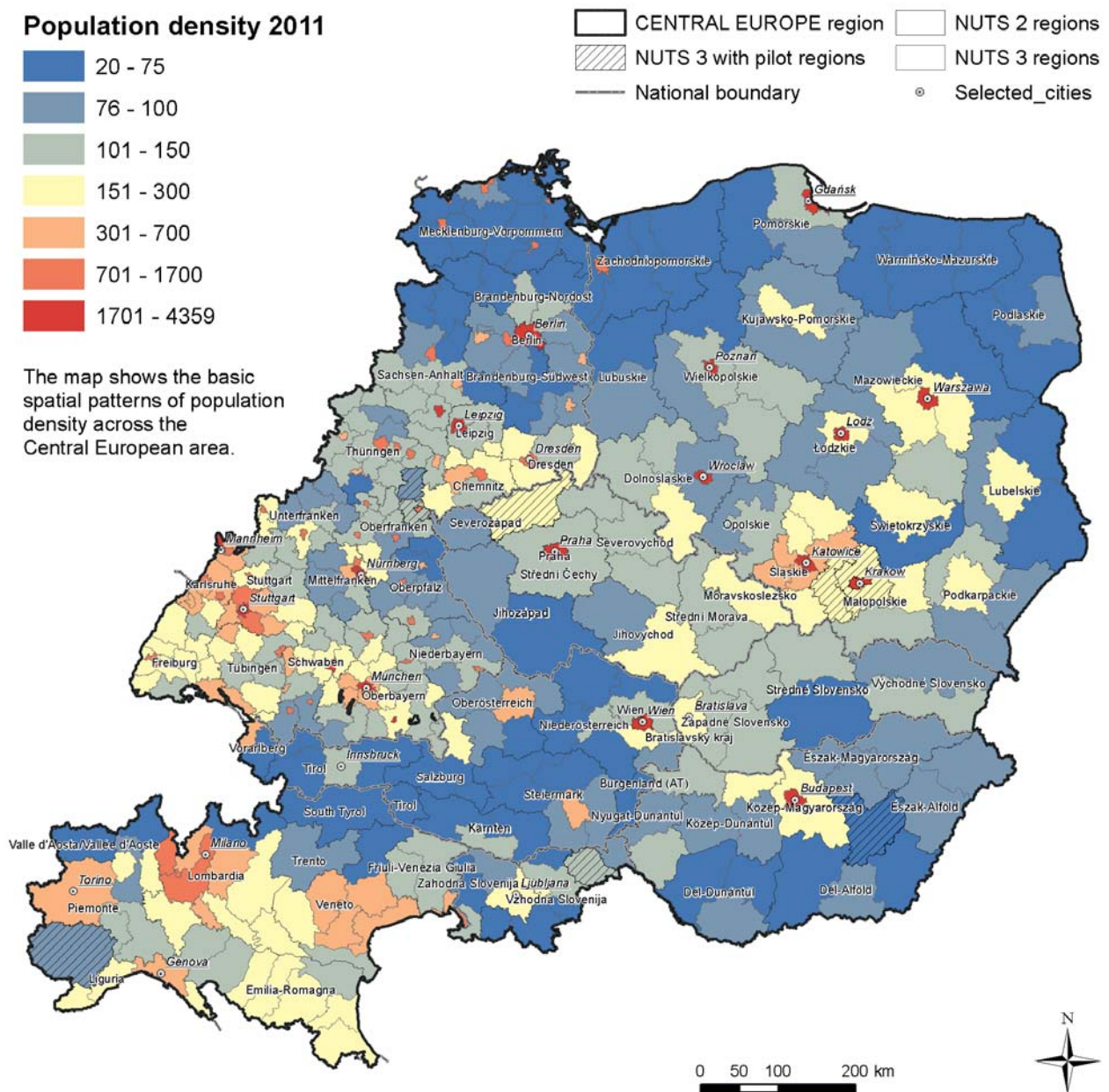
Map. 2. Population change in 1991–2011 in Central Europe.



Source: Output 3.1.5: Demographic change in Central Europe. A socio-economic background analysis.

Regions (as well as areas close to cities or some regional capitals) which are more attractive in view of labour market opportunities gain, while those that are unable to offer enough good and well-paid jobs and the consequent good quality of life lose. National metropolises and several second-rate metropolitan areas also show population growth. The remaining non-metropolitan areas either have a stable population or experience population shrinkage. It should be stressed that not all rural regions show similar population development because of varying demographic structures and inherited infrastructures. Contemporary population developments are shaped, *inter alia* by the changing economy, the environmental qualities of regions, and accessibility of metropolitan areas. But, in principle, sparsely populated rural areas are more vulnerable to population shrinkage because of their general lower population density than urban and metropolitan regions (see Map 3).

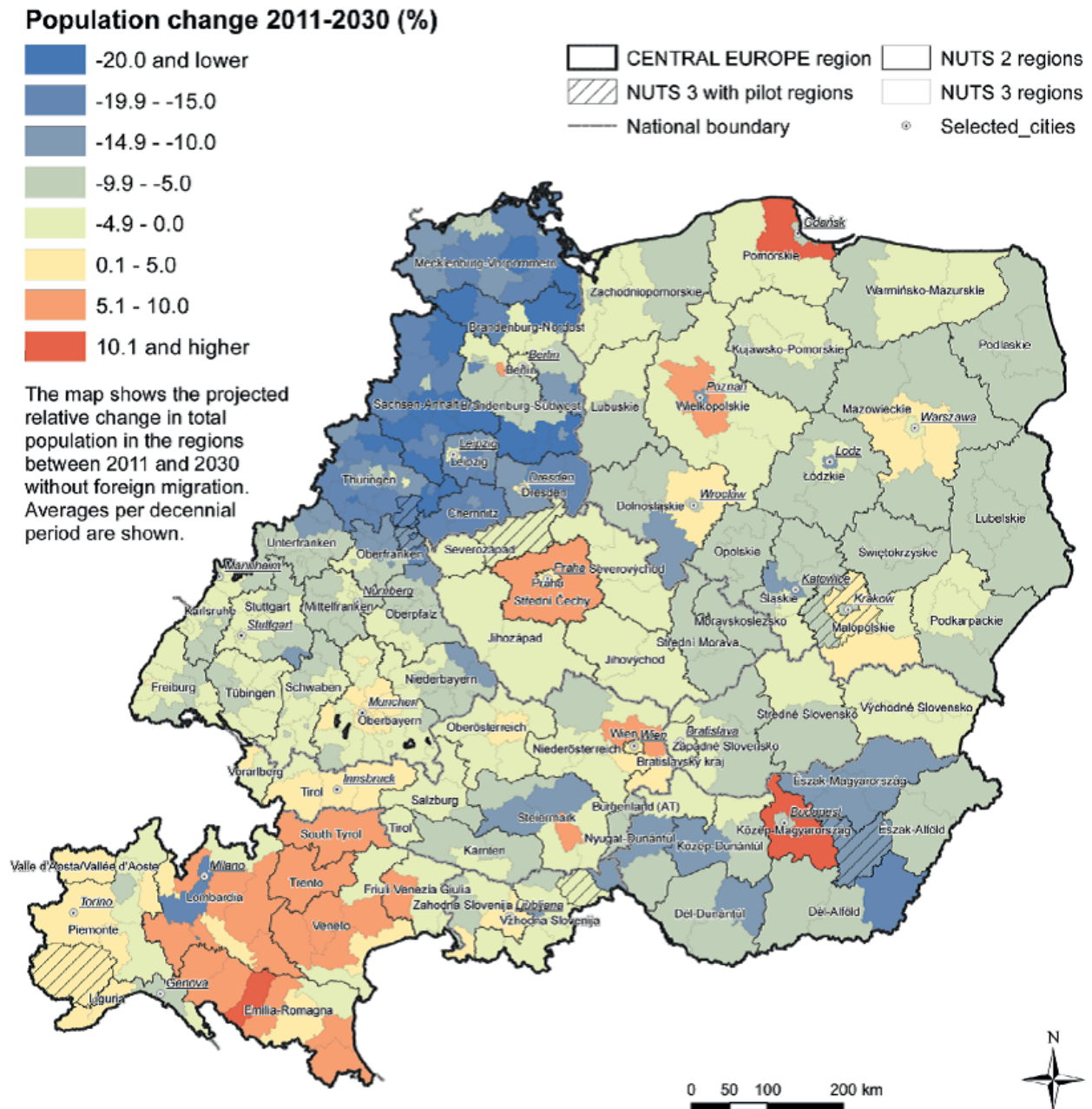
Map 3. Population density in Central Europe (present and future).



Source: Output 3.1.5: Demographic change in Central Europe. A socio-economic background analysis..

Population projections for Central Europe show the persistence of low fertility levels, which in turn restrict population development into stable or declining trajectories in the majority of regions (see Map 4). Migration is unlikely to change this pattern in the short-term period. The effects of demographic change such as population ageing and population shrinkage will become even more relevant in the next ten years. Further management of population ageing and mainstreaming of population shrinkage is to be expected.

Map 4. Population change projection for 2011–2030 in Central Europe.



Source: Output 3.1.5: Demographic change in Central Europe. A socio-economic background analysis.

1.2 Impact of the demographic change on policy

The contemporary demographic situation in Central Europe constitutes the basis for social and economic development in the area. The shifting of population cohorts in a majority of regions leads towards older and less numerous populations. This development poses a serious challenge as well as an opportunity for governance at all spatial levels. Policy and planning tools can help adapt to the changing demographic conditions as well as to secure more cohesive and resilient European communities.

Demographic change poses a **serious challenge** to a whole array of life conditions. An ageing and diminishing population may lead to: the decline in tax revenues for municipalities; a decline in economic competitiveness due to labour shortage and rising welfare costs; disruption of social cohesion between generations stemming from conflicts of interest in the redistribution of the welfare system between the young and old (young unemployment, pension and benefit systems, etc.); bankruptcy of municipal and regional governments owing to growing costs of service and infrastructure provision *per capita*; an overall decrease in quality of life considering the lower availability and accessibility of services and infrastructure; acceleration of polarisation between leading and lagging regions.

The demographic change *per se* is shaping several mutually interrelated realms of everyday life in localities and regions. From the **social perspective**, a smaller and older population living in an area will lead to changes in the consumer demand for services as well as the local housing market. Maintaining availability and accessibility of convenience goods for elderly people will be crucial considering the current policy position where “ageing in place” is preferred. The **economic impact** of demographic change in regions will mainly mean a decrease in funds available for services of general interest (due to decreasing tax yield) and also increasing *per capita* costs. These trends can be mitigated by cost-saving solutions in infrastructure and service provision as well as innovation in service management. The changing supply and demand for services and infrastructure may also lead to a spatial mismatch. Increasing costs *per capita* for the provision and maintenance of infrastructure are also expected in the case of **physical infrastructure** such as roads, water and sewage infrastructure, housing and public buildings. The inherited structures designed for higher population numbers may imply a long-term burden for service providers and operators including public administration. From the point of view of policy, it is important to highlight that, under the conditions of shrinking, infrastructure is a pull factor for migration in a different sense than usually conceived. This means that, contrary to past experiences, new and better infrastructure will not reverse the patterns of population decline.

The availability of a certain type of infrastructure may lead to population redistribution at the local level, but not to the reversal of general shrinking patterns. From the point of view of **regional policy**, the rationalisation of service and infrastructure provision is a technical as well as a political issue. Whereas the need to optimise costs is usually well understood, the decision on where the change should occur is highly contested. In ageing and shrinking regions such distribution discussions under the headline “Not In My Back Yard” will be common. This creates further pressure on solutions driven by stakeholder cooperation and regional governance. In **conclusion**, the effects of population change such as ageing and shrinkage will become even more relevant in the majority of regions in Central Europe in the near and medium-term future.

1.3 The European strategic documents related to demographic changes⁷

Demographic change is a cross-cutting issue concerning various fields of policy such as public finances, employment, social protection, immigration and family policies at different levels of governance including supranational. Although the EU competences on demography are rather limited, the organisation has been active in elaborating policy responses concerning problems of changing population age structure since the 1990s. Demographic problems were acknowledged to be a serious challenge for the EU in the **Lisbon strategy**, which called for an increase in the employment of older workers. In 2004 the High Level Group on the revision of the Lisbon strategy recommended the development of a more comprehensive active ageing strategy by 2006. Of the five headline targets of the **EU 2020 Strategy** three are related to the issues of demographic change. The Innovation Union that belongs to the flagship strategies within Europe 2020 comprises the **European Innovation Partnership on Active and Healthy Ageing**, which has been selected as a pilot to tackle the challenge of an ageing population.

The European Commission is active in addressing demographic changes at the European level and formulates the EU policy guidelines in this respect. An intensive debate on this subject was initiated by the Commission in 2005 with the Green Paper *Confronting demographic change: a new solidarity between the generations*. According to this document, Europe should pursue three essential priorities: return to demographic growth, ensuring a balance between generations, and finding new bridges between the stages of life. In 2006 the Commission set the core policy directions related to the demographic future of Europe, which refer to demographic renewal, employment, immigration and public finances. The issue of an appropriate family policy taking into account demographic changes was raised in 2007 (*Promoting Solidarity between the Generations*). Social considerations with respect to the labour market and long-term care needs of ageing workers have been the most important topics discussed by the Commission in the document *Renewed Social Agenda*. The current policy debate revolves around active and healthy ageing. This was reflected in the proclaiming of the year 2012 the **European Year for Active Ageing and Solidarity between Generations** (Decision 940/2011/EU) aiming at changing attitudes towards older people, engaging all levels of society in an effort to offer better opportunities to older people to remain active and participate as full members of society alongside the younger generations. It could be noted that, at the European level, more focus is on the social policy agenda – not on infrastructure – related to demographic ageing *per se*, but it also shows a lack of such direct links in other European documents to the topic.

Additionally, the European Parliament and the European Economic and Social Committee draw attention to the **regional dimension of demographic challenges** and their importance for the EU **cohesion policy**. In this regard the European Commission supports this view noting that *regions with declining populations consisting mainly of senior citizens will face difficulties in supplying essential public goods and services, such as health care, housing, urban planning, transport and tourism services*. The European Commission called on the Member States to ensure that operational programmes support initiatives of regions to meet the demographic challenges. Explicit measures to be implemented at the regional level and related to demographic ageing are included in the document *Regions for economic change* COM (2006) 675.

As the European Parliament considers that regions should pay more attention to the problems of ageing and dwindling populations and adapt their development strategies accordingly, the implementation of these strategies should be supported by the use of structural funds. In 2010 and 2011, the European Economic and Social Committee elaborated several documents addressing demographic challenges from the perspective of health and welfare

⁷ All documents mentioned here and others related to the topic are listed in the Annex.

systems, immigration, family policy and the labour market. It stressed the importance of the involvement and participation of older people in the labour market and in society but not only, as well as female labour participation being important for economic development (Martinez-Fernandez, 2013). Responding to the European Year of Active Ageing and Solidarity between Generations, the European Economic and Social Committee proposed numerous initiatives related mainly to the problems of older citizens. The Committee identified four areas as crucial for the implementation of active ageing policies at the regional level. These include: access to social services, mobility and accessibility of transport, adapted housing for the ageing population and participation in community activities. **The ageing dimension is much elaborated in the EU policies; however, a particular characteristics of the ADAPT2DC project is the special focus on adapting infrastructure to demographic change and taking into account the dynamics of the various service costs.**

Although some policies and strategies have already been developed at the EU level with the aim to cope with demographic changes (see Chapter 2 of the *Position Paper and Review of the Strategic Documents*⁸ related to demographic change), the project team of ADAPT2DC is convinced that it is necessary to develop more advanced policies and recommendations, especially highlighting the consequences demographic change will have on the provision, management and financing of public infrastructures and services in shrinking regions and cities in the Central European regions.

The existence of fundamental infrastructures and services such as roads, a functioning public transport system, and day-care services for older people or doctors, are crucial when it comes to retaining and/or attracting residents to regions and cities. Therefore, it is important to think about innovative ways of providing, managing and financing infrastructures and services also under shrinking conditions. The *Position Paper*⁹ was helpful inasmuch as general recommendations were presented for the handling of demographic change through policies and specific recommendations were provided for various areas of infrastructure. This was the basis for the development of this European Transnational Strategy for tackling the consequences demographic processes will have on the provision and financing of public infrastructures and services.

In summary: there are already many initiatives, projects and strategies related to the topic at the European as well the national and also regional levels. In general, such trend can be found across Central Europe but from the perspective of some regions, the picture may be different. Cost-saving policies in place of continuous-growth policies are still marginal. And there is a need to promote solutions on how to effectively and successfully adapt to demographic change. The following chapters offer some of these solutions in the fields of health care, the provision of social services, mobility and transport, public housing and other technical infrastructure.

8 See Chapter 2 of the *Position Paper* and Part I of *The transnational review of European and regional documents on DC*.

9 See *Position Paper* http://www.adapt2dc.eu/adapt2dc/adapt-doc/ADAPT2DC_PositionPaper_final.pdf

Chapter 2:

Vision of the European Strategy

The European Strategy carries the most important message from the whole ADATP2DC project and presents the main outputs of all phases of the project. It serves as a kind of memorandum that should prove useful for as many authorities as possible in the Central European countries and perhaps even beyond.

The principal goal of the European Strategy is to highlight challenges related to demographic changes and put forward adequate responses to be implemented at various levels of European governance. European regions differ in terms of social and economic conditions, but many regions in Central Europe share the same paths of demographic change. These common trajectories give an opportunity for mutual learning and exchange of best practices. Some solutions can therefore be carefully tested and evaluated.

The recommendations provided by the European Strategy are based on the assessment of transferability of best practices and exchange of experiences between the Central European regions that reveal social, economic, cultural, legal, and administrative differences. It must also be acknowledged that problems vital in some regions today are not yet visible in other regions but will be acute in the future. Therefore we should prepare **today** for how to act **tomorrow** (in the perspective of 2020 and later).

The issue of the political feasibility of recommended solutions is crucial. We acknowledge that demographic issues are sensitive to policy making, which makes strategic planning in a longer perspective more demanding. At certain points in time, some guidelines can be more or less acceptable but the most important task carried out was the development of an acceptable general **vision** that may be presented to and promoted among regions, cities, and states within and perhaps beyond Europe¹⁰.

10 A joint transnational vision for the future provision of infrastructures and services in shrinking regions and cities of Central Europe was presented in the *Position Paper* (Output 3.3.5 of the project) and it should be most relevant for everyone who would like to jointly read various documents project.

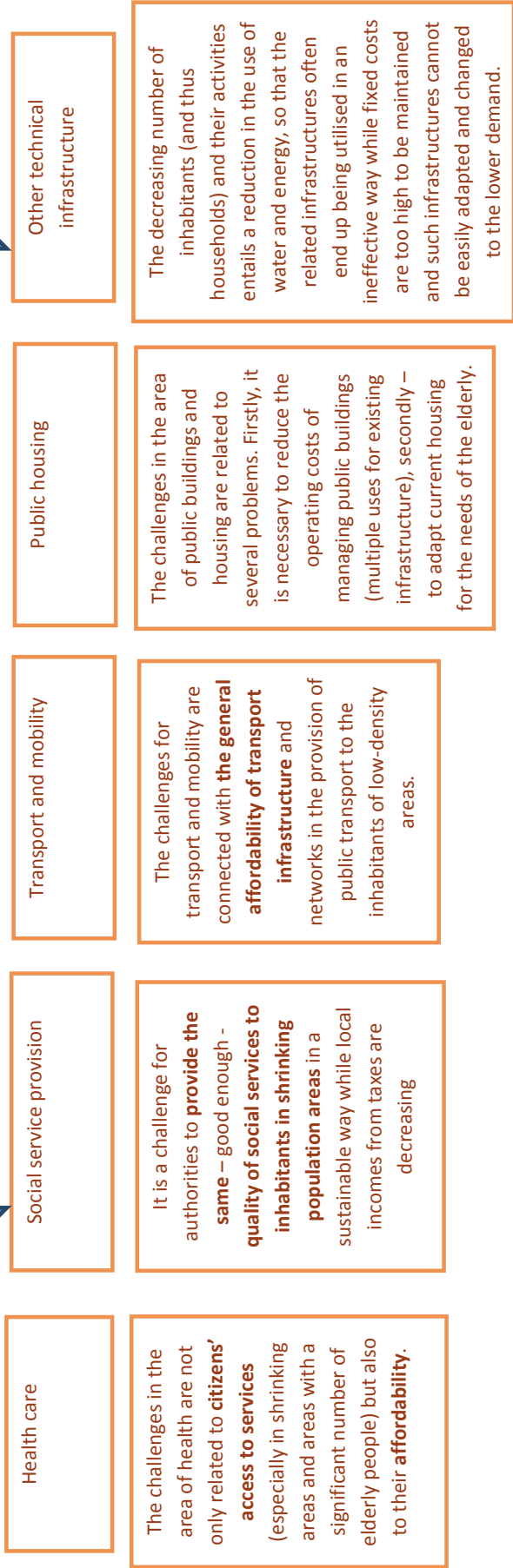
VISION

We treat demographic changes as a challenge that needs to be addressed by regions and cities in a harmonised and integrated manner and with respect to cultural values, social expectations, and the subsidiarity principle to offer all Europeans attractive spaces to live, work and spend leisure time in order to maintain or improve the development opportunities of regions and the whole European economy.

PRINCIPAL GOAL

Effective use of regional opportunities and potential for adapting the economy and society to demographic changes and to increase the social and spatial coherence Central European countries not only at local, regional, and national levels, but also including the European dimension.

MULTI-THEMATIC APPROACH



Chapter 3:

Policy recommendations in relation to demographic changes

3.1. General recommendations

From the policy perspective it is crucial to acknowledge in strategic and planning documents that the path of demographic development is very robust and that is unlikely to change in the short-term perspective. And one of the first general recommendations is that **demographic projections should be included in various regional policies, not only those related to social and health issues.**

In the course of the ADAPT2DC project it became evident that the availability of data concerning the cost of infrastructure and services shows large gaps, especially if one would additionally like to consider the issue of demographic change. Statistics on socio-demographic developments are available at the European, national, or regional levels, but once the costs of infrastructure provision are taken into consideration, hardly any comparable data exists. In all of the investigated fields, from social service provision and education to health care, from water provision to transport, there are situations where some data is available but it is not comparable. Additionally, even if some data is available and comparable, it is not necessarily easily transferable to territorial units matching real policy-making (and governance possibilities). And even if it is transferable, it may not always be updated, which makes it useless for the policy-making at the local level.

An additional difficulty in this regard is that these services are provided at different governance levels in the different countries, so it may be difficult to compare data across Central Europe. In order to analyse spending on infrastructure in the comparative perspective, it would be highly desirable to gather this type of data at the local and then regional level (subsequently at the national level and later, if possible, a European comparison could be attempted).

Therefore, the general recommendation is to **enhance data collection on income and expenditure for infrastructure** in a comparative and systematically updated way, which would also include the possibility of making projections of these flows taking into account changes in population. However, it is not only necessary to improve data collection but, even more importantly, to ensure better use of available data by policy makers at various levels of governance.

Other “general” points can also be derived from the project based on the findings of the Position Paper:

1. **Acknowledge the reality of shrinkage:** Although shrinkage has been a reality in many areas for years, political discourse is often still dominated by notions of “growth” – a more realistic discussion would be helpful.

2. **Long-term thinking is necessary:** The process of demographic change will in all likelihood continue over subsequent decades – therefore planners and policymakers must keep this in mind when deciding on the design of infrastructures.
3. **Cooperation and coordination between municipalities should be improved:** Any competition (for either inhabitants or companies) is expensive and leaves losers. Cooperation is in many cases more efficient.
4. **“Compact growth” instead of sprawl:** As far as settlement structures are concerned, the development of town centres should come before the development of suburbs.
5. **Holistic thinking followed by actions:** Interventions in one field often have effects on other fields. This is true horizontally (for instance for different fields of infrastructure) but also vertically (changes at higher levels of governance influence lower levels).

3.2. Health

The challenge

Demographic changes, namely population ageing and population shrinkage, have the most serious impact on the health care sector. Growing demand for health care services increases costs *per capita* while the rationalisation of health service networks worsens accessibility for its users.



The growing number of elderly people (including those in need of care and support) increase the demand for certain health care services. Simultaneously, this augmented demand increases the implementation and operating costs of the overall system of services that all of the Central European governments must guarantee to citizens as an obligatory responsibility of the welfare state. The public health care sector thus needs to be constantly adjusted taking into account not only the needs of growing group of senior citizens but also financial constraints. However, the adjustment and development of health/medical care services could also be treated as a unique opportunity to develop the “white” sector¹¹ of the economy.

Population shrinkage creates the problem of how to maintain medical and health care services in an increasing number of poorly-inhabited areas, mainly localised in the countryside. In these locations, in fact, a shortage of medical staff has already been diagnosed, and a further decrease in the number of doctors, health care specialists, nurses, and carers is forecast.

Moreover, in many Central European countries demographic change challenges occur in health care systems that are already neither effective nor efficient, where solutions which are innovative and based on modern technologies are neither affordable nor accessible.

In summary: The challenges within the scope of health are not only related to citizens’ access to services (especially in shrinking areas and areas with a significant number of elderly people) but also to their affordability.

Current solutions and good practices

There are already various solutions and good practices in the area of health, which are accessible and cost-effective. Although there are different national, regional, and sometimes local models of governance and financing systems of health care in Europe, some good examples may be found that can provide inspiration for local and regional governments on how to deal with the demographic change with regard to healthcare.

Based on the analysis carried out within the ADAPT2DC project, some good practices have emerged, showing that it is possible to deliver affordable health services even in rural and low-density regions, such as:

- **Mobile medical doctors¹²**

The opportunity to check citizens’ health conditions at their place of residence instead of compelling them to travel to health care centres offers new possibilities for treatment, but also disease prevention, for people who have difficulties accessing health care centres regularly (residents of rural areas, disabled, dependent, and elderly people). Some initial investments may be necessary (such as an appropriately equipped car), but in the long term higher benefits will result from the improvement of the general health status and the decrease in the costs of hospital treatments in serious cases.

11 “White economy” refers to those products, services, and activities related to healthcare and care concerning the dependent, disabled and the elderly (OECD).

12 See *The Best Practice Catalogue* O 4.1.1. and the following links: Competition BMVBS 2011 “People and Success” <http://www.menschenunterfolge.de/beitrag.html?frame=.../db/frontend.php/api/detail/id/751>, <http://www.eler.brandenburg.de/sixcms/detail.php/492304>

- **Highly specialised medical and health care services in one place** (e.g. an ambulatory healthcare centre)

The spatial concentration of highly specialised medical and health care services in one single place enables the provision of services at lower costs (for instance via the common use of equipment and the sharing of overhead costs such as administration costs and rent).

- **ICT (innovative) solutions in health care services (prevention and treatment)**

The use of innovative technological solutions can enhance the effectiveness, efficiency, and accessibility of health care services in several fields:

- Disease prevention (using telemedicine¹³),
 - Patient treatment (using ICT in medical emergency supply),
 - Consultation between patients and doctors (especially in low-density and rural areas),
 - Consultation between doctors and other medical staff,
 - Consultation between medical staff and patient's families.
- **Attracting medical staff** to low-density, rural and depopulated areas by:
 - developing scholarship schemes or other incentives for doctors (especially younger ones) which allow to maintain medical services (for example the “Thüringen Stipendium” – Germany)
 - implementing a mentoring system (collaboration between younger and experienced doctors) that could facilitate the process of integration and support of the staff in the field of health care (referred to as “Family Doctor Academy”¹⁴)

However, it must be stressed that, in giving recommendations in this field, the following should be taken into account:

- Various systems of organisation (referring to funders, providers, and end-users) of health care services exist in Europe, which are not directly regulated by the EU
- The costs of health care provision are taken into account in national regulations with the aim of managing the system as effectively as possible (better quality with the cost-effective perspective).

Recommendations

Future solutions for health in the face of demographic change (including ageing) in Central Europe have to consider the accessibility of health infrastructure and the provision of adequate health options for people who need them, especially in rural and low-density areas.

13 See *Final Report on Pilot Actions*, www.adapt2dc.eu

14 See the good practice “Family Doctor Academy” in the *Best Practice Catalogue* http://www.adapt2dc.eu/adapt2dc/BestPractice-Catalogue_WP_4_1_1.pdf

Therefore the following recommendations can be given:

1. At the European and national levels, future programmes and initiatives in the health care sector should include not only the reference to recognised and confirmed solutions (best practices) to respond to the forecast higher demand for services by elderly and dependent people, but also solutions on how to improve accessibility and affordability of the services with the indication of who should be responsible for their provision in the longer term perspective.
2. Concerning health care, the national regulations should be carefully examined and, if necessary, adjusted to give possibilities for the provision and financing of new, innovative solutions (for example telemedicine and telecare services), which could be less expensive than those currently used.
3. Due to demographic changes, in particular ageing, special support should be given to the medical education system and not only supporting geriatrics and gerontology studies but mostly including different methods of effective and attractive education, such as learning by doing, mentoring (with experienced staff), special scholarships for new professionals, and using IT technologies.
4. In some Central European countries, regional and local authorities could be more active in the organisation of cost-effective methods for delivering health care services to their inhabitants. Existing good practices in health care (not only from Europe but also from outside) should be actively and widely disseminated especially among policy makers at different levels of governance, who are primarily responsible for actions in this domain. For instance:
 - Concentration of medical specialists in central places (central locations which can easily be reached by a number of inhabitants of surrounding areas)
 - Where possible, supporting the appointment of community nurses/mobile care assistants to general practitioners (i.e. nurses working for a particular practice to unburden the doctor during home visits by taking over the visits where a medical degree is not necessary/basic care tasks)
 - Use of new communication technology for remote areas (telemedicine) + use of “Ambient Assisted Living” systems to enable people to stay in their own homes for longer
 - Ensuring coordination between regional health care and transport providers (so that health care centres can be easily reached even without a car)
 - Mobile units (either in the form of a “mobile practice” or in the form of a mobile treatment unit which can, for instance, be rented by different doctors from the medical association)
 - Support for those (particularly young) doctors who wish to open a practice in remote rural areas (this can be but is not limited to monetary support – also assistance in finding a flat or an office building, help in finding childcare, special offers of the municipality)
 - In order to counteract the decreasing number of doctors in rural areas: raising incentives for graduates to work in rural areas already during their medical studies (either by linking scholarship programmes to the commitment to settle down in a rural area or by introducing quotas for “rural doctors” into the student body)
 - Raising awareness of the needs of employees who are informal carers for relatives

- Support of (or raising awareness for) alternative living forms for seniors, such as “pensioner flat sharing” or assisted living (in order to postpone the moment when a person has into move to a care home).

However, we should remember that best practices face the limits of transferability due to different legal and financial systems and different modes of governance.

3.3. Provision of social services

The challenge

With decreasing incomes for shrinking municipalities, a range of social services are at risk. Financing oversized social infrastructures contrasts with the decreasing population size. To satisfy the needs of various groups (such as the elderly, children and disabled persons) is a challenge, given that the management of different social services (i.e. care homes, schools and daycare services for children, the elderly, etc.) in parallel is necessary.

Citizens demand the maintenance of a high level of quality of certain services, whereas authorities have to deal with decreasing income to finance them. However, focusing only on financial aspects without paying attention to the quality of life can threaten the operation of social services and make citizens (especially young families with children) more willing to move to areas where such services are maintained and available. Private contributions such as donations can make a difference, but they are neither possible nor available everywhere.



Even though some groups are decreasing in many municipalities across Central Europe, this does not diminish the need for financial resources. In some cases, the centralisation of social services (along with the closing of some unprofitable institutions) can save operating costs for the relevant municipalities. But this process obviously has limits seeing that the centralisation of services also creates mobility problems for citizens (including longer travel distances, additional and higher costs, etc.).

One of the challenges thus is to provide accessible, available, and affordable social services to citizens in a cost-effective manner.

In summary: It is a challenge for authorities to provide the same – good enough – quality of social services to inhabitants in shrinking population areas in a sustainable way while local income from taxes is decreasing.

Current solutions and good practices

Some good practices already exist that enhance cost efficiency in the field of providing social services in shrinking areas:

- **Involving citizens as volunteers**

A regularly applied solution in many countries to decrease costs is creating flexible organisations through the activation of voluntary work by citizens. Resources of civil society were involved in financing the social system to reduce and supplement public expenditure.

- **Creating new and/or adjusting already existing organisations caring for children¹⁵ and the elderly¹⁶**

There is a possibility to find savings in the organisation of care for children and also the elderly via integrated cost-effective services for such groups at the local level. This includes solutions at the citizens' place of residence (their homes) and in special daycare centres for children and for the elderly with various services available.

- **Utilising abandoned buildings¹⁷**

It is recommended to use older estates instead of building new ones, particularly if these items are owned by local governments. Thereby, the municipality does not only save on costs of building an entirely new institution, but also addresses the problem of unused decaying buildings in the town centre. A feasibility study should be used to decide on this issue taking into account in particular the changes of the population's needs in the longer perspective.

15 As example please see the pilot project in the Jászszág – *Promoting the return of women to the labour market by launching integral nursing services for children*, Final Report on Pilot Actions, www.adapt2dc.eu.

16 *Best Practice Catalogue* http://www.adapt2dc.eu/adapt2dc/BestPracticeCatalogue_WP_4_1_1.pdf

17 See the good practice “Centre of Culture and Leisure for Senior Citizens” *Best Practice Catalogue* an in *Malopolska Region Demographic Transition: Working for the Future*, Perek-Białas J., Martinez-Fernandez C., Weyman T., *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2013/06, OECD Publishing, 10.1787/5k4818gwg2jk-en

- **Multifunctional community centres**

Creating community centres (central meeting points) where citizens can keep in touch with one another and where different services are offered to inhabitants in the same spot (e.g. meeting rooms, ICT items, offices, learning centres, consulting).

- **Integrated spaces for the elderly and youth to take part in common activities.**

As it was specified in project's the best practice catalogue, it is practical to combine the services for the elderly with childcare institutions or schools, where different age groups can share experience, knowledge, provide advice to one another or take part in common workshops/activities (inter-generational cooperation/communication).

Recommendations

Solutions should be responsive to demographic changes by taking into account the shortage of resources and the changing needs of the society for social infrastructures, whereby flexible organisations and diversified financial models are required.

The following recommendations can be determined:

1. At the European and national level, a radical change is needed to replace growth-oriented strategies into qualitative decline-oriented methods in social infrastructure.
2. Adapted solutions in social services will be effective only if local, regional and national policies co-operate and the different levels respect one another's initiatives. Co-creation and collaboration with co-funding of solutions (with the use of European funds, as well as other public and private sources) is necessary. There is a need to show the advantages of specific solutions in social service provision and thus to change the attitudes of policy makers to be able to adopt sustainable solutions and increase the willingness in building up co-operation with citizens in this field, which should be less difficult than in the technical infrastructure (for example owing to voluntary activity).
3. At the local level an important step is to identify the demands of citizens in order to realise which social services and infrastructures are relevant for securing in the longer term, and which are the necessary types of social services to preserve in communities suffering from demographic change.
 - Adapt flexible organisations connected with demand-responsive social care services. For instance integrated community centres where different types of services are situated in one centre can save on the maintenance costs that would normally be necessary if all these services were maintained separately. Another example is the combination of schools with kindergarten/daycare services, in order to benefit from common overhead costs.
 - Diversify financing of social service provision by involving various resources (not only public but also private).
 - Utilise redundant capacities, use available items and support investments in quality improvements of services to reduce operating costs.

- Foster civic participation in managing demographic changes, enhance voluntary engagement. In the case of childcare: actively involve parents and grandparents. In the case of elderly care: involve children and grandchildren but also neighbours.

3.4. Transport and mobility

The challenge

Mobility of the residential population, i.e. the possibility for every person to access goods and services, employment and education, is the chief determinant of the quality of life and a precondition for any sustainable regional development. In addition to the decentralised provision of the above-mentioned services, the transport system plays a crucial part in accessing these offers.

As shown in Chapter 2, many parts of Central Europe are facing both a decline and the ageing of their population. In all policy fields, due to the decreasing demand, the decline in population requires the adaptation of capacities either for economic or technical reasons (or both). This also applies to the transport system, where the affordability of technical infrastructure such as roads and road maintenance, railway lines, regional airports or public transport must be thoroughly examined. On the other hand, the Central European rural areas with low population density are especially affected by demographic change. In these areas, due to the very low demand, the supply of technical infrastructure is already often unsatisfactory – further decline of supply is almost impossible as it would mean depriving entire regions of basic accessibility.



Finally, the ageing population leads to changing mobility patterns of the local population: fewer students, fewer people in education, fewer people in employment mean a significant decline in the demand for public transport and threaten its economic viability above all in rural regions. On the other hand, the relative and absolute increase in the population of the elderly people cannot compensate for this falling demand for public transport as this age group tends to be less mobile, with different targets and will increasingly consist of experienced drivers.

In summary: The challenges for transport and mobility are generally connected with affordability of transport infrastructure and networks and with the provision of public transport to the inhabitants of low density areas.

Current solutions and good practices

In the past two decades, a considerable shift between modes of transport has taken place from railway to road, which was supported by the following European and national transport policies:

- High investment, modernisation and extension of the road network in particular concerning motorways on a supra-regional scale (mostly co-funded by the ERFD)
- Modernisation of parts of the rail network on a supra-regional scale (mostly co-funded by the ERFD)
- Closure of many railway lines on a regional level
- Modernisation of many urban public transport systems
- Reduction of the public transport supply in many rural areas
- No consistent policies so far to adapt the regional and local road network to the declining population

As a consequence of these policies, the interregional connectivity in Central Europe has improved significantly at the expense of very high public expenditure mainly for road transport (to a lesser extent also rail transport). The growing motorisation of major parts of the population has resulted in improved accessibility and mobility for many people. However, the situation for people without cars in rural areas has deteriorated since and is still the key challenge.

Good practices to improve public transport in rural areas at comparably low costs include:

- **Integrated transport planning**

This attempt at including all modes of transportation (cars, non-motorised traffic, public transport) at all levels of governance is probably the most important one. The best practice catalogue shows different solutions either improving quality and accessibility via various means of transport or cutting costs without reducing the standards of public transport.

- **Combined school and public passenger transport**

The example of opening school transport to the public is a very important solution for securing transport and mobility in rural areas.

- **Combined freight and passenger transport**

This has been a well-known solution for decades in many countries and is still practiced in Switzerland and Austria. In some countries combined freight and passenger transport is currently being tested.

- **Demand-responsive transport (DRT)**

This established and well-investigated solution for rural areas is a possible backbone of public transport in rural areas.

- **Citizen Buses**

This issue is shown in the best practice catalogue with many interesting examples dealing with local civil initiatives.

- **Rural car pool schemes**

These attempts can also be subsumed under the roof of solutions implemented by the civil society. In many “old” EU member states car sharing schemes as well as car pools are booming due to the possibilities offered by the internet.

Recommendations

Future solutions for transport and mobility under the conditions of demographic change in Central Europe have to take into consideration the future affordability of transport infrastructure and the provision of adequate mobility options for non-car-users in rural areas. Therefore the following recommendations can be given:

1. At the European and national levels, all investments in TEN-T or national transport infrastructure should be checked under the aspects of future affordability: Will there be sufficient demand for new infrastructures in 25 years? What operational costs will this incur? Who will cover the associated costs?
2. Concerning public transport, the national law should clearly foresee which governance level (PTA – Public Transport Authority) has the responsibility to provide such offers. These levels have to be endowed with adequate financial resources.
3. At the regional and local level cost-effective public transport in rural areas (beyond the provision of decentralised services as recommended in the other chapters) should be organised by these PTAs, around the following issues:
 - Integrated public transport planning, i.e. integration of all means (rail and bus) in one plan to avoid inefficient competitive supply.
 - Bundling of demand as much as possible, i.e. integration of public and school transport or – if possible – freight and passenger transport to secure maximum capacity utilisation.
 - Flexible and demand-responsive public transport (including taxi services) in areas of very low demand to secure a minimum level of public service.
 - Encouraging civil and/or market-driven solutions such as citizen buses, car sharing/car pool schemes, etc. These solutions may be difficult to introduce but may have very positive side effects concerning the local identity and social cohesion of residents.

3.5. Public buildings and housing

The challenges

In case of publicly managed buildings, the effort of municipalities to minimise (or at least reduce) the financial costs associated with operating and maintaining such buildings, plays a major role. In this regard, the demographic change is often associated with attempts to reduce or to find multiple uses for existing public infrastructure (such as merging schools, building multigenerational leisure centres, etc.). The challenges in this field are associated with public buildings and important issues arise here: how, why and for whom they should be maintained.

On the other hand, local authorities in affected regions face a difficult task – to ensure an adequate quality of life of the population in a situation when the public budget of municipalities is being constantly reduced. And regarding the issue of housing, the relationship between the demographic change and housing is essentially double-edged. The decline in population reduces demand for housing in a particular region. On the other hand, appropriate housing support may affect the attractiveness of the region for current residents and create a potential for attracting new ones. It is necessary to adapt current housing available in the region into a form that meets the requirements of the changing age structure of the population.



Due to the population ageing, there will be a need to secure flats and houses in which more and more elderly people will be living, if possible, in an autonomous and independent way. Preferred and already-known measures such as barrier-free housing or the provision of sustainable health and social services close to the residential areas of the elderly should be considered and applied, if possible. This could be a new type of housing or better adaptation of existing housing to secure the adequate capacity. But the socio-economic situation of different age groups must be taken into account here in order to consider inter- and intra-generational needs in their places of residence. One solution could be the use by municipalities of public housing management as a policy tool facilitating the provision of local housing.

The main challenges include the following:

- The high cost of operating public buildings.
- The need for rationalising the existing network of educational, social and health institutions (with regard to operating property in the public domain).
- The large number of unused and abandoned industrial areas (this applies to big cities and traditional industrial regions).
- The large number of vacant public buildings (housing) in rural municipalities as well as cities in structurally weak regions.
- Inadequate capacity of social housing for vulnerable groups disadvantaged due to demographic change.
- Weak housing market as a restriction of mobility.

In summary: The challenges within the scope of public buildings and housing involve several problems. Firstly, it is necessary to reduce the operating costs of managing public buildings (multiple uses for existing infrastructure), secondly – to adapt current housing for the needs of the elderly.

Current solutions and examples of good practices

The majority of the problems outlined above are being solved at the local level. Dealing with available housing, for example, fully depends on the particular owner – local authorities are capable of procuring changes in this regard only to a limited extent. Another problem is the management of buildings and industrial areas, which are abandoned by their first owners. All costs of the administration (even minimal) of such premises are at the expense of the local authorities and public budgets.

Examples of good practices aimed at saving public resources can include:

- **Merging primary schools with regard to driving distance within micro-regions¹⁸**

A number of regional integrated plans for the reorganisation of primary education were drawn up due to the declining number of students in primary schools. Many (but not only) rural schools are being merged and municipalities thereby save on their costs of operation. The merging of institutions – saving management costs or merging branches – results in savings on property management costs.

18 See the example of Brehem, Germany, in the *Best Practice Catalogue* – Ch. 3.4.1, p. 23

- **Concentration of different services in one building**

It is already evident that reducing operating costs by concentrating multiple service offers in one building might be effective (various services and actions could be organised with different management of responsibility and financing as a solution)¹⁹.

- **Providing unused public buildings to cultural or entrepreneurial activities at a reduced or very low price**

This is based on the assumption that a minor profit from rent is always better than costs related to the maintenance of unused buildings. Even temporary or non-profit use of public buildings can generate values of general interest with a possible spread effect.

Recommendations

1. Analysis of public money spent on operating public buildings (including available publicly managed housing) in the medium-term perspective

It is necessary to thoroughly and critically analyse the structure of public funds that are being spent on operating public buildings, including (publicly owned) housing²⁰. There is a need for active communication between the representatives of municipalities (and also citizens) and increased willingness to cooperate for a longer term than just the current election period.

2. Energy audits of public buildings

A good example of this type of practice is the Green Savings Programme²¹. Funds from such programme are primarily intended for the “green” renovation of buildings, houses and flats, resulting in lower operating costs. The programme could be open to both municipalities and citizens. In known cases, grants are awarded based on clear rules and a certain degree of co-financing participation by owners is expected.

3. Creation of a centralised database of unused public buildings at the regional/local level

Such database would serve as an information platform for all potential investors or non-governmental, non-profit organisations that are in need of space in order to be able to implement their (business) plans in a particular locality. The database would also be used by regional/local authorities for formulating regional policies. Such databases of available public buildings do not currently exist in many Central European countries.

4. At the local level, each municipality should support vulnerable groups in public housing if they cannot afford it.

If authorities want to provide their population with a certain level of quality of life, they cannot ignore housing issues. The ideal solution would be low-cost housing that can be allocated to members of vulnerable groups (the elderly, young families, the socially excluded) in their difficult situations.

19 See: *Final Report on Pilot Actions*, p. 6

20 See: *Final Report on Pilot Actions*, p. 7

21 The programme’s website: <http://www.novazelenausporam.cz/>

5. Initiation of an operational programme (regional/national/European) focused on providing financial support for the vacancy management of abandoned housing/ industrial sites

In some cases it is not possible to meaningfully revitalise abandoned housing/industrial areas. Then, the last-resort solution is the demolition, which, can save money (i.e. operational and maintenance costs) in the long run. Local governments operating with limited budgets cannot afford to manage vacancies without external support.

3.6. Other technical infrastructure

The challenge

In Central Europe, as in the rest of the European Union, the ongoing economic crisis makes demographic change an increasingly urgent issue. Particularly, the sustainability and organisation of current welfare state services and infrastructures is endangered. Increasing costs, inefficient sizing and distribution, lack of financial and human resources, affect many technical infrastructures such as water, sewage and energy supply. This is particularly evident in rural and isolated areas where the ageing processes overlap with demographic shrinking, depopulation, and economic marginalisation. In these contexts, the reduction in the number of inhabitants, households and activities entails a reduction in water and energy use, so that the infrastructures used for their production and delivery/transport (water pipelines and sewers, electricity networks, power stations and plants, etc.) often end up being **utilised below capacity**. Since fixed costs are high, these types of infrastructures cannot be easily adapted to the modified



demand. Additionally, many of these infrastructures do not meet environmental standards and are in need of fundamental modernisation. Simultaneously, however, the supply of energy and water has to be guaranteed to all citizens, including those who live in scarcely and sparsely populated areas. The costs must then be distributed between fewer inhabitants, which determines **higher prices per capita**.

In summary: The decreasing number of inhabitants (and thus households) and their activities entails a reduction in the use of water and energy, so that the related infrastructures often end up being utilised in an ineffective way while fixed costs are too high to be maintained and such infrastructures cannot be easily adapted and changed to the lower demand.

Current solutions and good practices

Although demographic change determines similar challenges to water and energy infrastructures, market and supply conditions are different, which means that the solutions to be tested are different.

- As regards energy, a few large private and state-owned companies form oligopolies and rule the main markets. Simultaneously, however, the increasing diffusion of green technologies exploiting locally available renewable energy sources is paving the way for a complementary energy supply system, more decentralised and open to private or community-based operators.
- As for water, the management of this resource still largely relies on public authorities and agencies. This is consistent with the far more pervasive implications of water management, which include the provision of water for civil, industrial, agricultural, and sports/entertainment uses, the management of waste water, the contrast to droughts, floods and landslides, the safeguarding of soils, rivers and humid areas from water pollution, etc.

Within such a framework, the ADAPT2DC project presents a selection of best practices, showing how to cope with augmented costs, and the inefficiencies and rigidities of technical water and energy infrastructures in Central Europe. More specifically, the solutions proposed include:

- measures (when feasible) for reducing, re-organising and even closing existing infrastructures and networks;
- inter-urban and inter-regional cooperation agreements and projects aimed at increasing efficiency and reducing costs;
- further development of autonomous, decentralised, and demand-oriented channels (e.g. local energy production, local sewage treatment plants);
- creation of new market opportunities, jobs, and income in the green economy market.

Recommendations

As far as technical infrastructures are concerned, the challenge of demographic change consists above all in the containment of increasing operational costs in a context characterised by rising environmental standards, rigid facilities (and networks), and elevated fixed costs.

As regards water and sewage infrastructures, the following recommendations can be determined:

1. All actors should keep demographic decline in mind when it comes to the planning of water/sewage networks. For instance, when new networks are planned, their economic viability should be assessed along the minimum level of anticipated demand, not the maximum level. Similarly, each replacement/renewal of pipes should consider whether downsizing is feasible. When new facilities (such as sewage plants) are planned, a **modular construction** should be considered (which makes future structural alterations easier).
2. In areas with particularly low population densities, more flexible legal standards should be considered, for instance the usage of personal/private wells (for generating drinking water) should be allowed in order to reduce the size of water networks. Also, the usage of small sewage treatment plants may be considered as an alternative to central (municipal) sewage treatment plants.
3. Intercommunal cooperation: if some water or sewage companies (which are often in the hands of local administration) centralised their structures, costs could often be saved, including joint initiatives of several municipalities in the region and the consequent sharing of costs.
4. Minimisation of the designation of new development areas/concentration on the development of brown fields: each new (additional) industrial estate or residential area needs a new connection to water/sewage networks: by concentrating on vacant lots in town centres, those costs are saved (keyword: “compact development”).
5. In case of rain water drainage in rural areas, the use of trenches/ditches may be considered (the related investment costs are much lower than those for sewage pipes).

As regards energy infrastructures, the following recommendations can be determined:

1. The expansion of decentralised energy production and communal energy networks (in order to ensure a local supply and to be more independent from global price fluctuations) – particularly in scarcely populated regions.
 - One possibility of securing the community-based energy supply is the involvement of citizens. This could, for instance, be the case for direct shareholding in energy plants (citizens’ cooperatives).
 - The engagement of municipal utilities and/or public-private partnerships (for instance with agricultural cooperatives).
 - Inter-communal cooperation: the shared management of centralised energy facilities can unify dispersed markets into larger ones, which is a step in mitigating the financial burden caused by dispersed oversized infrastructure.
 - Usage of urban vacant lots/brownfields for the production of renewable energies (for instance photovoltaic systems)/lease of municipal spaces for the private generation of energy.
 - Publicity for the advantages of autonomous supply with renewable energies/diffusion of green energy technologies such as photovoltaic panels and biomass power stations producing electricity and heat for neighbouring facilities and households.

2. When it comes to planning the networks, effects of demographic change, such as the regionally differentiated decrease in private demand for energy, cannot be considered in an isolated way, but only in the context of demands of other energy users. Increased energy efficiency is an important component.
3. Minimisation of the designation of new industrial and residential areas with the need for new energy connections in rural/remote regions.

Conclusions

Overall, the recommendations show that there are cost-effective solutions for the provision of public infrastructure and services in all fields in shrinking regions, which will not only secure the status quo but can also improve the level of services. However, many of these solutions will still require not only a considerable amount of public responsibility and expenditure but also – perhaps above all – awareness that demographic change is a fact, and we should all prepare for this change in various domains. Many of the issues presented here as crucial for shrinking regions must be examined in the long-term perspective and with a focus on synchronising adequate strategies with current planning systems in regional and local communities. Solutions arising from comparative studies must be carefully placed in a local context, due to specific target groups and local circumstances in order to achieve sustainability.

All solutions on dealing with demographic changes, even those already known, require special managerial skills and new approaches to governance processes at local and regional levels, as well as an attempt to promote actions beyond incidental (one-off) actions within time-limited projects. This means that new arenas for local governance should be established, with verified routines for local planning. Consequently, good solutions for shrinking regions appeal to new institutional innovations and arrangements of local governance practices.

Public intervention is crucial for the future of shrinking regions. Nevertheless, in most cases, the economic environment should be designed to encourage entrepreneurship and support private investments for sustainable regional development. Finally, the assets of an ageing population such as experience, responsibility and time should be used to promote civic solutions for many problems, especially in small neighbourhoods. If state organisations, private capital, and the civic society work successfully hand in hand, the adaptation to demographic change is much more of an opportunity rather than a threat for shrinking regions.



Annex A.1.

Differences in NUTS between countries and implications for policy recommendations

The regional level in the EU was defined by Eurostat in the form of “NUTS”. The Nomenclature of Territorial Units for Statistics (NUTS) was introduced by Eurostat more than forty years ago for the needs of classifying territorial structures and, nowadays, serves as a reference for the collection, development and harmonisation of regional statistics, for socio-economic analyses of the regions and for the framing of the Community’s regional policies. It currently comprises a simple three-level hierarchical classification based on unified methodological principles and it is presented in Table 1.

Table 1. EU NUTS Levels

Level	Minimum Population	Maximum Population
NUTS – 1	3 million	7 million
NUTS – 2	800,000	3 million
NUTS – 3	150,000	800,000

According to the EC Regulation, “Existing administrative units within the Member States shall constitute the first criterion used for the definition of territorial units (...). ‘Administrative unit’ shall mean a geographical area with an administrative authority that has the power to take administrative or policy decisions for that area within the legal and institutional framework of the Member State”²².

Despite the aim of ensuring that regions of comparable size appear at the same NUTS level, each level contains regions that differ greatly in terms of area, economic strength, administrative power, and even population. See Table 2.

²² EC Regulation No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS).

Table 2. Differences between NUTS in Europe and in individual countries.

NUTS level	EU-Terms	AT	CZ	DE	HU
NUTS 0	nation	AT – ÖSTERREICH	CZ – ČESKÁ REPUBLIKA	DE– DEUTSCHLAND	HU – MAGYARORSZÁG
NUTS 1	major socio-economic regions	3 – Groups of states (Gruppen von Bundesländern), e.g. Westösterreich	1 – the same as NUTS0	16 – States (Länder) e.g. Thuringia	3 – Statistical Large Region (Statistikainagyrégiók), e.g. ALFÖLD ÉSZAK-Magyarország
NUTS 2	basic regions for the application of regional policies	9 – States (Bundesländer), e.g. Kärnten	8 – Oblasts (Oblasti), eg. Severozápad	39 – Government Regions (Regierungs Bezirke), some smaller Länder (=NUTS 1 as Thuringia)	7 – Planning and statistical region (Tervezési-statisztikai régiók), e.g. Észak-Alföld
NUTS 3	small region for specific diagnoses	35 – Groups of districts (Gruppen von Politischen Bezirken), eg. Klagenfurt-Villach	13 – Regions (Kraje), e.g. Ústecký kraj + Prague	429 – Districts (Landkreise, Kreisfreie Städte)	20 – counties (Megyék) and Budapest, e.g. Jász-Nagykun-Szolnok
LAU 1	local administrative units 1	35 – the same as NUTS3	77 – Districts (okresy)	1457 – Collective municipalities (Verwaltungsgemeinschaften)	174 – Statistical Subregions (Statistikai-kistérségek)
LAU 2	local administrative units 2	2357 – Municipalities (Gemeinden)	6249 – Municipalities (obce)	12379 – Municipalities (Gemeinden)	3152 – Settlements (Települések)

NUTS level	EU-Terms	IT	PL	SI	SK
NUTS 0	nation	IT – ITALIA	PL – POLSKA	SI – SLOVENIJA	SK – SLOVENSKO
NUTS 1	major socio-economic regions	5 – Groups of regions (Gruppi di regioni), e.g. Nord-Ovest	6 – regions (regiony) – groups of voivodships, eg. Central Region	1 – the same as NUTS0	1 – the same as NUTS0
NUTS 2	basic regions for the application of regional policies	21 – regions (Regioni), e.g. Piemonte	16 – voivodships (województwa) e.g. Województwo Śląskie)	2 – Macroregions (Kohezijske regije) – Vzhodna Slovenija, Zahodna Slovenija	4 – Oblasts (Oblasti), e.g. Stredné Slovensko
NUTS 3	small region for specific diagnoses	107 – Provinces (Province), e.g. Torino	66 – sub-regions (podregiony) – groups of districts, e.g. Podregion Katowicki	12 – Statistical regions (Statističneregije), eg. Gorenjska	8 – Regions (Kraje), e.g. Žilinský kraj
LAU 1	local administrative units 1	107 – the same as NUTS 3	379 – Districts (powiaty), e.g. Powiat Mikołowski	58 – Administrative units (upravneneote)	79 – Districts (okresy)
LAU 2	local administrative units 2	8101 – Municipalities (Comuni)	2478 – Municipalities (gminy), e.g. Suszec	211 – Municipalities (občine)	2928 – Municipalities (obce)

Annex A.2

Various important documents at the European level related to and on demographic changes

Communication from the Commission, Europe 2020 *A strategy for smart, sustainable and inclusive growth*, COM(2010) 2020 final, Brussels, 3.3.2010.

Communication from the Commission to the European Parliament and the Council, Brussels, *Taking forward the Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Ageing*, COM(2012) 83 final, Brussels, 29.2.2012.

Communication from the Commission. *Green Paper “Confronting demographic change: a new solidarity between the generations”*, COM (2005) 94 final.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Promoting Solidarity between the Generations*, COM (2007) 244 final.

Communication from the Commission, *Renewed Social Agenda: Opportunities, Access and Solidarity in 21st Century Europe*, COM(2008) 412, Brussels, 2 July 2008

The EU Contributing to Active Ageing and Solidarity between Generations, Publications Office of the European Union, Luxembourg 2012

European Parliament resolution of 15 November 2011 on demographic change and its consequences for the future cohesion policy of the EU,(2010/2157(INI)).

SOC/367, *The impact of population ageing on health and welfare systems*, Brussels, 15 July 2010.

SOC/373, *Legal immigration in the context of demographic challenges*, Brussels, 15 September 2010.

SOC/399, *Family policy and demographic change*, Brussels, 4 May 2011.

SOC/400, *Demographic trends and the labour market*, Brussels, 13 July 2011.

Source: SOC/448, *The involvement and participation of older people in society*, Brussels, 14 November 2012.

European Year of Active Ageing and Solidarity between Generations 2012, Conclusions of the EESC coordination group, European Union 2013.

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Progress Consulting S.r.l. and Living Prospects Ltd, *Active ageing: local and regional solutions*, European Union, May 2011.

Territorial Agenda of the EU

Green Paper on Territorial Cohesion

Regions 2020 – An assessment of future challenges for EU regions, Commission Staff Working document

Barca-Report – An Agenda for reformed cohesion policy

European Spatial Development Perspective: Towards balanced and sustainable development of the territory of the EU

Others:

- *EU Convention on Demographic Change* – Age Platform Europe, see <http://www.age-platform.eu/>
- *CE-Ageing Platform Strategy*, 2013,
http://www.ce-geing.eu/images/documents/products/CE%20Ageing%20Strategy_29102013_final.pdf
- OECD publications like Martinez-Fernandez, 2013

Selected deliverables of the ADAPT2DC project which can be found at www.adapt2dc.eu:

D3.1.5: *Comparative socio-economic background analysis of shrinking regions and cities in Central Europe*

D4.1.1: *Best Practice Catalogue*

D4.2.8: *Transnational Guidebook for Pilot Action Implementation*

D4.1.2: *Regional Guidebook: methods to adapt to or counterbalance shrinking*

D4.4.4: *Final report on Pilot actions*

D5.2.8: *Recommendations from the Best Practice Catalogue*

D5.2.10: *The Transnational Review of European and Regional Strategic Documents on Demographic Changes (Appraisal of advantages/disadvantages)*



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