



## **Final Report**

### **Integrated Regional Development Concept „Lower Middle Elbe“**

#### **INTERREG IVB Project “LABEL”**

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## 1 Quintessence and conclusions of the IRDC Lower Middle Elbe

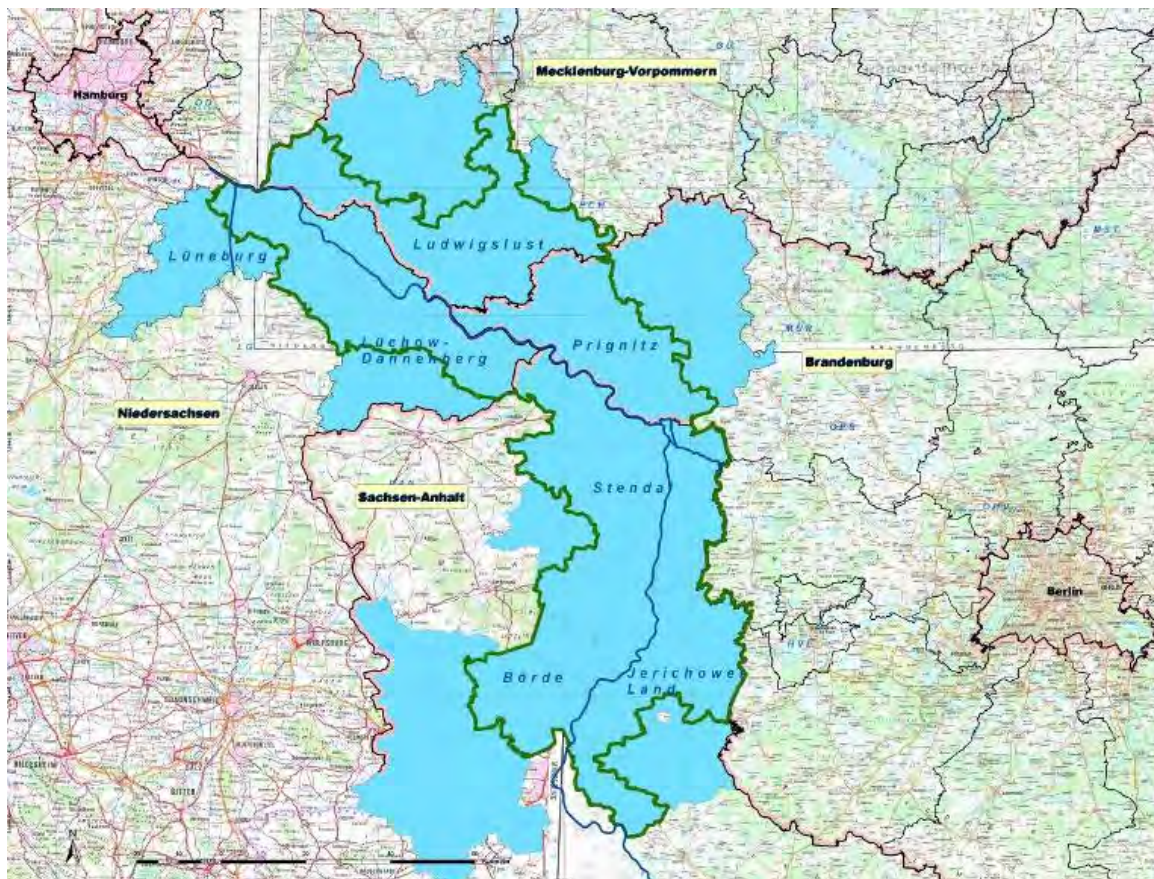
- Objective of the Integrated Regional Development Concept is to render an expert opinion which creates a sense of identity in the participating counties and municipalities in the study area.
- The analysed area is composed of economically underdeveloped, sparsely populated, peripherally located areas as well as of stronger economic regions around the cities of Magdeburg and Hamburg.
- The study area is heterogeneous and has not been systematically analyzed in the present cross-border approach so far.
- The unique and common feature of the study area is the biosphere reserve "Flusslandschaft Elbe" and the Elbe tributaries and back waters.
- The biosphere reserve is an important connecting element, but not always recognised as such by the regional actors.
- The study area is understood as "model space for a sustainable and environmentally sound development" where economic, ecological and social development is equally important.
- The cross-sectoral issues flood control, climate protection, river economics and development of settlement systems/demographic change are connecting elements between the counties and municipalities and therefore special attention is being paid to these issues.
- There are several regional initiatives, networks and development plans dealing with the same issues, including cross-sectoral issues, but are often dedicated to only one particular area.
- A cross-border analysis of the Elbe region between Hamburg and Magdeburg was previously only done by the Municipal Association for Co-operation in the Elbe Valley - an interstate cooperation of counties and municipalities should be strengthened in future.
- Joint action of the counties and municipalities located within the study area is driven by the idea to benefit from the metropolitan regions around Hamburg, Magdeburg and Braunschweig/Wolfsburg/Salzgitter and enter into cooperation and division of work with these spaces. On the other hand, the unique, rural character of the landscape shall be preserved.
- The strategic recommendations are based on the model concept „Region Untere Mittelbe: Zukunft erkennen – grenzenlos Handeln“, which aims at developing a sense of common identity and joint action in the region Lower Middle Elbe.
- The 19 identified projects are appropriate to implement these principles. However, this requires coordinated action. The Municipal Association for Co-operation in the Elbe Valley (KAG Elbetal) would have been an appropriate platform for this approach.

## 2 Topic and objectives

The project LABEL („ELBE-LABE -adaption to flood risk in the Elbe river basin“) is being implemented within the framework of the Community initiative INTERREG. For the project 20 project partners from Germany, the Czech Republic, Austria, and Hungary joined together to work on a more efficient flood risk management along the Elbe river.

Work package four of the project LABEL includes the task of elaborating a regional development concept (IRDC) for both the Czech and the German partners. The German project partner County of Ludwigslust commissioned the Landgesellschaft Mecklenburg-Vorpommern together with their consortial partners (Niedersächsische Landgesellschaft, Landgesellschaft Sachsen-Anhalt) to realise an integrated regional development concept (IRDC) for the Lower Middle Elbe area between Magdeburg und Lüneburg. The principal represents the Counties of Ludwigslust, Prignitz, Stendal, Jerichower Land, Börde, Lüneburg, and Lüchow-Dannenberg of the „Kommunalen Arbeitsgemeinschaft zur Zusammenarbeit im Elbetal (KAG)“, a municipal work group for collaboration in the Elbe Valley.

Figure 1: Territory covered by the IRDC Lower Middle Elbe



Source: own illustration

 Study area

As a result, an integrated regional development concept is being elaborated as an expertise which represents a self-commitment of the partners in the municipal work group for collaboration in the Elbe valley (KAG Elbetal). The Lower Middle Elbe region is being defined by this concept using key data and assessment for the first time. Until now the ana-



lysed area has never been seen as an administrative entity nor as a tourist destination or as a single economic area.

The integrated regional development concept therefore plays an important role in creating a sense of identity. Recommendations and projects for the development of an integrated river basin management may serve as guidance for decision-making and show development options for the seven counties involved as well as for other actors such as regional planning or trade associations.

The integrated regional development concept thus facilitates a collaboration of decision makers in different Federal States and Counties.

### 3 Methodology and working approach

The IRDC Lower Middle Elbe is being worked out following a three-phase model:

#### 1. Analysis phase:

- Analysis of general conditions of the analysed area (summary of planning and initiatives)
- Inventory and structural analysis
- SWOT analysis

#### 2. Concept phase:

- Description of cross-sectoral issues
- Overall concept

#### 3. Project phase:

- Recommended action and project proposals

This model is being implemented by a consortium of three land development companies, Landgesellschaft Sachsen-Anhalt, Landgesellschaft Mecklenburg-Vorpommern, Niedersächsische Landgesellschaft. The consortium is managed by Landgesellschaft MV mbH.

All analyses are dedicated to developing recommendations for action and project proposals with regard to the four cross-sectoral issues of flood protection, climate protection, river economics, and development of land use patterns/demographic change. Thus, work in the different chapters will be based on the cross-sectoral issues as far as possible. The cross-sectoral topics can be described as follows:

#### Flood protection

- Consideration of measures to protect and preserve the natural and cultural landscape taking into account the special requirements of flood protection
- Measures to protect population and material assets

#### Climate protection

- Identification of expected changes regarding climate and water balance within the context of economy and ecology on the one hand and global and regional challenges of climate change on the other.
- Assessment of climate change impacts on navigability on the Elbe river, e.g. changes regarding low water and flood occurrences

#### River economics

- Economic importance of the Elbe river as a transport route with harbour infrastructures
- Recreational use of the Elbe area - another sector of river economics

### Development of settlement systems/demographic change

- Land use management for the purpose of flood protection (settlement and business development) in areas with high flood risk
- Services of General Interest taking into account demographic change

In the course of work on the concept several already existing planning documents and development concepts have been evaluated (see annex). The findings of the analysis are included in chapter three. So the principal is provided with a summary of general conditions of the analysed area.

At the same time, these general conditions represent the framework for further development in the analysed area and are therefore regarded as essential for chapters six and seven (development strategy, recommended actions, projects).

Another point of special importance is the administrative heterogeneity of the area. The analysed area involves four Federal States and seven Counties. From this follows that there are differences in the political conditions (Federal State Law, spatial planning rules, and different visions of how to develop the Elbe basin) which have to be taken into account in the elaboration of the integrated regional development concept.

A steering committee ensured a continuous communication to the County of Ludwigslust and actors from the other six Counties involved. A further transfer of knowledge and integration of additional aspects into the planning was realised by expert interviews as well as by participating in workshops

Some of the events and meetings in this regard are listed in a table (see annex).

## 4 General conditions of the analysed area – Summary of planning and initiatives

### 4.1 Principles and objectives of regional development and planning

Principles and objectives of regional development and spatial planning are defined by the Regional Planning Act (Raumordnungsgesetz ROG) in planning programmes on Federal State level as well as in regional development plans. Objectives of regional policy are binding parameters; principles of regional policy are general parameters as requirements for subsequent considerations or discretionary decisions.

In the following, these principles and objectives will be connected to the cross-sectoral issues of the integrated regional development concept Lower Middle Elbe. The correlation is based on the regional planning level<sup>1</sup> with regard to the seven Counties.

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<sup>1</sup> The planning regions are designated by the spatial planning offices of the Länder (Ämter für Raumordnung). Information in the following tables relate to the study area. General statements like “Adaptation and development of land use patterns with regard to climate change” are valid for the entire planning region and therefore for the study area as well.

**Term definition:** state planning = L, regional planning = R, objective = Z, principle = G

### Planning region Westmecklenburg

Flood protection	Climate protection
<ul style="list-style-type: none"> <li>- Priority area nature protection and landscape conservation (LZ); (near Boizenburg, Jessenitz, Dömitz; FFH)</li> <li>- Reserved area flood protection (LG); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- In reserved areas flood protection special attention is being paid to prevention and measure to minimize damage. (LG)</li> <li>- Reserved areas nature protection and landscape conservation (LG); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- Reserved area flood protection (LG); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- Reserved areas nature protection and landscape conservation (RG); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- Priority areas nature protection and landscape conservation (RZ); (riparian zone of the Elbe river)</li> <li>- Reserved areas coastal and flood protection (RG); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- Special importance of the issue of flood protection (RG)</li> <li>- Reserved areas coastal and flood protection (RZ)</li> </ul>	<ul style="list-style-type: none"> <li>- Adaptation and alignment of land use with regard to climate change (RG)</li> </ul>
River economics	Development of settlement systems/demographic change
<ul style="list-style-type: none"> <li>- Reserved area tourism (LG)</li> <li>- Tourism development area (RZ); (everywhere in the immediate vicinity of the Elbe river)</li> <li>- Development of landscape-related recreational offers, accommodation capacities, tourism infrastructure; preferential consideration for grants with regard to tourism (RZ)</li> <li>- Further development of offers and conditions for water sports and passenger cruises (RZ)</li> <li>- Harbours of Boizenburg and Dömitz will be further developed for tourist usage. (RG)</li> <li>- Important development site for business and industry: Boizenburg, Ludwigslust (RZ)</li> <li>- Safeguarding and further development of large-scale and supraregional transport connections (RG)</li> <li>- Safeguarding and further development of regional industry or business focus inter alia shipbuilding (RG)</li> <li>- Strengthening and further development of rural areas with a healthy economy (RG)</li> <li>- Development impetus from the metropolitan region of Hamburg shall be used. Creation of building areas and infrastructure (RG)</li> <li>- Fishery as a typical economic sector in the region shall be preserved and further developed. (RG)</li> <li>- Harbour infrastructure shall be further developed according to needs (RG)</li> </ul>	<ul style="list-style-type: none"> <li>- Low order centres: Boizenburg, Lübtheen, Dömitz, Grabow (RZ)</li> <li>- Middle order centre: Ludwigslust (RZ)</li> <li>- Strengthening of centres (RG)</li> <li>- Priority locations: Neu Kaliß, Rastow (RZ); priority locations for settlement supplement centres. They are defined as main places of a certain municipality, if criteria like number of inhabitants, employment figures, and trade capacity are regarded as adequate. Siedlungsschwerpunkte ergänzen die zentralen Orte. (RZ)</li> <li>- Regional facilities of services of public interest shall be concentrated in central towns.</li> </ul>



## Planning region Prignitz-Oberhavel

<b>Flood protection</b> <ul style="list-style-type: none"> <li>- Green belt system (LZ) (riparian zone of the entire Elbe River). The green belt system must be preserved and extended. Utilisation is excluded regularly.</li> <li>- Area of high flood risk (LG) (everywhere in the immediate vicinity of the Elbe river)</li> </ul>	<b>Climate protection</b> <p>Not specified.</p>
<b>River economics</b> <ul style="list-style-type: none"> <li>- Provision sites for large-scale industry/business projects: Perleberg, Pritzwalk (LG)</li> <li>- transnational transport corridor Hamburg/ atlantic region (LZ)</li> </ul>	<b>Development of settlement systems/demographic change</b> <ul style="list-style-type: none"> <li>- Middle order centres with function sharing: Perleberg – Wittenberge, Pritzwalk – Wittstock (LZ)</li> </ul>

An up-to-date regional development plan for the planning region Prignitz-Oberhavel is not available.

## Planning region Lüneburg

<b>Flood protection</b> <ul style="list-style-type: none"> <li>- Regional planning graphics show defined priority areas for flood protection in detail. Top priority in the field of flood protection is given to dike enforcement measures along the Elbe River. Existing flood control installations shall be continuously developed and maintained. (LZ)</li> <li>- Floodplains are to be preserved and further developed as necessary natural habitats for numerous animal and plant species taking into account considerations of flood control demands. This valid especially for the important dyke foreland of the Elbe river. (RG)</li> </ul>	<b>Climate protection</b> <ul style="list-style-type: none"> <li>- Climate change and climate protection demands shall be considered more carefully by sustainable spatial development. This includes e.g. compact constructions and forms of settlement, promotion of inner development, establishment of optimal framework conditions for efficient use of solar energy, promotion and use of renewable energy in residential building, best possible public transport linkage for residential areas, traffic avoidance as well preservation and increase of storage capacities for climate-relevant gases (forests, woods, organic soil) (LG)</li> <li>- Particularly, still existing parts of the fen landscape in the local subdistricts of Hittbergen, Wendewisch, and Garlstorf are to be preserved because of their unique importance for landscape and culture. This is also valid for the designated preservation areas due to landscape-ecological reasons. Other nature conservation tasks include the protection and further development of the biosphere reserve „Niedersächsische Elbtalaue“, which is regulated by the Biosphere Act. (RZ)</li> </ul>
<b>River economics</b> <ul style="list-style-type: none"> <li>- The Elbe River and its lateral canal are very important for the local economy. Transport of goods on water ways is to be encouraged. Provision of spaces for industry and business is still necessary in future to safeguard and create jobs and vocational training opportunities. For this purpose, crucial technical infrastructure like the Scharnebeck ship hoist must be further developed to relieve the increasing harbour hinterland transport in the future. (LZ)</li> <li>- Apart from the commercial usage the Elbe river is also important for cruise tourism. Future navigability must be ensured to strengthen and develop the water-based tourism sector in the region. (LZ)</li> </ul>	<b>Development of settlement systems/demographic change</b> <ul style="list-style-type: none"> <li>- The development of settlement systems should be preferentially oriented towards central locations (LZ). In addition to this, the maintenance and improvement of the functionality of rural settlement systems is to be promoted. Therefore, additional development and modernisation measures should be realised in accordance to a sustainable development of settlement systems. (RG)</li> <li>- Locations with a special development task with regard to rural settlement systems in the analysed area include among others Dahlem, Gienau, and Oldendorf an der Göhrde (LZ). Above mentioned localities must in particular fulfil functions like for example rural living, local recreation, and rural tour-</li> </ul>

	<p>ism. They also must hold agricultural and other rural business establishments. (LG)</p> <ul style="list-style-type: none"> <li>- Low order centres: Scharnbeck, Neetze, Neuhaus, Dahlenburg</li> <li>- Low order centre with middle order functions: Bleckede</li> </ul>
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## Planning region Lüchow-Dannenberg

<b>Flood protection</b> <ul style="list-style-type: none"> <li>- Regional planning graphics define areas for flood runoff and prevent differing planning, measures, or usages. These areas are to be kept clear of planings, measures, or usages, which could potentially affect flooding, flood retention and flood discharge or which could reduce the retention areas separately or in combination with other measures. (RZ)</li> </ul>	<b>Climate protection</b> <ul style="list-style-type: none"> <li>- Ventilation lanes and cold discharge paths, in particular in the Drawehn brook valleys and at the Geest brinks towards the Elbe, must not be affected in their natural function by measures. (RZ)</li> <li>- Preservation, maintenance, and use of forests are to be intensified because of forest-based carbon dioxide sequestration. By increased usage of wood as renewable energy source and as building material it is possible to reduce carbon dioxide emissions significantly. (RG)</li> </ul>
<b>River economics</b> <ul style="list-style-type: none"> <li>- Regional planning graphics define the Elbe as navigable water, its minimal load capacity, and freight handling locations. The Federal Waterway Elbe is to be preserved and further developed in its capacity aiming at stabilising the lane depth at 1.60 m below the GIW 89 with a lane width of minimum 50 m for 95% of the year, at a lane depth of 2.50 m at Mid-water level MW for 50% of the year, and for the 3-layer container transport at a passage height of 7.00 m above measure water level for more than 355 days a year in average.</li> <li>- Preservation of the Elbe as a high-capacity navigable river is regarded as a regional objective. This includes usage of the Elbe for tourism. Therefore, planning efforts to strengthen the tourism sector are to be promoted. (RZ) Examples include the development of marinas as well as the construction of embarkation points for boat tours in this part of the region. (RG)</li> </ul>	<b>Development of settlement systems/demographic change</b> <ul style="list-style-type: none"> <li>- Generally, a spatial and settlement system is to be developed in rural areas which preserves open space and prevents unplanned settlement in open country. (LZ)</li> <li>- For the development of settlement systems in towns and cities it is important to pay attention to the special character of the specific land-use area. Especially, the overall appearance of locality and landscape are to be preserved and developed in accordance with demands of urban development. (RG). Settlement development should priorly focus on central localities. (LZ)</li> <li>- A regional development plan (RROP) defines priority areas for the development of settlement systems which serves as a guidance for general settlement development. (RZ)</li> <li>- Fundamental development components with regard to population structure are to be taken into account for all measures and plannings of spatial development. (RG)</li> <li>- Middle order centre: Lüchow</li> <li>- Low order centres: Hitzacker, Dannenberg, Gartow</li> </ul>

## Planning region Altmark and Magdeburg:

Flood protection	Climate protection
<ul style="list-style-type: none"> <li>- Preventive inland flood protection is to be realised by floodplain conservation and restoration as well as by retention areas in areas with high food risk. (LG)</li> <li>- In individual cases of land-use conflicts between priority areas for nature and landscape and priority areas for flood control, flood protection has priority. (LZ)</li> <li>- Definition of priority areas for flood control to preserve floodplains for flood retention and flood run-off as well as for the prevention of disadvantageous land-uses which accelerate and foster flood events. (LZ)</li> <li>- Priority areas include areas between shorelines and dikes or river terraces as well as overflow and retention areas of major watercourses (LZ)- Elbe, Havel, Aland-Biese-Milde, Tanger, Ehle, Elbaumflut, Ohre, Uchte, Ihle, Stremme</li> <li>- All options of natural water retention are to be used for flood control including dike relocation to re-establish floodplains, removal of hard surfaces or structures that covering the ground, seepage, and renaturation, agricultural and silvicultural land-use in accordance with the location. (EFGL)</li> </ul>	<ul style="list-style-type: none"> <li>- Negative impacts of climate changes must be counteracted. Atmospheric pollution shall be reduced, especially in urban agglomerations. Greenhouse gas emissions shall be reduced to be able to reach the Federal government's carbon emissions caps. Measure shall be aligned with these objectives. (EFGL)</li> <li>- Open spaces are to be preserved or re-established in their functions with regard to their importance for functional soils, for water balance, fauna and flora, and for the climate as such. (LG)</li> <li>- With regard to a sustainable protection of natural resources, open space areas shall be used only in cases where public interest can be justified and if inevitable usage is realised in way that is environmentally sound and space saving at the same time.</li> <li>- Usages linked to open space, like agriculture, forestry, primary production, water catchment, and ground water protective measures shall be aligned with measures of regulation and regeneration of the natural balance. (LG)</li> <li>- Negative impacts of climate changes shall be counteracted. Necessary reduction of greenhouse gas emissions shall not be lower than the international commitments of the Federal Republic of Germany with regard to reduction of greenhouse gas emissions. Regionally significant plans and measures must be in line with these objectives. (EFGL)</li> <li>- Necessary spatial conditions are to be created or maintained to allow a continuous development of agriculture and forestry as highly productive sectors of the economy. Natural resources can thus be protected and sustainable measures with regard to nature protection and landscape conservation can be implemented.</li> <li>- Priority areas for nature and landscape are planned for the protection of natural resources. These include parts of the biosphere reserve Flusslandschaft Elbe north of Magdeburg, parts of the Lower Havel lowland and Schollen Lake, Elbaue Beuster – Wahrenberg, Tangelnscher Bach and marshland forests, Schießplatz Bindfelde east of Stendal, Stendaler Stadtforst, Alte Elbe between Kannenberg and Berge, parts of the biosphere reserve Mittlere Elbe, Elbaue Jerichow, parts of Colbitz-Letzlinger Heath, Altenplathow Forest, Demsin Heath, Fiener Bruch, Ramstedt Forest, Tangerniederung</li> </ul>
River economics	Development of settlement systems/demographic change
<ul style="list-style-type: none"> <li>- To improve local business conditions it is necessary to reserve area to the required extent, to develop business relevant infrastructure, and to increase the appeal of the region as business location. (LG)</li> <li>- The existing network of waterways and inland ports shall be maintained and, if necessary, modernised to ensure an efficient and demand-oriented transport of goods and to relieve road</li> </ul>	<ul style="list-style-type: none"> <li>- The integrity of the ecological balance of populated and unsettled areas is to be preserved. Well-balanced economic, infrastructural, social, ecological, and cultural conditions are to be strived for in all parts of the area. (LG)</li> <li>- Reuse of idle settlement areas is to be preferred to the usage of open land. (LG)</li> <li>- Further unplanned settlement in open country is to be prevented. (LG)</li> </ul>

<p>and rail-based transport. (LZ)</p> <ul style="list-style-type: none"> <li>- The development of the Mittelland Canal/Elbe-Havel Canal including the Waterway Interchange with a permanent link to the ports in Magdeburg which is independent from the Elbe water level has had the highest priority.</li> <li>- The development as well as future development opportunities of priority public port locations are to be supported in particular.</li> <li>- Priority locations for port development: Arneburg/Niedergörne, Haldensleben, Genthin</li> <li>- Tourism is to be developed sustainably. In particular, improvement of tourism infrastructure as well as of tourism facilities is to be permitted and their enhancement is to be facilitated with regard to a sustainable development. (LG)</li> <li>- Easy accessibility of all parts of the area for personal and commercial transport is to be ensured. In particular, preconditions for shifting transportation towards environmentally friendly modes of transport like rail or waterways are to be improved. (LG)</li> <li>- Priority location for state-relevant, large-scale industrial plants: Arneburg</li> <li>- Priority location for region-relevant industrial plants and business locations: Stendal-Buchholz</li> </ul>	<ul style="list-style-type: none"> <li>- The infrastructure is to be aligned with settlement and open land systems. Area-wide basic supply of goods and services as well as waste disposal services are to be guaranteed. Social infrastructure is to be concentrated primarily in central places. (LG)</li> <li>- The development of social infrastructure shall be aiming at providing necessary facilities to the population in reasonable distance in all parts of the area in order to improve the general living conditions. For this purpose, the network of social facilities shall be improved and broadened according to the needs and mainly in central places. (LG)</li> <li>- Rural areas are to be developed individually as economic and residential areas. Ecological functions of rural areas are to be preserved also with regard to the overall area. (LG)</li> <li>- Urban inner-development, modernisation of flats, urban renewal, and improvement of the residential environment have priority over designation of land for development in outskirt area. (LG)</li> <li>- Middle order centre partly functioning as high order centre: Stendal</li> <li>- Middle order centres: Bug, Haldensleben, Stendal</li> <li>- Low order centres partly functioning as middle order centres: Genthin, Wolmirstedt, Havelberg, Osterburg</li> <li>- Low order centres: Angern, Gommern, Jerichow, Parey Arneburg, Havelberg, Seehausen, Schönhäusen, Tangerhütte, Tangermünde</li> </ul>
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EFGL: Einzelfachliche Grundsätze der Landesplanung (Functional principles of federal state law for comprehensive regional planning)

## Conclusions:

The analysis of principles and objectives of regional development and spatial planning in the six planning regions involved indicates that the intended development objectives for each region correspond to a large extent with each other. At this level there already is a consistent area which forms the region Lower Middle Elbe.

This uniformity is manifested in the cross-sectoral issue of flood protection. There are regulations concerning the protection of the natural and cultural landscape against flood events in all planning regions. This includes the designation of priority areas and reserved areas for flood control<sup>2</sup> in the catchment area of the river Elbe. Flood control measures in the planning regions follow the same approach. This also includes hydro-engineering measures like dyke construction or re-establishment of flood plains.

There are similar statements from the analysed planning regions regarding the development of settlement systems and demographic change. Priority is given to area-wide basic services of technical infrastructure for the population. Special regional facilities and social infrastructure of services for the public shall be concentrated primarily in central places. The former principle of a region-wide provision of public services is thus given up as a consequence of demographic change.

In contrast to the concrete statements concerning flood protection and development of settlement systems/demographic change, there are more general statements with regard to climate protection. These statements often represent principles rather than objectives

<sup>2</sup> Names for these areas may vary in the different planning regions.

and are therefore subject to further considerations and discretionary decisions. The need for protection of nature and landscape is being accentuated, in particular the development of the biosphere reserve Flusslandschaft Elbe. Furthermore, the need for minimising excessive land use by a sustainable spatial and settlement development is being emphasized.

Statements regarding the cross-sectoral issue river economics focus mainly on the sectors of tourism and commercial shipping. The planning regions, however, show considerable differences in the weighting of these sectors. The tourism sector connected with river economics shall be encouraged in the planning region Westmecklenburg, whilst the importance of the river Elbe for commercial transport including necessary technical facilities is being emphasized in the planning regions Lüneburg, Lüchow-Dannenberg as well as Altmark and Magdeburg.

## 4.2 Regional initiatives and networks

An increasing number of associations is working in the regions and is collaborating in growing networks to strengthen regional economy, environment, and identity. There are over 500 regional initiatives in Germany. An online portal<sup>3</sup> provides detailed information about the whole range of initiatives. A variety of initiatives and networks have been established in the past in the analysed area. In the following these initiatives are described shortly.

The area of analysis is characterised by the unique Elbe valley which in large parts has been preserved in unspoilt nature also due to the fact that the area is located on both sides of the former border between East and West Germany. The area remained untouched during the years of German separation. Today's tourists attach little value to administrative divisions or municipal jurisdiction but enjoy the landscape as such and need comprehensive tourism infrastructure.

Taking into account these considerations, perceiving the Elbe area as promising cooperation area against the background of the developing biosphere reserve „Flusslandschaft Elbe“, and understanding this as a chance, seven Counties from north of Magdeburg to Lower Saxony joined in 1996 to coordinate their activities concerning the Elbe River and pool their resources to promote and support the biosphere reserve and its sustainable development objectives. The municipal work group for collaboration in the Elbe valley - **KAG Elbetal** was founded. Since then, the KAG Elbetal is committed to a mutually coordinated, sustainable regional development of the Elbe valley.

The declared objective of the KAG is to develop the Elbe Valley economically, ecologically, with regard to tourism, and as an area for living with the involvement of regional partners in industry, agriculture, environmental organizations and tourism organizations. In In 2010, however, the counties agreed to suspend the KAG - subject to county council decisions. Still a continuous cooperation between the counties is intended with regard to the common issues.

Thirteen towns and cities affiliated in an Elbe flood partnership – „**Hochwasserpartnerschaft Elbe**“ – in May 2009. Some of them are also involved in the KAG Elbetal and are part of the area of analysis in the States of Lower Saxony, Saxony Anhalt, and Mecklenburg-West Pomerania. Municipalities, which are directly affected, are dedicated to developing joint flood protection and prevention strategies, even if the Federal States are responsible for flood control.

<sup>3</sup> <http://www.reginet.de/regionalinitiativen.html>



### Lower Saxony:

In 2009 an inter-ministerial working group Land Development / IMAK Biosphere Project Group "Lower Saxon Elbe Valley" developed a project concerning an integrated Elbe floodplain management - **Integriertes Auenmanagement Elbe**. There is a pollution risk for local agricultural businesses in the Elbe floodplains because of frequent flood events. Therefore, an integrated floodplain management was developed by the participating institutions to minimize these risks. The goal is to solve the pollution problem on-site at the Elbe River in an inter-departmental approach of joint action. At the same time, pollutants are prevented from entering the food chain. Activities will be supervised by a steering group, where representatives of public and private bodies collaborate.

The regional development concept for the **Leader-Region Elbtalaue** was created by the LAG, which was re-organized in 2007. In fact, the LAG already exists since 2002. Since then the Elbe Valley region belongs to the Leader regions in Lower Saxony. The area includes the joint communities Scharnebeck, Ostheide, and Dahlenburg, the town of Bleckede, Amt Neuhaus from the County of Lüneburg, and the entire County of Lüchow-Dannenberg, with its joint communities Elbtalaue, Gartow and Lüchow (Wendland). The focus of the development of the Elbe Valley is the goal to strengthen the region economically to create jobs and improve the quality of life.

In the fields of economy, energy, education and culture a number of projects have been realised in the programme period 2002-2006, which should lead to the achievement of objectives. With the start of the new funding programme, the region Elbtalaue applied again as a leader region and was also selected for the current funding period.

Thus, the region continues to follow the basic approaches of the Leader programme, such as the bottom-up approach, in implementing new projects and enhanced cooperation of all sectors and levels in the region through an integrated approach to development.

In 2004, the Lower Saxony Counties of Stade, Lüneburg and Harburg, together with the Hamburg-Harburg district, have founded a growth initiative - **Wachstumsinitiative Süderelbe AG**. In shared responsibility, a co-operation area was created by the States of Lower Saxony and Hamburg, the relevant Counties, municipalities and private businesses in the region. Its aim is to improve cross-border competitiveness and site conditions. This will be achieved by establishing new businesses and integrating companies in the region as well as by developing new clusters. The Süderelbe AG, being a customer-oriented service provider, will promote the economic development of the Süderelbe region.

The primary goal has been divided into three key economic and regional development objectives to develop specific projects:

- Improving economic performance and job creation through the identification and development of growth potential.
- Concentration of cluster capabilities and activities in the region ("Strengthening strengths")
- Development of return-oriented single business plans for investment projects and for professional development of processes, planning of the implementation organization and preparation.

In the area of cluster management or rather settlement and land management, the growth initiative is already successful and this will also strengthen the image of the districts as business locations.

### Mecklenburg-West Pomerania:



The **Territorial Local Development Strategy (GLES) / Local Action Group South-western Mecklenburg** focuses on improving the quality of life in the region. Five development objectives have been identified:

- Ensuring sustainable agriculture,
- Maintenance of the cultural landscape,
- Revitalization of the villages
- Inter-municipal cooperation and networking initiatives
- Valorisation of environmentally and socially responsible leisure and recreational activities.

The leisure and recreation sector is concentrated in the area of the Mecklenburg Elbe valley and along the Müritz-Elde waterway. Both areas are located within the territorial boundaries of the Integrated Regional Development Concept. Although the region is not a holiday destination, according to the analysis of the Territorial Local Development Strategy (GLES), there is still potential for development in tourism as an important component of the river-based economy. The flagship project “Erlebnis-Wasser” refers to the Müritz-Elde waterway as a tourism development axis. The focus is on sub-regional and project-based implementation of the Regional Water Tourism Concept for the Lake area and the INTERREG IIIB project INWATER.

Another network has been established within the framework of the project „Regionale Kooperation im Urstromtal Elbe – zwischen Dömitz und Hamburg“(regional cooperation in the Elbe glacial valley between Hamburg and Dömitz). The implementation of the project as one of the flagship projects of the metropolitan region of Hamburg started in 2003. 11 cities and municipalities along the Elbe River<sup>4</sup> from the States of Mecklenburg-West Pomerania, Schleswig-Holstein, Lower Saxony and Hamburg are involved in this voluntary, inter-county and inter-state initiative.

**Figure 2: Cooperation area of the regional network**



Source: <http://www.urstromtalbe.de/>

<sup>4</sup> Municipality Amt Neuhaus, City of Bleckede, City of Boizenburg, City of Dömitz, Joint Community Elbmarsch, Free and Hanseatic City of Hamburg – District Bergedorf, City of Geesthacht, Joint Community Hitzacker, City of Lauenburg, Joint Community Scharnebeck, City of Wismar

The aim is to promote the tourism development in the Elbe area. In particular, projects are to be realised which will improve the region's accessibility and integration by the developing the infrastructure. The primary focus is on strengthening and inter-linking passenger shipping services in connection with public transport, cycling and the development of infrastructure for water-related recreational activities. Gastronomy, hotel industry, agriculture, horticulture, crafts and culture are brought together to support the marketing of the region. The project is presented on the website [www.urstromtal-elbe.de](http://www.urstromtal-elbe.de). The page was last updated in 2006.

#### Brandenburg:

The **Territorial Local Development Strategy (GLES) / Local Action Group Storchennland Prignitz** focuses on the improvement of the quality of life and the valorisation of natural and cultural resources. Development objectives include:

- Preservation of the characteristics of the region
- Preservation of the unique natural and cultural landscape
- Creation of attractive conditions for working and living
- Promotion of regional products and services
- Provision of services in the sectors of supply, recreation and education for the large cities.

The key topics “Netzwerk Bahn und Bus” and “Auf neuen Wegen durch die Region” put emphasis on bicycle tourism – in particular on the Elbe bicycle trail as an important part of the tourism infrastructure. The Wittenberge station is supposed to be the central hub for tourists.

Since 2005, the municipalities of Perleberg, Karstädt, and Wittenberge joined to form the **Regional Growth Area Prignitz**. A site development concept is updated continuously (last updated 30/04/2010). The transportation and logistics industry sector as an important area of expertise plays an ever increasing role for the Regional Growth Area Prignitz. To meet the challenges of this development a medium to long term development of the industrial port ElbePort Wittenberge towards a tri-modal logistics hub for seaport hinterland transport chains is intended. A stronger marketing of the site is regarded as a key measure.

#### Sachsen-Anhalt:

The **International Building Exhibition (IBA) Urban Redevelopment Saxony-Anhalt 2010<sup>5</sup>** was initiated by the Federal State of Saxony-Anhalt in 2002. The state of Saxony-Anhalt commissioned the Bauhaus Dessau Foundation and the Saxony-Anhalt State Development Company (SALEG) to prepare and realise the International Building Exhibition (IBA) Urban Redevelopment 2010. The International Building Exhibition Urban Redevelopment 2010 is dedicated to exploring the impacts of demographic change in 19 small and medium-sized towns in Saxony-Anhalt. Parallel to presentations in each city, an exhibition is organised at the Bauhaus Dessau, which is dedicated to exploring the question of how cities will look like tomorrow taking into account that the general principle of steady growth could not be valid anymore in the near future. The IBA will make clear that quality of life can no longer be defined by increasing population and land use, but need other references for urban development.

Within the area of analysis of the IRDC, only the **Hanseatic City of Stendal** participated in the IBA 2010 under the heading “Central place in a rural area”. The state capital Mag-

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<sup>5</sup> <http://iba-stadtumbau.de/>

deburg is actively involved in the implementation with the topic "Living at and with the Elbe River".

The Association **Netzwerk Zukunft Sachsen-Anhalt e.V.**<sup>6</sup> is involved in the implementation of Agenda 21 in Saxony-Anhalt since 1997. The association promotes local Agenda 21 processes in Saxony-Anhalt, by collecting visions for a better future, initiating public dialogue and by networking regional sustainability initiatives. They want to help people to develop creativity and imagination, and to influence decision-making processes. They would like to encourage people to combine forces and take the future into their own hands. Agenda 21 initiatives and best practice projects in Saxony-Anhalt will be learning from each other and coming together in dialogue.

The **Bundesverband der Regionalbewegung**<sup>7</sup> was founded in 2005 based on the initiative "Tag der Regionen". The Action Alliance "Tag der Regionen", the Bundesverband der Regionalbewegung e.V. and the Netzwerk Zukunft Sachsen-Anhalt e.V. work closely together.

There are various regional development networks in the **Altmark Region**<sup>8</sup>, including the Counties of Stendal and Salzwedel, and in the **Magdeburg Region**, including the City of Magdeburg and the Counties Börde and Jerichower Land. Some key initiatives and networks, which are focused on the Elbe area and the four cross-sectoral issues, will be described in the following.

The **Regionalverein Altmark e.V.** was founded in 2006 as a spin-off from the Regionale Interessengemeinschaft „Die Altmark mittendrin“ e.V. (short: RIG e.V.) in connection with the Federal initiative "Regionen Aktiv – Land gestaltet Zukunft". Members of the association include the two Altmark Counties, several municipalities, professional associations of agriculture, regional nature conservation organisation, both Sparkassen, the Tourismusverband Altmark e.V., the Regionale Planungsgemeinschaft Altmark, and numerous representatives from local businesses and dedicated individuals.

The aim of the association is to support the sustainable development of the Altmark. Above all, the implementation of the ILE process will be supported actively. Other responsibilities include the implementation of the „Regionalbudget“<sup>9</sup> in the Altmark, and the implementation of the bioenergy network<sup>10</sup>, which represents regional initiatives in the field of bioenergy and renewable energies.

Founded in 1998, the **Städtenetz Altmark**<sup>11</sup> is a voluntary association of thirteen cities of the Altmark region, dedicated to promoting joint activities in the fields of tourism and marketing. The network is co-ordinated by a steering group of the Mayors and has its own office since 2002 which is hosted by the Regionale Planungsgemeinschaft Altmark. Within the boundaries of the IRDC area the following municipalities are participating: the Hanseatic Cities of Seehausen, Havelberg, Osterburg, Werben, and Stendal and the Cities of Tangermünde, Arneburg, and Tangerhütte.

The **Integrierte Ländliche Entwicklung** (GAK) was introduced in Saxony-Anhalt from 2005 on in a statewide information process together with the designation of 5 ILE regions. In the Elbe area in Saxony-Anhalt there are two ILE regions; **Altmark and Magdeburg**. The ILE regions participate actively in the implementation of the so-called ILE-lead projects, supported by regional managers.

<sup>6</sup> <http://www.netzwerk-zukunft-sachsen-anhalt.de/>

<sup>7</sup> [www.regionalbewegung.de](http://www.regionalbewegung.de)

<sup>8</sup> <http://altmark.eu/regionalverein-altmark/>

<sup>9</sup> The flagship project „Regionalbudget“ within the framework of the Bund-Länder-Gemeinschaftsaufgabe „Verbesserung der regionalen Wirtschaftsstruktur“ (GRW) provides a new funding opportunity which is valid until 2013.

<sup>10</sup> In a competition of the BMELV the Altmark was designated as a „Bioenergieregion“.

<sup>11</sup> <http://www.altmark-journal.de/>

Local Action Groups Leader 2007-2013 continue their work of the previous funding period LEADER +. But there are also some new groups. Along the Elbe River, six LAGs are working in Saxony-Anhalt.

The LAGs are represented in the Leader Network Saxony-Anhalt. The spokesman of the Leader Network represents the State of Saxony-Anhalt in the Bundesarbeitsgemeinschaft LEADER, which has been established in 2009.

### Conclusions:

An inter-state analysis within the Elbe area between Hamburg and Magdeburg is realised solely by the municipal work group for collaboration in the Elbe valley - KAG Elbetal. The developed guiding principles provide the framework for joint action. The future focus should be placed more on the coordination of cross-border projects in the Elbe area.

Within the project area there are numerous regional initiatives and regional networks which work on various topics.

In the development area of the metropolitan region of Hamburg and the Regional Growth Area Prignitz the focus is on improving the economic site conditions for enterprises. The development of some parts of the river-based economy plays a particular role in this connection.

The inter-state partnership Elbe flood control emphasises the topic of flood control. Best practices from the project “Integriertes Auenmanagement Niedersachsen” should be continued in a cross-border approach. It is useful in general for the entire region to learn from already existing experiences in Lower Saxony.

In the context of regional development by ILE and Leader, there are promising development approaches to the topics of development of settlement systems, demographic change, and tourism development potentials in the analysed IRDC area. However, these approaches are limited to specific regions. In the future, local action groups and stakeholders in each region will collaborate more closely and beyond the borders of their regions to promote cross-border cooperation projects.

### 4.3 Other development concepts

The **Framework Concept for the inter-state biosphere reserve Flusslandschaft Elbe** includes a large reference area: the western region of the Elbe valley in Saxony-Anhalt, Lower Saxony, Brandenburg, Mecklenburg-Vorpommern and Schleswig-Holstein. The goal of the framework concept is a regional specification of the models for protection, preservation and development of nature and landscape in particular protected areas. From an overall perspective, the framework concept contributes primarily to the coordination of inter-state collaboration, for example by developing inter-state conservation goals. In addition to general recommendations for sustainable land use (e.g. grassland use, hunting), resource protection (e.g. hydrology, soils, species, and habitats), and environmental education, spatial models for subspaces are presented. These include Werbener Elbe-Überschwemmungsaue, Wahrenberg-Werbener Elbe-Altaue, Sandauer Elbe-Altaue, and Altmärkische Wische. The framework concept is perceived as an expertise. It does not affect existing laws and has no binding effects for owners and authorized users.

The **Development and Growth Concept for the Lüchow-Dannenberg County** of 2009 describes current strategic objectives for the development of the County. The overall objective is to ensure and to strengthen economic development potentials for growth and employment. Sub-objectives are identified for the sectors economy, energy, transportation infrastructure, information infrastructure, transport, tourism and culture, home, family and health, environment, agriculture and forestry. These include the protection and creation of



jobs and a sustainable improvement of the quality of life in the County. As far as contents are concerned, the Development and Growth Concept Content is in line with the principles and objectives of European structural policy and will be continuously updated. It also integrates all the major programmes at EU level and sets guidelines for future regional development.

The **Regional Development Concept (RDC) of the LAG Elbtalaue** was developed in 2007 in close co-operation between the Lüchow-Dannenberg County and the eastern municipalities of the Lüneburg County. The RDC is based on the Leader approach and identifies specific fields of action, such as tourism and culture, agriculture, forestry and energy, integrated floodplain management, functionality of towns and villages, nature and landscape as well as education for sustainable development. The model „Elbtalaue – Flussland schafft neue Wege“ identifies the Elbe River as an unique selling point and serves as a starting point for the development of all fields of activity.

An **Integrated Climate Protection Concept** was developed by the traget GmbH on behalf of the County of Lüchow-Dannenberg in 2010. The three joint communities Elbtalaue, Gartow and Lüchow (Wendland) and numerous other regional actors were involved, too. For the development of the integrated climate protection concept of an inclusive approach was sought in order to cover all relevant areas. The concept was created in accordance with the requirements of the Directive on the promotion of climate protection projects in social, cultural and public facilities under the climate protection initiative. The climate protection concept includes an inventory analysis (including an energy and CO<sub>2</sub> emissions balance), a potential assessment as well as related fields of action and measures. In addition, numerous projects and recommendations for the municipal administration were developed, which include, for example, procurement, real estate, energy advice for households, forestry, agriculture or transport.

The **Regional Development Concept (RDC) of the Region Wendland-Elbtal** was created in the course of the competition „Bioenergie-Region“. It includes the joint communities Scharnebeck, Ostheide, Dahlenburg, City of Bleckede, Amt Neuhaus in the Lüneburg County and the joint communities Elbtalaue, Gartow, and Lüchow in the Lüchow-Dannenberg County. The objective is to meet the total domestic primary energy demand by renewable and regionally produced energy and through energy saving by involving citizens, businesses and communities. The development approach provides for the systematic regionalisation of the bioenergy value chains as a business development programme.

In the course of adapting to changing national spatial development challenges and the development of a new paradigm of „Großräumige Verantwortungsgemeinschaften“ the „Modellvorhaben der Raumordnung (MORO) Nord“ was established in the area of „Überregionale Partnerschaften“. The final report – **„Ermittlung von Entwicklungspotenzialen in Norddeutschland und Erarbeitung eines Strategiepapiers zu deren kooperativer Stärkung im Sinne einer Partnerschaft von Stadt und Land“** also refers to Northern Lower Saxony. The aim of the final report is to show how key areas and rural areas can collaborate in projects to improve the competitiveness of the region. Fields that are appropriate from the perspective of rural areas are identified and structured according to the MORO principles.

The **Regionalreport 2009** of the Niedersächsisches Institut für Wirtschaftsforschung (NIW) analyses and describes regional trends in Lower Saxony. In addition to this, possible courses of action are outlined for the State. The Regionalreport 2009 emphasises demographic change and increasing competition between regions.

While most of the concepts mentioned earlier refer to economy and tourism, the **Biosphärenreservatsplan Niedersächsische Elbtalaue** focuses on nature conservation and documents the environmental needs and approaches for a balance of three compo-

nents - environment, economy and social affairs. Basis is § 22 (1) NEIbtBRG, which provides for the development of a plan to ensure the preservation and development of the biosphere reserve. The territorial scope of the Biosphärenreservatsplans covers parts of the Counties of Lüchow-Dannenberg and Lüneburg and is regarded as an expert sectoral planning, which is not directly legally binding.

The **Leitbild Prignitz-Oberhavel** identifies the following core areas: water and boat tourism, concentration of middle order centre functions, interlinking of road, rail, water transportation networks, cooperation in the corridor Hamburg-Berlin, in the regional growth centre, and in tourism networks (KAG Elbetal and others). The focus is on river economics and public services in rural areas as far as cross-sectoral issues are concerned.

The **marketing concept of the Tourismusverband Prignitz e.V.** (2010) aims at cycle tourism and the locational attraction of the Biosphere Reserve Flusslandschaft Elbe Brandenburg in particular. The development of water-based tourism is seen as a main task for the future. The port in Wittenberge is referred to as the most important marina between Hamburg and Magdeburg. Elbe shipping is regarded as a niche product which has an advertising appeal.

A survey of lockings of ships in the water sports area between the Elbe, Havel and Oder in 2003 shows the small share of the Müritz-Elde waterway in the total volume of water sports. The Port Dömitz is the starting point for visitors from the Elbe area and end point for the Müritz-Havel area. In close cooperation with the involved actors in the region, the association BATZ e.V. has conducted a **customer survey** in 2004. The goal is the quantitative and qualitative strengthening of the district. From the results of the survey it becomes evident that the Elbe plays an important role as a close-by water sports area (28% of guests come from Lower Saxony, Schleswig-Holstein and Hamburg). In 2010, a second customer survey will be conducted along the Müritz-Elde waterway. Based on the resulting recommendations the tourist regions of the Elbe and of the Mecklenburg Lake District will be better connected by the Müritz-Elde waterway and thus be better valorised.

The waterway interchange Elbe / Müritz-Elde-Waterway in Dömitz is referred to as a strength of the region in the **Handlungskonzept für die Freizeit- und Erlebnisregion Dömitz-Malliß**. It is a starting point for further development of water tourism and should be strengthened by the expansion of the port. Apart from canoe trekking and boat touring, cruise tourism is considered, too.

The **Handbuch Tourismus in Sachsen-Anhalt (2004)** deals with the future of the tourism industry in Saxony-Anhalt as a major economic factor. In addition to the classical inventory, developments are discussed. This manual is intended as a strategic foundation for the tourism strategy of the Federal State, which determines the tourism development in Saxony-Anhalt. The core area of water tourism is analysed with regard to the brand "Blaues Band". The importance of water sports has already become very clear by activities which are related to the "Blaues Band". The Elbe as the main waterway in the "Blaues Band" brand is of crucial importance for canoe touring. This justifies the development of "Lighthouse" activities related to the Elbe. A new opportunity is given by the waterway interchange in Magdeburg. Goal is to link the diverse offers of different tourist areas.

Within the series of tourism studies the State of Saxony-Anhalt has published the **guideline „Landurlaub Altmark“ (2003)** which presents important results regarding the development of the Altmark region as a tourist destination. It is based on the agricultural and structural development planning „Urlaub und Freizeit auf dem Lande in der Altmark“, which was developed by the Amt für Landwirtschaft und Flurneuordnung Altmark. The guideline „Landurlaub Altmark“ can be regarded both as a detailed inventory and as a manual for decision-makers and key players. It outlines ways to develop rural tourism as an economic factor and alternative source of income. Water-based tourism is described as one of the most important sectors also with regard to various other brands and poten-

tials in the Altmark region. The results indicate that the region can be regarded as a tourist destination of regional importance which particularly attracts tourists from the city triangle of Hamburg-Berlin-Hannover and Saxony-Anhalt.

The **Klimaschutzkonzept 2008** outlines concrete objectives for regional politics in the State of Saxony-Anhalt to counteract the negative impacts of climate change. Measures have been identified to further reduce climate-relevant detrimental gas emissions in Saxony-Anhalt. A cost/benefit assessment of measures shall facilitate the selection process within the climate protection program.

The **Strategiepapier des Landes Sachsen-Anhalt zur Anpassung an den Klimawandel und dazu gehörender Aktionsplan (2010)** evaluates climate scenarios in the various regions of Saxony-Anhalt. The results include impact forecasts for all key sectors and strategies for dealing with the impacts as well as said focal points for further investigation. For the planning region of IRDC part Saxony-Anhalt different climate scenarios for the north-eastern region of Saxony-Anhalt and the river Elbe have been developed.

The Altmark region has a tremendous biomass potential, which is based in particular on the high availability of agricultural and forestry land. The potentials are not released fully until now. The long-term objectives for the bioenergy sector in the region are therefore focused on the creation of regional added value, job creation, ensuring the availability of resources and the protection of a sustainable cultural landscape. These are laid down in the **Regional Development Concept "Bioenergie-Region Altmark"** which was developed as a contribution of the Altmark region to the competition „Bioenergie-Regionen“ of the Federal Ministry of Food, Agriculture and Consumer Protection by the Regionalverein Altmark e.V.. Thus, the region is following the pursuit of the mission statement: "The Altmark - innovative and competent in the use and processing of biomass" with regard to the bioenergy sector. Bioenergy is used for an effective energy supply and sustainable regional development by concerted action. At the same time, the Altmark as a rural area will fulfill the traditional tasks of food production and supply of renewable raw materials for production.

The municipal work group for collaboration in the Elbe valley (KAG Elbetal) has published a brochure containing general flood control information as well as information about flood risk in general and specific risks in different Counties. The **Hochwasserbroschüre** is dedicated to increasing awareness of flood control issues among the population of the area.

The aim of the **Agrarstrukturelle Entwicklungsplanung AEP-Elbe1 (2002)** is to explore conflicts, potentials and development opportunities in the planning area with regard to the effects of the designation of the biosphere reserve "Flusslandschaft Elbe". The planning document outlines a general basis for decision-making and action as well as concepts, measures, and strategies for their implementation in their respective fields of action.

The **Integriertes Ländliches Entwicklungskonzept für die Region Magdeburg (ILEK 2006)** aims at identifying development objectives and developing strategies for the implementation on the basis of a SWOT analysis in a bottom-up process which involves regional actors. The vision for a strong and innovative economic development and high quality of life includes, among others, the following statements: The cultural landscape offers significant attractions for environmental education, recreation, tourism and in the wellness sector. The demands of demographic change are addressed by innovative bundle offers, successful pilot projects and active cooperation of the residents. This vision is underpinned by development objectives and flagship projects, including the use of natural landscape potential in the NATURA 2000 sites along the Elbe and the Fiener Bruch for specific tourism offers.

In the course of the development of an **Integrated Rural Development Concept - Region Altmark (2006)** the region could contribute with existing plans and concepts and

bring them together with their strategic vision for rural development. The key objective consists in actions of regional actors to make the Altmark a competitive rural region. The focus is on highlighting opportunities for the future and mobilising endogenous resources as well as regional initiatives with regard to a changing environment (globalisation, regionalisation, site competition, demographic trends, etc.) and accordingly to a sustainable development strategy. In summary, the following mission statement has been laid down: "Die Altmark mittendrin – wettbewerbsfähig und lebenswert". By implementing certified pilot projects, i.e. a combination of integrative schemes, a high value for all participants and sustainability of individual measures can be guaranteed.

The Middle Elbe region (upstream from Hamburg to Magdeburg) is not regarded as a homogeneous tourist destination with a central tourism marketing approach as of today, although there are similar natural areas and tourism potentials. The **concept of a specific tourism marketing of the region between Hamburg and Magdeburg along the Elbe** is dedicated to exploring the opportunities of a joint marketing of the Elbe region with a focus on marketing and networking. The marketing approach includes four modules including an image brochure "Tourismusband Elbe". The concept of a tourism belt along the Elbe will open up over-regional markets by concerted and powerful communication and marketing activities.

### Conclusion:

Generally, it can be said that there is a variety of development concepts for all parts of the analysed area, which are often dealing with similar topics. However, in many cases these concepts do not consider adjacent regions and do not include overall reflections. Only a few concepts, such as the brochure about flood control and concept of a specific tourism marketing of the region between Hamburg and Magdeburg along the Elbe the concept of the single, targeted tourism marketing of the region of Hamburg and Magdeburg refer to the analysed area as a whole.

In particular, the main focus of most of the available concepts is on tourism, and especially on water-based tourism. This clearly indicates the importance of the Elbe River for the whole area. The interrelation between tourism and the biosphere reserve is recognized as a key USP by the involved municipalities.

The concepts also refer to the topics of climate change and flood control. Except for the brochure about flood control and climate protection concepts, climate change and flood control are of minor importance in these concepts. This also applies to the topic of demographic change.

As the contents of the concepts are very similar, an overall perspective on the area of analysis, especially from the point of demographic change, river economics, and climate and flood protection, may be regarded as reasonable and effective

## 5 Inventory and structural analysis

The following structural analysis of the area is divided into seven chapters. The necessary data was collected based on information available at the level of Counties or, if possible, at the administrative level of local municipalities. This results in two levels of representation. In part, the region of the Lower Middle Elbe is shown on the County level, where possible, however, the actual area of analysis is referred to. For the latter, the analysis is based on data on local municipality level. The level of representation is apparent from table headings and captions.

The structure analysis included a particular challenge. The available official statistical data of the Federal States are often not comparable. They differ in units and in the issues that could be represented. An example is the representation of farms by size class. While it is possible to show farms with more than 1,000 ha for the Counties of Prignitz and Ludwigslust, this is impossible for the Lower Saxony Counties, where only data for farms up to a size of 100 ha is available, because there are no agricultural businesses bigger than that.

Problems arise for example also in the representation of school types. Since the school policy is governed by the Federal States, there are many different school types. Still, the analysis must be based on a common approach and the results must be presented in a single overview.

Therefore, it became necessary to convert units, combine issues in similar groups (see Table 1: Key data for the analysed area) and adapt time series to available data. Detailed explanations have been included below the tables wherever necessary.

Some information had to be excluded because of the necessary harmonisation of data. This could be compensated by additional information in the text. Thus it was possible to map the region of the Lower Middle Elbe by statistical data.



## 5.1 Location, size, administrative structure

The analysed area is located in Northern Germany and is made up of areas in seven Counties of four Federal States.

**Table 1: Key data for the analysed area (2008)<sup>12</sup>**

Counties [number]	Area [km <sup>2</sup> ]	Joint Com- munities <sup>1</sup> [Number]	Municipali- ties <sup>2</sup> [Number]	Population [Total]	Migration balance [absolute]	Inhabi- tants [per km <sup>2</sup> ]
<b>Prignitz, Ludwigslust:</b>						
2	2.444,54	6	60	119.021	- 1.101	49
<b>Lüneburg, Lüchow-Dannenberg:</b>						
2	1.319,28	6	32	64.733	- 33	49
<b>Stendal, Jerichower Land, Börde:</b>						
3	3.888,26	5	69	261.975	- 2.785	67
<b>Total</b>						
<b>7</b>	<b>7.652,08</b>	<b>17</b>	<b>161</b>	<b>445.729</b>	<b>- 3.919</b>	<b>58</b>

<sup>1</sup> Ämter, Samtgemeinden, Verbandsgemeinden, Verwaltungsgemeinschaften

<sup>2</sup> Gemeinden, amtsfreie Gemeinden, amtsfreie Städte, Einheitsgemeinden

Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg

The area includes Prignitz County in Brandenburg, Ludwigslust County in Mecklenburg-West Pomerania, Lüneburg and Lüchow-Dannenberg County in Lower Saxony and Stendal, Jerichower Land and Börde in Saxony-Anhalt. With 50% the three counties in Saxony-Anhalt have the largest share in the analysed area.

The connecting element is the Elbe between the river kilometers 340 (Hohenwarthe, north of Magdeburg) and 569 (mouth of the Elbe-Lübeck-Canal). Until 1990, the Elbe was part of the inner-German border in areas of the Counties of Ludwigslust and Stendal, and divided East and West Germany.

The total area covers 7,652 km<sup>2</sup> which is equivalent to about half of the area of Schleswig-Holstein. Ca. 35% belong to the UNESCO Biosphere Reserve „Flusslandschaft Elbe“.

445,729 inhabitants (2008) live in 161 municipalities and 17 municipalities associations, about twice as many as in Magdeburg. While in Magdeburg there are but 1,147 people per km<sup>2</sup>, the population density in the study area amounts to 58 per km<sup>2</sup>. In terms of spatial structure, the region of the Lower Middle Elbe belongs to the "very low density peripheral area"(Federal Office for Building and Regional Planning, Regional Planning Report 2005). These areas are characterized by low population densities and long distances to centers.

In 2008, the region lost over 3,900 residents (just below 1% of the population) and is one of the areas of Germany with a declining population. The region-specific differences in the study area with regard to the issue of demographic trends are presented in Section 5.3 (spatial and settlement structure, population).

<sup>12</sup> The seven counties within the analysed area have been grouped into three sections in accordance with the division of work in the consortium (see annex, B3).

## 5.2 Natural and geographic conditions

### 5.2.1 Biogeographic classification

According to the topographic structure of Germany, the study area is located **primarily**<sup>13</sup> in the North-East German Lowlands. In the following, the topographic structure of the IRDC area is divided into different main geographic units in accordance with the biogeographic classification of the Federal Agency for Nature Conservation.

**Figure 3: Biogeographic classification according to BfN**



Source: own illustration according to Federal Agency for Nature Conservation

The entire area of analysis is characterised by the **Elbe valley lowland** (D 09). The Elbe valley lowland includes the section of the Elbe valley between the Ohre valley in the South and the area affected by tide and the wet land around Geesthacht in the North. It is therefore a part of the Elbe valley that was formed significantly by Pleistocene watercourses of the Vistulian glaciation. The width of the Elbe valley lowland varies to a large extent and is not limited to today's Elbe valley.

Through embankments and drainage systems, the area was made arable and is now very well used for agriculture. Remnants of **natural forests** are still to be found in the form of alluvial forests in the Elbe floodplains between the dykes, alder swamps in the Lower Havel lowland. The alluvial soils and more humid locations are arable land today; the flood-prone parts of the floodplains are predominantly grassland. The dry sand areas are occupied by vast pine forests.

<sup>13</sup> The geographic units Lüneburger Heide and Weser-Aller-Flachland belong to the North-West German Lowlands

The Northwestern part of the analysed area borders on the **Landschaftseinheit Lüneburger Heide** (D 28). This landscape was formed by glacial moraines and by postglacial rearrangement processes. The heterogeneity of soils is crucial for small-scale arable farming or forestry use of the landscape units. Some rivers are to be found in the territory. The moraine area is divided into various sub-units. This includes the Hohe Heide to the South-West, which is composed of a number of Saale ice age end moraines with the central Wilseder Berg. The Luheheide West of the river Ilmenau and the Elbe-Seitenkanal is surrounded by several mountain ranges and plunges down significantly towards the Elbe valley. The Ostheide on the other hand, is located east of the Elbe-Seitenkanal on the Eastern edge of the Lüneburger Heide from Lüneburg to the North of Wolfsburg. The landscape is characterised by a sharp moraine edge against the Elbe lowland, which can be noticed at the Scharnebeck ship lift in particular.

Large areas of the analysed area are part of the **Landschaftseinheit Mecklenburg-Brandenburgisches Platten- und Hügelland** (D 05). Main parts of the entire region are more or less loamy glacial drift plates reaching from the river Elde to the Upper Havel. In addition, there are large sandy areas of various origins. The relief of this landscape unit is quite gentle with the exception of the Ruhner Berge and some parts of the Prignitz and slopes down from North to South. Natural drainage is following the main slope from North to South. The Elde takes up numerous tributaries in the area and flows into the Elbe just east of Dömitz. Another characteristic river, the Stepenitz, flows into the Elbe, and takes up numerous tributaries. Soils in the Nordbrandenburgisches Platten- und Hügelland are mostly sandy and loamy. In the Prignitz a rather strong spatial change between sand and clay can be observed.

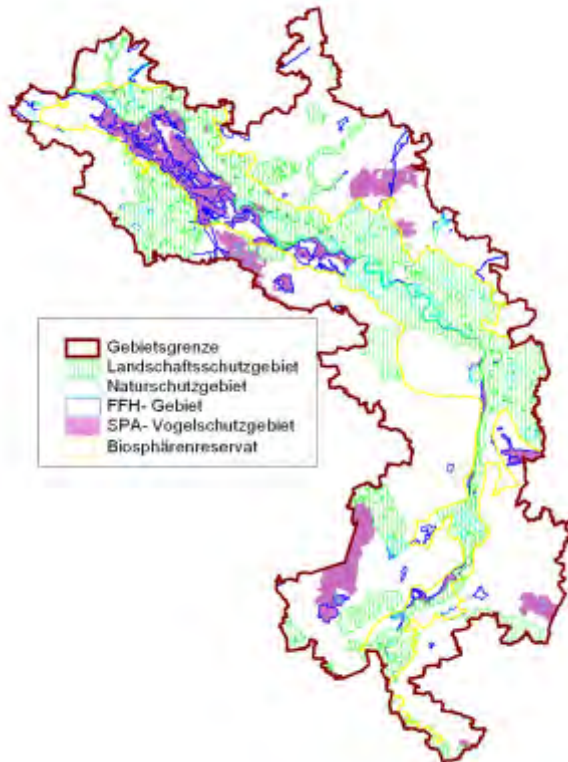
The **Landschaftseinheit Wendland und Altmark** (D 29) is located west of the Elbe valley lowland. The geomorphology of the area has been significantly shaped by the Saale ice age. Several prominent elevations of end moraine formations, the so-called "Southern Ridge", dominate the landscape. It is part of the Elbe glacial valley and is crossed by the lower reaches of the Jeetzel and its backwaters. Several moraine islands and sand dune areas form a contrast to the otherwise swampy lowland character of the landscape. Towards the South the landscape changes into an end moraine landscape which is referred to as the „Altmarkheiden“. Prevailing soils at the flat-hilly Colbitz-Letzlinger Heide include sandy loess brown earth, podsol, and sandy brown podsol. This region is relatively poor in water.

The Southern part of the analysed area includes parts of the **Landschaftseinheiten Brandenburgisches Heide- und Seengebiet** (D 12), **Fläming** (D 11), **Elbe-Mulde- Tiefland** (D 10), **Östliches Harzvorland und der Börde** (D 20), as well as **Weser- Aller-Flachland** (D 31)

### 5.2.2 Protected areas and planning from a nature conservation perspective

The analysed area of the IRDC Lower Middle Elbe is characterised by a variety of protected areas. Natura 2000 areas are of particular importance, because they stand for a coherent network of protected areas within the European Union.

**Figure 4: Overview of protected areas**



Source: own illustration

Within the analysed area there are 34 areas designated as Special Protection Areas (SPA) for birds. There is a clear focus in the northern part of the analysed area along the Elbe. 104 areas are designated in accordance with the Flora-Fauna-Habitat-Richtlinie (FFH). These areas often overlap with the areas designated as SPA areas. FFH and SPA areas can be found along the entire course of the Elbe. Again, the core area is located in the North (see Annexes: Table of Special Protection Areas (SPA) and Flora-Fauna-Habitat areas (FFH) in the analysed area).

A similar situation can be observed with regard to landscape protection areas and nature protection areas. Landscape protection areas are designated along the entire river Elbe. Another big area is located in the landscape unit Lüneburger Heide. Nature protection areas are usually very small and spatially well distributed with the focus on the Elbe area. A total of 37 landscape protection areas and 60 nature protection areas is located in the analysed area. (see annex: overview of protected areas). The biosphere reserve Middle Elbe extends over the entire study area.

Approximately 52% of the analysed area is designated as protected areas, according to nature conservation directives.

### 5.2.3 Waters and flood protection

The analysed area Lower Middle Elbe is mainly characterized by 23 major waters, linked to the major river Elbe. The Elbe flows through analysed area over a length of about **232 km**.

The following table provides an overview of the location and course of the waters in the analysed area.

**Table 2: Important waters in the analysed area**

Water	Location/course in the analysed area
<a href="#">Prignitz, Ludwigslust:</a>	
Elbe	Southern border of Amt Lenzen-Elbtalaue and Amt Bad Wilsnack/Weisen, Wittenberge; border river towards Lower Saxony and Saxony-Anhalt; border river of Mecklenburg-West Pomerania, only few kilometres within the County near Boizenburg and Dömitz
Löcknitz	Crosses a large lowland area in Prignitz County and flows via Karstädt, Lanz, and Polz towards Dömitz
Stepenitz	Flows via Wolfshagen, Perleberg, and Wittenberge into Elbe
Karthane	Flows through Plattenburg lake area, via Bad Wilsnack towards Hinzdorf through the Elbe flood plain into Stepenitz near Wittenberge
Boize	North of Boizenburg, one of the bigger tributary of the Elbe
Schaale	East of Boizenburg, links Sude to the Schaalsee near the Lower Saxon border
Sude	Located north of Lübbtheen in the analysed area; second largest Elbe tributary in Mecklenburg-West Pomerania
Elde (Müritz-Elde-Wasserstraße)	Between Dömitz, Ludwigslust towards Neustadt-Glewe
<a href="#">Lüneburg, Lüchow-Dannenberg:</a>	
Elbe	Northern border of Lüneburg County and Lüchow-Dannenberg County, Gewässer I. Ordnung
Elbe-Seitenkanal	From Artlenburg via Scharnebeck, Bad Bevensen, and Uelzen, Gewässer I. Ordnung
Neetze	Rises in Staatsforst Göhrde South-East of Dahlenburg, flows North-West into Ilmenau in Fahrenholz, East of Winsen (Luhe), Gewässer II. Ordnung
Jeetzel	parallel to Drawehn-Höhenzug, through Wustrow, Lüchow ,and Dannenberg, into Elbe near Hitzacker
<a href="#">Stendal, Jerichower Land, Börde:</a>	
Elbe	Through the entire planning area from South to North
Havel	From Brandenburg, flows into Elbe near Werben
Elbe-Havel-Kanal	Links Elbe to Havel and Mittellandkanal (waterway interchange); from Brandenburg via Genthin to Elbe near Parey, Niegripp, and Hohenwarthe
Mittellandkanal	From Haldensleben to waterway interchange; linkage to Elbe and Elbe-Havel- Kanal
Milde/ Biese/ Aland	Elbe tributaries flowing via Osterburg, Seehausen into Elbe near Schnackenburg (Niedersachsen)
Uchte	Through Stendal into Biese near Osterburg
Zehrengaben	South of Wittenberge; flows into Seege, which flows into Elbe only few kilometres away
Tauber Aland	from Werben to Seehausen; flows into Biese
Lüderitzer Tang/ Tanger	From Wittenmoor via Groß Schwarzloosen to Tangermünde; flows into Elbe near Tangermündee



Water	Location/course in the analysed area
Stremme	Small water linking Elbe to Havel via Roßdorfer Altkanal and Mittellandkanal
Ohre	From Haldensleben parallel to Mittellandkanal; Flows into Elbe near Rogätz
Ehle	From East to West (Magdeburg); Flows into Umflutehle at Lostau
Parchener Bach	South of Genthin; flows into Elbe-Havel-Kanal
Ihle	East of Burg; flows into Elbe-Havel-Kanal near Burg

Source: Landkreis Lüneburg, Fortschreibung Regionales Raumordnungsprogramm 2003 (Umweltbericht), Entwurf Fortschreibung 2009, S. 26; Landkreis-Lüchow-Dannenberg, Regionales Raumordnungsprogramm 2004, S. 62; Landesamt für Umwelt, Naturschutz und Geologie Mecklenburg-Vorpommern: Gutachtlicher Landschaftsrahmenplan für die Region Westmecklenburg

In order to achieve good protection of groundwater, all groundwater basins are protected areas. Protected areas are subject to various restrictions and prohibitions with regard to usages. There are 53 drinking water protection areas established in the analysed area (see annex: Table of drinking water protection areas within the analysed area).

Systematic land management allows for successful flood prevention. Land management with regard to flood control measures was implemented in the Federal States with characterisation, identification of existing risks and precise definition of the areas by expert technicians. As a result, areas have been designated for flood protection where other usages are restricted or limited. These areas are included in the spatial planning. In this concern there is a distinction between flood plains and flood-prone areas.

Flood plains are defined as areas which will be flooded regularly in case of flood events. Usually, these are areas between the shoreline of the waters and the main dyke or the high banks and flooding polders.

**Table 3: Flood plains as defined by spatial planning in the analysed area**

Flood plains	Location/course in the analysed area
<b>Prignitz, Ludwigslust:</b>	
Elbe area between river kilometer 431,5 and 502,0 (Lenzen-Wittenberge-Gnevsdorf)	Flood plains are currently under planning. They will be included in the map „Festlegungskarte 1 des Landesentwicklungsplan Berlin-Brandenburg (LEP B-B)“. Elbe and confluence areas of Havel, Stepenitz, Löcknitz, and Karthane.
Elbe and Sude area between Boizenburg and Besitz	Flood polder, priority area coastal and flood protection; affects parts of the Sude lowland which is a nature protection area at the same time.
Southern Elbe area between Brahlstorf and Melkof	Flood polder, priority area coastal and flood protection
<b>Lüneburg, Lüchow-Dannenberg:</b>	
Elbe (Schnackenburg – Geest)	Along the Elbe through all adjacent municipalities in Lower Saxony in the analysed area; width: ca 1,000 m.
Krainke	Long bend in a north westerly direction in the municipality Amt Neuhaus, then parallel to Elbe and B195. A 150 m wide strip along (sometimes even larger) is designated flood plain area.
Sude / Rognitz	Flood plain area in the northern part of the municipality Amt Neuhaus
Jeetzel	Flood plain area in the municipalities Dannenberg (Elbe) and Hitzacker (SG Elbtalaue, LK Lüchow-Dannenberg); southern part of Gem. Dannenberg (Elbe) width: ca. 40 m, towards Elbe increasing width up to ca. 1,500 m
Seege	Municipalities Gorleben, Hühbeck, Flecken Gartow, Schnackenburg of SG Gartow, LK Lüchow-Dannenberg
<b>Stendal, Jerichower Land, Börde:</b>	
Elbe	On both sides along the Elbe, Widenings between Tangermünde and Jerichow; near Ringfurth; Bertingen; Lostau; Pretzien
Milde/Aland/Biese	Homogenous strip along the water course till Osterburg; widening near Uchte confluence, which is narrowed till. Elbe and Aland flood plain areas merge near the confluence area
Zehrengaben	Starting from Kleinau with widening, narrow along the water course, widening from Groß Garz to Lower Saxony border
Havel	Large flood plain areas along the entire course of Havel in the analysed area Extensive enlargements in the Elbe confluence area
Uchte	Widenings starting from the State border, narrow in Stendal, extensive widening just before Osterburg and confluence in Biese
Lüderitzer Tang	Large areas along the water course, Extensive widening near Tanger
Tanger	Large areas along Tanger till Elbe in Tangermünde
Stemme	Between Zabakuck and Wilhelmsthal
Ohre	Parallel to the banks from the Drömling, Wider strip between Haldensleben and Wolmirstedt, narrow area between Wolmirstedt and Zielitz, significant widening towards Elbe near Rogätz
Ehle	Near Biederitz on both sides along the water
Parchener Bach	Following the water course until Elbe-Havel-Kanal at

Flood plains	Location/course in the analysed area
	Genthin extensive widenings
Ihle	Narrow strip along the water course till Elbe-Havel-Kanal near Burg
Beber	Narrow strip along the water course till Althaldensleben, thereafter widenings till Ohre confluence
Olbe	Narrow strip along the water course till Beber confluence

Source: [http://www.nlwkn.niedersachsen.de/master/C45915652\\_N5737468\\_L20\\_D0\\_I5231158.html](http://www.nlwkn.niedersachsen.de/master/C45915652_N5737468_L20_D0_I5231158.html), Stand: 05.05.2010; ROK- Daten Sachsen – Anhalt; Regionaler Planungsverband Westmecklenburg: Entwurf Raumentwicklungsprogramm Westmecklenburg, 2009; Landesentwicklungsplan Berlin-Brandenburg, 2009

As dykes can not provide absolute protection against floods, areas which are protected by dykes are at risk of flooding in case of flood events that exceed the design basis or in case of dyke breakage. Therefore, property owners have to take appropriate precautionary measures in these areas. Although for these areas there is a lower risk of flooding than in natural flood plains, an element of risk still remains.

**Table 4: Flood-prone areas as defined by spatial planning in the analysed area**

Flood-prone areas	Location/course in the analysed area
<b>Prignitz, Ludwigslust:</b>	
Elbe area between river kilometer 431,5 and 502,0 (Lenzen-Wittenberge-Gnevsdorf)	The area is described as flood risk area in Landesentwicklungsplan Berlin-Brandenburg (LEP B-B) (see map Festsetzungskarte 1). This area consists of flood-prone areas and flood plains. Flood plains are not defined in planning yet.
Elbe area between Boizenburg, Vellahn and Dömitz	Flood-prone areas in the Elbe valley; identical with the nature reserve Naturpark Mecklenburgisches Elbetal; designated as reserved area coastal and flood protection
<b>Lüneburg, Lüchow-Dannenberg:</b>	
Elbe	Municipalities Artlenburg, Brietlingen, Echem, Scharnebeck (partly), Hittbergen, Lüdersburg, Stadt Bleckede (ca. 50%), Amt Neuhaus (ca. 50%), Hitzacker (z. T.) Dannenberg (ca. 50%), Jameln (partly), Damnitz, Gusborn (partly), Langendorf (partly), Gorleben (partly), Gartow (> 50%), Schnackenburg
<b>Stendal, Jerichower Land, Börde:</b>	
Aland	Wrechow area
Aland/Biese	Between Osterburg and confluence Untere Milde, Lower Saxony border
Augraben	Between Bühne and Biese confluence
Beber	Between Erxleben/Altenhausen and Ohre confluence
Elbe	Between Werben/Quitzeöbel and entire analysed area
Elbe/Aland	Garbe lowland area
Havel	Between Brandenburg border and Elbe confluence
Löderitzer Tang	Between Wittenmoor and Tanger
Ohre	Between Drömling and Elbe confluence
Olbe	Between Eichenbarleben and Beber confluence
Stremme	Between Klitsche and Brandenburg border
Tanger	Between Weißewarte and Elbe confluence
Uchte	Between Tornau/ Döbbelin and Stendal

Flood-prone areas	Location/course in the analysed area
Zehrengaben	Between Kleinau/ Gross Garz and Lower Saxony border

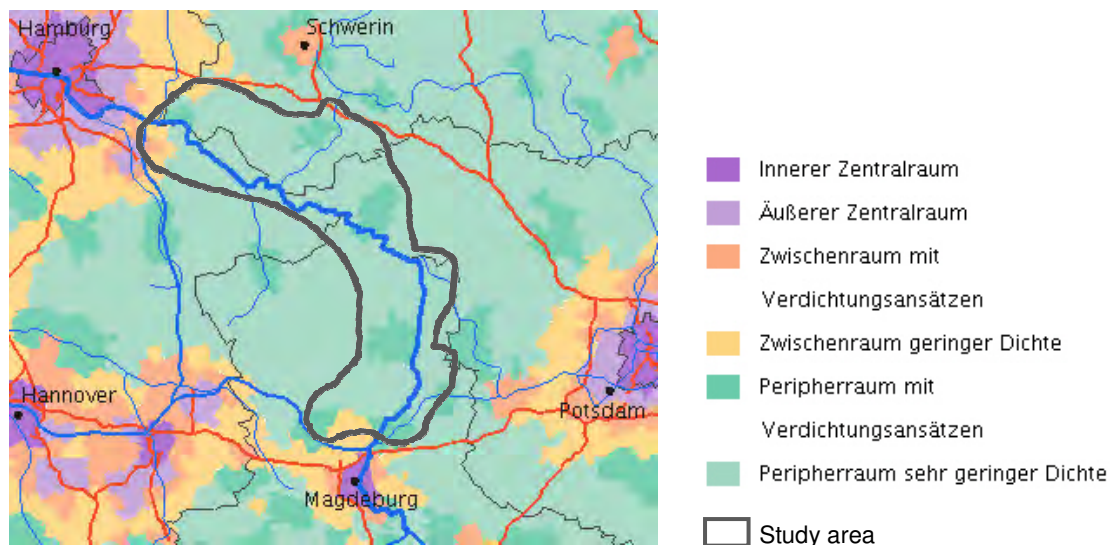
Source: <http://memas01.lbeg.de/lucidamap/index.asp?THEMEGROUP=GEO>, Stand: 05.05.2010; ROK- Daten Sachsen – Anhalt; Regionaler Planungsverband Westmecklenburg; Entwurf Raumentwicklungsprogramm Westmecklenburg, 2009; Landesentwicklungsplan Berlin-Brandenburg, 2009

## 5.3 Settlement systems and population

### 5.3.1 Settlement systems

The IRDC area is predominantly characterised as a peripheral rural area with a very low population density and dispersed settlement structure. This type of spatial structure consists of sparsely populated, predominantly rural areas with less than 100 inhabitants per km<sup>2</sup> and with larger distances to the centers. These characteristics also determine urban development, and technical and social infrastructure.

Figure 5: Types of spatial structure according to BBSR analysis



Source: Raumordnungsbericht 2010, BBSR 34/2009

There are areas with signs of densification at Haldensleben, Burg, Genthin, Stendal, Wittenberg, and Ludwigslust. Transitional areas with low density between central area and peripheral area exist at Magdeburg and Boizenburg. This type includes areas, which do not have own large population, but still have easy access to major centers. They represent the extended area around the central areas.

The area has no high order centre, **seven middle order centres**, partly with function sharing, four low order centres with function sharing, and 21 low order centres. In comparison with the settlement systems as defined by BBSR it can be observed that the area is characterised by few middle-sized cities (similar to middle order centres) with at least 20,000 inhabitants, some small towns and many rural communities and rural towns (up to 5,000 inhabitants).

The analysis of the statistical data that was collected specifically for the classification of the area reflects the results derived from figure 5 above.

The highest population density in the IRDC area is to be found in the Börde County. This is due to its location near Magdeburg, the share of Haldensleben, and the comparatively

low share in the IRDC area. The lowest population density was found in the catchment area of the Lüchow-Dannenberg County.

**Table 5: Population and population density in the analysed area (2008)**

County	Area [km <sup>2</sup> ]	Inhabitants [Number]	Population density [Inhabitants/km <sup>2</sup> ]
Prignitz	1.049,35	53.237	50,73
Ludwigslust	1.395,19	65.784	47,15
Lüneburg	696,10	38.737	55,65
Lüchow-Dannenberg	623,18	25.996	41,71
Stendal	2.173,17	115.999	53,38
Jerichower Land	1.046,27	83.531	79,84
Börde	668,82	62.445	93,37
<b>Total:</b>	<b>7.652,08</b>	<b>445.729</b>	<b>58,25</b>

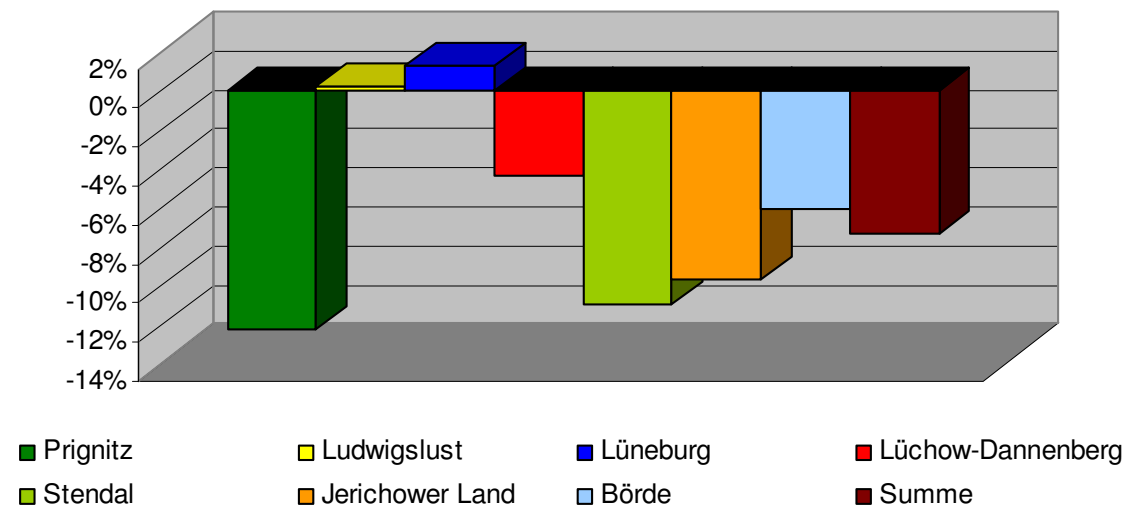
Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg;  
Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de);  
Statistisches Landesamt Sachsen-Anhalt



### 5.3.2 Population

The population declined since 2000 with a total loss of -7.25%. Compared to Germany as a whole, with a population decline of - 0.3%, the population decline in IRDC area is much more extensive.

**Figure 6: Development of population in the analysed area (2000 till 2008)**



Quelle: own illustration

There are huge regional differences. The greatest decline was observed in the Stendal County and Prignitz County. There is a stagnation in the Ludwigslust County. The Lüneburg County has recorded a slight population increase, as an exception.

**Table 6: Population development in the analysed area**

County	2000	2004	2006	2008	2000 zu 2008	
					[absolute]	[%]
Prignitz	60.619	56.689	55.064	53.237	- 7.382	-12,18
Ludwigslust	65.604	68.963	67.357	65.784	180	0,27
Lüneburg	38.253	39.278	39.112	38.737	484	1,27
Lüchow-Dannenberg	27.179	26.827	26.431	25.996	- 1.183	- 4,35
Stendal	130.254	123.132	119.684	115.999	-14.255	- 10,94
Jerichower Land	92.429	88.185	85.911	83.531	-8.898	- 9,63
Börde	66.449	65.224	63.855	62.445	-4.004	- 6,03
<b>Total:</b>	<b>480.787</b>	<b>468.298</b>	<b>457.414</b>	<b>445.729</b>	<b>- 34.878</b>	<b>- 7,25</b>

Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg; Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de); Statistisches Landesamt Sachsen-Anhalt

The migration balance indicates the attractiveness of the region compared to other regions. From an overall perspective of Germany it can be observed that in recent years the former West German States have a positive net migration in all types of regions whereas in former East Germany the net migration is positive only in urban agglomerations.

**Table 7: Population influx and outflux in the analysed area \***

County	Year	Inhabitants [Total]	Influx [absolute]	Outflux [absolute]	Net migration [absolute]
Prignitz	2004	56.689	2.178	2.692	- 514
	2008	53.237	2.059	2.556	- 497
Ludwigslust	2004	68.963	4.888	5.437	- 549
	2008	65.784	3.873	4.477	- 607
Lüneburg	2004	39.278	2.818	2.586	232
	2008	38.737	2.449	2.459	- 10
Lüchow-Dannenberg	2004	26.827	1.867	1.675	192
	2008	25.996	1.653	1.676	- 23
Stendal	2004	123.132	5.666	7.566	-1.900
	2008	115.999	5.246	6.642	-1.396
Jerichower Land	2004	88.185	3.760	4.434	-.674
	2008	83.531	3.367	4.165	-.798
Börde	2004	65.224	3.138	3.367	-.229
	2008	62.445	2.577	3.055	-.478
<b>Total:</b>	<b>2004</b>	<b>468.298</b>	<b>24.315</b>	<b>27.757</b>	<b>- 3.442</b>
<b>Total:</b>	<b>2008</b>	<b>445.729</b>	<b>21.224</b>	<b>25.030</b>	<b>- 3.806</b>

\* across municipality borders

Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg;  
Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de);  
Statistisches Landesamt Sachsen- Anhalt

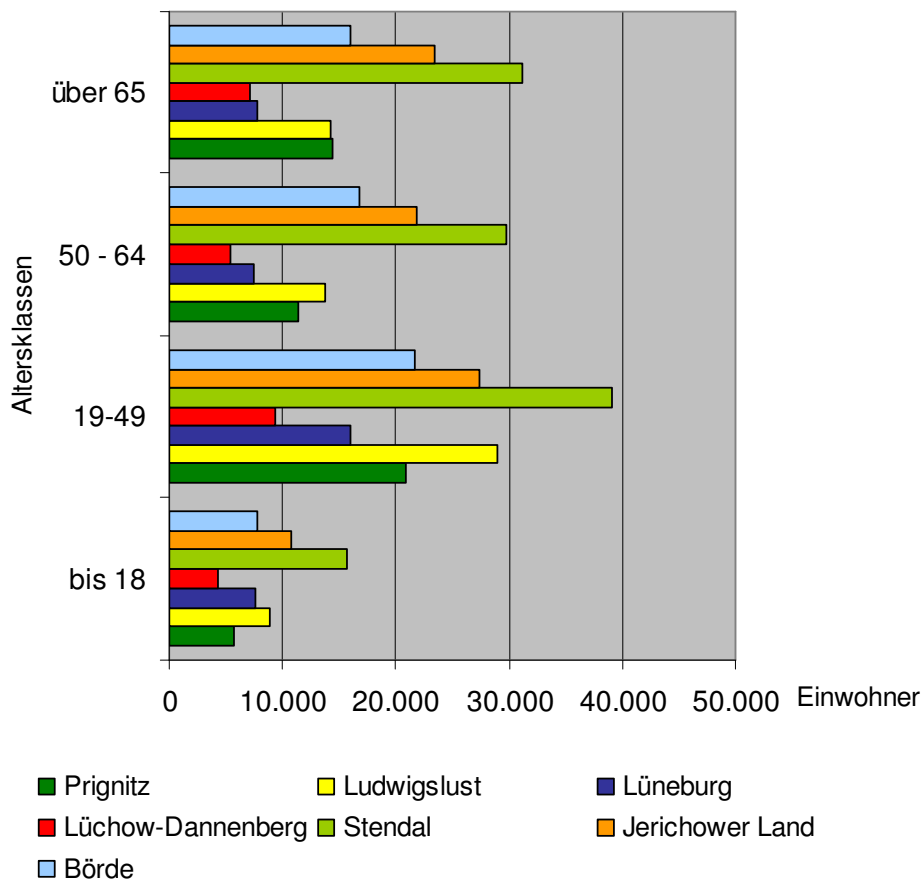
From an overall perspective it can be said that the migration balance is currently subject to a negative trend in all. Low net migration values can be observed in the Lüneburg and Lüchow-Dannenberg County. Net migration in East German Counties is continuously at a consistently negative level since years, whereas in West German Counties the trend changed only recently from 2004-2008

**Table 8: Age structure in the analysed area (2008)**

County	0 - 5		6-18		19 - 49		50 - 64		over 65	
	absolute	%	absolute	%	absolute	%	absolute	%	absolute	%
Prignitz	1.079	2,06	4.644	8,87	20.898	39,91	11.342	21,66	14.399	27,50
Ludwigslust	2.912	4,43	5.999	9,12	28.924	43,97	13.696	20,82	14.253	21,67
Lüneburg	1.609	4,15	5.970	15,41	16.007	41,32	7.382	19,06	7.769	20,06
Lüchow-Dannenberg	918	3,53	3.316	12,76	9.317	35,84	5.305	20,41	7.140	27,47
	under 18		18 - 45		45 - 60		over 60			
	absolute	%	absolute	%	absolute	%	absolute	%	absolute	%
Stendal	15.599	13,49	39.112	33,83	29.735	25,72	31.167	26,96		
Jerichower Land	10.681	12,79	27.449	32,86	21.914	26,23	23.487	28,12		
Börde	7.780	12,50	21.687	34,84	16.792	26,98	15.988	25,68		

Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg;  
Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de);  
Statistisches Landesamt Sachsen- Anhalt

**Figure 7: Age structure in the analysed area (2008)**



Source: own illustration

An onion shape becomes apparent from the illustration, which is shown here only on one side as no distinction has been made between male and female inhabitants. The onion shape clearly indicates an age-structure development, which is to be found in many Western European industrial countries, where a low birth rate in transition leads to a backlog of older people. At the same time, the younger age groups decline from year to year. This phenomenon is usually referred to as "Überalterung". Characteristics include a birth rate of below 2.1 children per woman, high life expectancy with a late, high mortality rate. The age-specific mortality, however, remains the same.

The percentages, grouped in three classes and compared to the overall statistics for Germany, show significant deviations from the national average in all counties except for the Lüneburg County. The under 19-year age group is 3-8% smaller compared to the German average. About 61% of the population belongs to the middle age group, which equals the German average. Only in the County of Ludwigslust this group is stronger (65%). The age group of retirees is 6-8% larger in the East German part of the analysed area compared to the German average.

**Table 9: Age group proportions on county level [%]**

County	Age groups		
	under 19	19-64 (60) <sup>14</sup>	over 64 (60)
Prignitz	11	62	27
Ludwigslust	13	65	22
Lüneburg	20	60	20
Lüchow-Dannenberg	16	56	27
Stendal	13	60	27
Jerichower Land	13	59	28
Börde	12	62	26
<b>Germany</b>	<b>19</b>	<b>61</b>	<b>20</b>

Source: Statistisches Amt Mecklenburg-Vorpommern; Amt für Statistik Berlin-Brandenburg;  
Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de);  
Statistisches Landesamt Sachsen-Anhalt

**Table 10: Age structure forecast on County level (2006 to 2025)**

County	Age group	2006 [absolute]	2025 [absolute]	2006 to 2025 [%]
Prignitz	0 - 5	3.357	2.027	- 39,6
	6 - 18	9.392	6.097	- 35,1
	19 - 44	27.847	15.077	- 45,9
	45 - 64	25.770	21.501	- 16,6
	over 65	20.855	24.363	+ 16,9
Ludwigslust	0 - 5	6.091	4.289	- 29,6
	6 - 18	15.477	12.248	- 20,9
	19 - 44	44.981	30.234	- 32,8
	45 - 64	36.588	37.051	+ 1,3
	over 65	24.173	35.251	+ 45,8
Lüneburg	0 - 5	9.897	9.602	- 3,0
	6 - 18	25.204	21.976	- 14,0
	19 - 44	65.633	60.145	- 8,4
	45 - 64	43.552	55.623	+ 21,7
	over 65	31.620	43.116	+ 36,4
Lüchow-Dannenberg	0 - 5	2.528	2.050	- 18,9
	6 - 18	7.250	5.326	- 26,5
	19 - 44	14.804	11.563	- 21,9
	45 - 64	13.784	14.030	+ 1,8
	over 65	12.512	15.635	+ 25,0

<sup>14</sup> Die Altersklassenstruktur lag für die Landkreise in Sachsen-Anhalt anders strukturiert vor, daher ist die statistische Ableitung nicht korrekt einheitlich darzustellen.

County	Age group	2006 [absolute]	2025 [absolute]	2006 to 2025 [%]
Stendal	0 - 5	5.705	3.475	- 39,1
	6 - 18	15.450	10.279	- 33,5
	19 - 44	44.241	24974	- 43,6
	45 - 64	37.155	31.988	-13,9
	over 65	26.929	33.428	+ 24,1
Jerichower Land	0 - 5	4.312	2.756	- 36,1
	6 - 18	11.201	7.702	- 31,2
	19 - 44	33.998	20.476	- 39,8
	45 - 64	29.652	25.694	- 13,4
	over 65	21.912	27.418	+ 25,1
Börde	0 - 5	8.231	5.417	- 34,2
	6 - 18	21.271	15.612	- 26,6
	19 - 44	66.163	40.639	- 38,6
	45 - 64	54.933	51.308	- 6,6
	over 65	37.237	50.219	+ 34,9

Source: <http://www.wegweiser-kommune.de/datenprognosen>

A negative trend can be observed for the youngest generation in all Counties.

A more favourable trend can be expected for the Lüneburg County.

The highest increase in the age group > 65 years is to be expected in the County of Ludwigslust with an increase of 45.8% and in the Börde County with an increase of 34.9%. The Prignitz County shows the lowest predicted increase with 16.9%.

**Table 11: Population forecast on County level (2006 to 2025)**

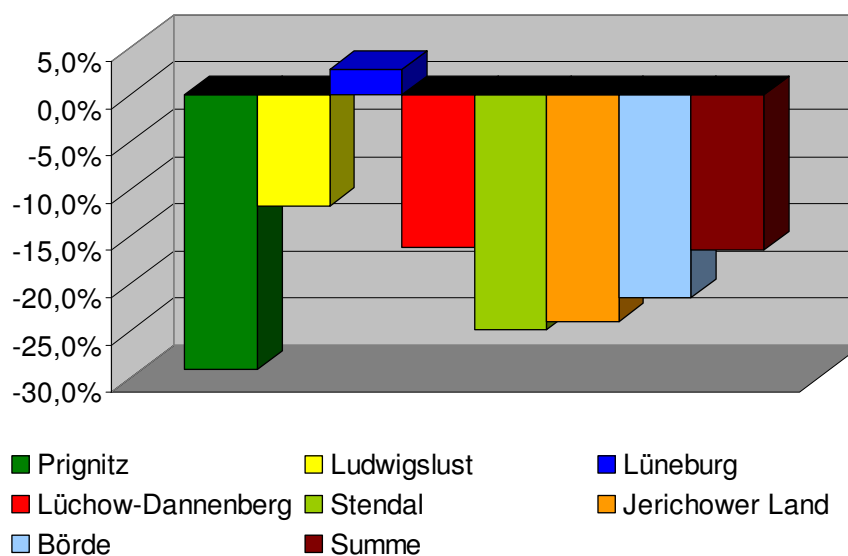
County	2006	2010	2015	2020	2025	2006 to 2025 (2006 to 2020)
	[absolute]					[%]
Prignitz	87.221	81.870	76.240	71.150	61.800	- 29,2
Ludwigslust	127.310	122.452	117.689	116.415	112.289	- 11,8
Lüneburg	175.906	184.009	192.287	200.020	---	(+ 12,1)
Lüchow-Dannenberg	50.878	50.357	48.772	46.984	---	(- 8,3)
Stendal	129.480	121.815	113.829	105.787	97.291	- 24,9
Jerichower Land	101.075	95.491	89.638	83.498	76.762	- 25,1
Börde	187.835	178.467	168.741	158.560	147.359	- 21,5

Source: Statistisches Amt Mecklenburg-Vorpommern, Statistische Berichte – Bevölkerungsentwicklung der kreisfreien Städte und Landkreise in Mecklenburg-Vorpommern bis 2030, Basisjahr 2006, Grundlage ist die 4. Landesprognose; Amt für Statistik Berlin-Brandenburg, Statistischer Bericht – Bevölkerungsprognose für das Land Brandenburg 2009 bis 2030; Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, Regionale Vorausschätzung der Bevölkerung Niedersachsens für die Jahre 2004 bis 2021  
Statistisches Landesamt Sachsen-Anhalt, 5. Regionalisierte Bevölkerungsvorausberechnung Sachsen-Anhalt



The regionalised population forecast, which extrapolates the population development from 2006 to 2025, indicates a population decline of -16.4% in the analysed Counties. The regional differences are significant. The highest population decline of -29.2% is expected for the Prignitz and of -24.9% for the Stendal County. A positive trend is estimated for Lüneburg County with a growth of +2.6%. This is a result of the situation south of Hamburg. The south of Hamburg is continuing to grow. With around 176,000 inhabitants, well above average purchasing power and more than 5,000 companies Lüneburg is a growth area in the south of the metropolitan region of Hamburg. Nevertheless, differences within the Lüneburg County can be observed. The development in municipalities near the Elbe River shows a negative trend whereas municipalities with a more favourable location towards Hamburg show a positive trend.

**Figure 8: Population forecast 2006 to 2025 on County level [%]**



Source: own illustration

Heterogeneous spatial structures in the population development with demarcations between the catchment area of Hamburg, Hannover, Braunschweig, Magdeburg and peripheral areas become evident when considering the entire analysed area.

## 5.4 Regional economy and employment

The very heterogeneous structure of economy and employment in the analysed area will be described in the following.

When comparing economic and employment data of the seven participating Counties, it becomes apparent, that the study area can be divided into three zones of related content.

The first area includes the County of Lüneburg and the northwestern part of the Ludwigslust County. This area is economically the most established and benefits significantly from the economic power of the metropolitan region of Hamburg. This zone is followed by the area of the Counties Lüchow-Dannenberg, Prignitz and the eastern part of the Ludwigslust County. This middle section of the analysed area is characterised by its disadvantageous peripheral location. The southern third zone includes the Counties of Stendal, Jerichower Land and Börde. This area is economically stronger than the second zone and benefits from the economic areas of Hannover and Magdeburg.<sup>15</sup>

**Table 12: Gross Domestic Product (GDP) at market prices on County level**

County	Gross Domestic Product (GDP) at market prices					
	[M €]			Share on State level [%]		
	2003	2005	2007	2003	2005	2007
Prignitz	1.464,0	1.549,7	1.640,2	3,1	3,2	3,1
Ludwigslust	1.866,0	2.106,0	2.439,0	6,4	6,7	7,0
Lüneburg	3.345,8	3.498,8	3.677,2	1,8	1,8	1,8
Lüchow-Dannenberg	893,3	922,5	988,8	0,5	0,5	0,5
Stendal	2.209,0	2.238,0	2.463,0	4,8	4,7	4,8
Jerichower Land	1.804,0	1.933,0	2.003,0	3,9	4,1	3,9
Börde	3.461,0	3.636,0	4.003,0	7,5	7,7	7,8
<b>Total:</b>	<b>15.043,1</b>	<b>15.884,0</b>	<b>17.214,2</b>	<b>---</b>	<b>---</b>	<b>---</b>

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2005, 2007, 2009;  
Statistisches Jahrbuch Brandenburg 2005, 2007, 2009;  
Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen,  
[www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de); Statistisches Landesamt Sachsen-Anhalt, Internetveröffentlichung

The economic importance of the Counties (Table 12) is very different compared on State level. While the Lüneburg County contributes only 1.8% to the total GDP of Lower Saxony, the share of Ludwigslust County in the State GDP of Mecklenburg-West Pomerania amounts to 7%.

However, the GDP per inhabitant in € (2007), considered as a measure of the prosperity of a region, reveals a different picture. With 20,800 €, the GDP per inhabitant is the highest in the Lüneburg County, whereas 19,300 € GDP per inhabitant<sup>16</sup> in Ludwigslust County is the lowest value within the analysed area.<sup>17</sup> Only the Börde County has a rela-

<sup>15</sup> Data on population trends, migration, age structure forecast, population forecast, GDP per capita, employees per economic sector, commuting, unemployment have been used.

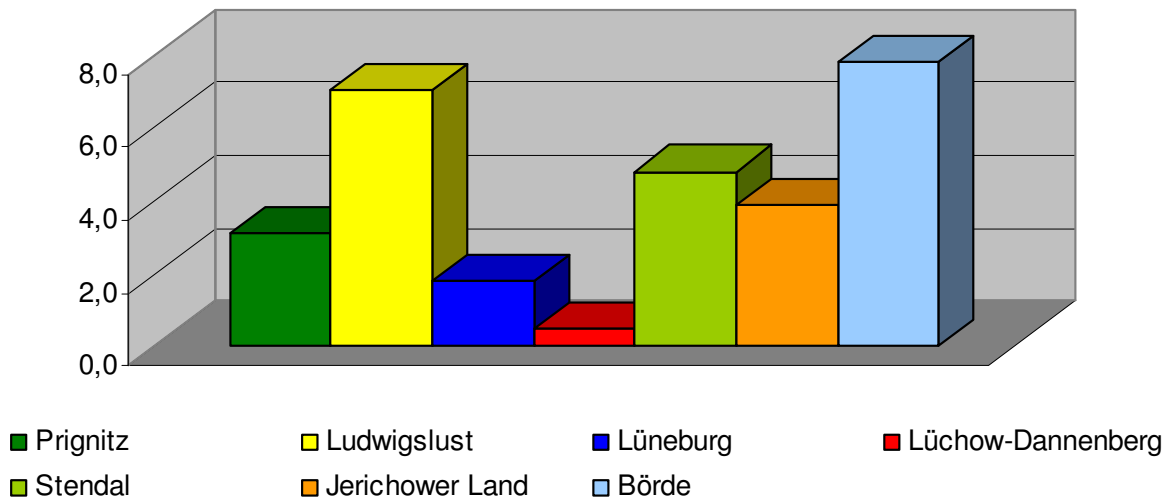
A comparative analysis of these key data indicates a global validity of the described sub-zoning of the study area. There is a smooth transition between the zones. A sharper, more detailed detail description or graphic representation is not possible on the basis of available data.

<sup>16</sup> Continuous spatial monitoring BBSR, macroeconomic accounting of the Länder

<sup>17</sup> Lowest value in Prignitz County with 19,100 Euro per inhabitant (2007)

tively large share in the GDP of Saxony-Anhalt (7.8%) and a high GDP per inhabitant as well (21,600€).

**Figure 9: GDP at market prices proportions on County level 2007 [%]**



Source: own illustration

According to table 13, the share of agriculture in gross value added is over 3% in all Counties with the exception of Lüneburg (1.6%), well above the national average of 1%.

**Table 13: Gross value added by economic sector on County level (2007)**

Sector	County						
	PR	LWL	LG	DAN	SDL	JL	BK
Gross value [M €]							
Agriculture, forestry, fishery	68,2	86,0	54,0	49,7	85,0	65,0	113,0
Manufacturing industry	442,5	689,0	677,9	251,4	490,0	571,0	1.373,0
Service industry	959,1	1411,0	2.563,3	585,0	1.631	1.162	2.101,0
<b>Gross value total:</b>	<b>1469,8</b>	<b>2185,0</b>	<b>3.295,2</b>	<b>886,1</b>	<b>2.207,0</b>	<b>1.798,0</b>	<b>3.587,0</b>
Gross value proportions [%]							
Agriculture, forestry, fishery	4,6	3,9	1,6	5,6	3,9	3,6	3,2
Manufacturing industry	30,1	31,5	20,1	28,4	22,2	31,8	38,3
Service industry	65,3	64,6	77,7	66,0	73,9	64,6	58,6

PR=Prignitz, LWL=Ludwigslust, LB=Lüneburg, DAN=Lüchow-Dannenberg, SDL=Stendal, JL=Jerichower Land, BK=Börde  
Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Landkreis Prignitz, Statistisches Jahrbuch 2008; Statistische Ämter des Bundes und der Länder, [www.regionalstatistik.de](http://www.regionalstatistik.de); Statistisches Landesamt Sachsen-Anhalt; Statistischer Bericht- Volkswirtschaftliche Gesamtrechnungen; Juni 2009

Thus, the structural change towards a service-based economy is most advanced in the County of Lüneburg. Here, the share of the tertiary sector in gross value added amounts to around 78%. In the Börde County this structural change is less advanced (58.6%). There, however, the share of manufacturing industry is on the highest level (38.3%).

The limited extent of the primary economic sector in the Lüneburg County is also reflected by employment data (table 14). Only 1.6% are employed in sector 1. In contrast to this, 6% are employed in this sector in the Ludwigslust County.

**Table 14: Employees by economic sector at the place of work on County level (2008)**

County	Sector 1 (Agriculture, forestry, fishery)		Sector 2 (Manufacturing industry, mining industry, energy, construction)		Sector 3 (Trade, hotel and restaurant industry, transportation, service industry)		Employees total
	[absolute]	[%]*	[absolute]	[%]*	[absolute]	[%]*	
Prignitz	1.569	6,05	7.991	30,79	16.395	63,17	25.955
Ludwigslust	2.100	5,91	13.811	38,86	19.631	55,23	35.542
Lüneburg	752	1,63	12.036	26,14	33.258	72,23	46.046
Lüchow-Dannenberg	490	4,16	3.962	33,62	7.333	62,22	11.785
Stendal	1.787	5,17	9.378	27,12	23.415	67,71	34.580
Jerichower Land	1.285	5,00	9.131	35,57	15.254	59,42	25.670
Börde	1.787	3,41	19.925	38,02	30.691	58,57	52.403
<b>Total:</b>	<b>9.770</b>	<b>4,21</b>	<b>76.234</b>	<b>32,86</b>	<b>145.977</b>	<b>62,92</b>	<b>231.981</b>

\* Share in total employees

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Landkreis Prignitz, Statistisches Jahrbuch 2008; Statistische Ämter des Bundes und der Länder, [www.regionalstatistik.de](http://www.regionalstatistik.de); Statistisches Landesamt Sachsen-Anhalt

Table 15 illustrates the existing structural differences between former East and West German States with regard to the number of farms by size. While most of the farms in Eastern Counties have more than 200 ha, some are even bigger than 1,000 ha, the farms in Counties in former West Germany have an average of below 100 ha.

In contrast to this, the number of farms up to a size of 50 ha is nearly the same in East and West German Counties, with an average share of about 50%.

**Table 15: Number of farms by size on County level (2007)**

County	Farms with an agricultural area of ... to ...					Farms [total]
	< 10 [ha]	10-20 [ha]	20-50 [ha]	50-200 [ha]	200 < [ha]	
Prignitz	178	65	88	115	183	629
Ludwigslust	216	88	106	156	167	733
				50-100 [ha]	100 > [ha]	
Lüneburg	208	100	109	132	198	747
Lüchow-Dannenberg	148	80	119	176	236	759
Stendal	144	74	90	71	305	684
Jerichower Land	92	30	53	33	154	362
Börde	114	53	81	68	289	605

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Landkreis Prignitz, Statistisches Jahrbuch 2008; Statistische Ämter des Bundes und der Länder 2010, [www.regionalstatistik.de](http://www.regionalstatistik.de)

Table 16 indicates that there is an outbound commuter surplus in the analysed area. No County has a positive commuter balance which means that there are not enough jobs for all residents in working age. The region thus has a low job centrality. The job centrality is considered an indicator of the importance of municipalities or regions as a business and location. For the analysed area this means that it is particularly difficult here to guarantee jobs or to create new jobs. The number and diversity of employment opportunities has a direct impact on the population development of our region. This results in a selective migration of mobile and well-trained people from the area.

**Table 16: Number of employees on County level (2008)**

County	Employees at		Outbound commuters	Inbound commuters	Commuter balance
	Place of work	Place of living			
Prignitz	25.955	28.056	7.580	5.479	- 2.101
Ludwigslust	35.553	50.216	23.378	8.702	- 14.676
Lüneburg	46.058	55.755	39.568	29.871	- 9.697
Lüchow-Dannenberg	11.787	13.135	9.264	7.916	- 1.348
Stendal	35.505	42.843	13.162	5.824	- 7.338
Jerichower Land	26.557	35.768	16.215	7.004	- 9.211
Börde	53.008	73.943	36.864	15.929	- 20.935
<b>Total:</b>	<b>234.423</b>	<b>299.716</b>	<b>146.031</b>	<b>80.725</b>	<b>- 65.306</b>

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Landkreis Prignitz, Statistisches Jahrbuch 2008; Statistisches Landesamt Sachsen-Anhalt

The highest outbound commuter surpluses can be observed in the Counties of Ludwigslust, Lüneburg, Jerichower Land, and Börde. This means that these Counties are still attractive for living, although there is no sufficient number of jobs available. The high outbound commuter surplus of these Counties can be explained by their proximity to the economically strong regions of Hamburg, Magdeburg, and Hanover.

Regarding the age structure of employees (table 17) there are no apparent differences between the seven Counties in the analysed area.

**Table 17: Age structure of employees on County level (2008)**

County	Employees age...				
	Younger than 20	20 to younger than 30	30 to younger than 50	50 to younger than 65	65 and older
	Share in percent				
Prignitz	3,4	16,3	50,1	---	---
Ludwigslust	4,0	18,1	50,5	27,1	0,3
Lüneburg	2,3	18,8	55,9	22,6	0,4
Lüchow-Dannenberg	2,8	17,5	53,4	25,8	0,5
Stendal	3,5	16,9	51,3	28,0	0,3
Jerichower Land	3,5	17,4	51,7	27,1	0,3
Börde	3,7	18,3	51,5	26,3	0,2

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Landkreis Prignitz, Statistisches Jahrbuch 2008; Statistische Ämter des Bundes und der Länder, [www.regionalstatistik.de](http://www.regionalstatistik.de)



The unemployment rates (see table 18) are very different. They vary between 16.4% in Stendal County and 7.5% in the district of Lüneburg (Germany: 7.8%). The unemployment statistics thus indicates which Counties are located close to central areas or peripheral areas (spatial demarcation by types of areas in accordance with ROB 2010 of the BBSR).

**Table 18: Unemployment rate (yearly average) on County level**

County	Unemployment rate		
	2004	2006	2008
Prignitz	21,5	19,2	15,0
Ludwigslust	14,6	14,9	11,1
Lüneburg	10,3	10,4	7,5
Lüchow-Dannenberg	14,2	14,0	12,0
Stendal	23,5	21,6	16,4
Jerichower Land	17,8	16,3	11,8
Börde/ Ohrekreis	17,9/ 14,0	16,4/ 13,0	9,5

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2009; Statistische Ämter des Bundes und der Länder, 2010; Statistische Ämter des Bundes und der Länder, [www.regionalstatistik.de](http://www.regionalstatistik.de); Statistisches Landesamt Sachsen-Anhalt, Internetveröffentlichung Struktur Kompass

The share of long-term unemployed (unemployed for more than 12 months) varies between 30% (Counties of Lüneburg and Ludwigslust), and 40% (Counties of Lüchow-Dannenberg and Prignitz). National average is 33% (as of 2008, table 19). This is a high proportion of long-term unemployment compared to other industrialised nations which causes problems for the affected regions because it is difficult to re-integrate long-term unemployed into the job market. The chance to find a job on the primary labour market is four times higher for a short-term unemployed than for a long-term unemployed. Between 1998 and 2010 about 8.5% of the short-term unemployed, but only 1.7% of the long-term unemployed could find a new job each month (Federal Employment Agency, Nuremberg, 2010).

**Table 19: Number of unemployed persons (yearly average) by groups on County level**

County	Year	Total	Younger than 25		55 and older		Long-term unemployed	
		[absolute]	[absolute]	[%]*	[absolute]	[%]*	[absolute]	[%]*
Prignitz	2004	10.087	1.150	11,40	814	8,07	4.998	49,55
	2006	8.712	1.089	12,50	1.016	11,66	3.556	40,82
	2008	6.700	634	9,46	985	14,70	2.667	39,81
Ludwigslust	2004	9.349	1.226	13,11	688	7,36	3.433	36,72
	2006	9.508	1.397	14,69	1.005	10,57	3.124	32,86
	2008	7.070	932	13,18	963	13,62	2.067	29,24
Lüneburg	2004	8.954	879	9,82	844	9,43	3.480	38,86
	2006	9.086	884	9,73	893	9,83	3.746	41,23
	2008	6.610	581	8,79	615	9,30	1.990	30,10
Lüchow-Dannenberg	2004	3.366	326	9,69	297	8,82	1.526	45,34
	2006	3.356	428	12,75	310	9,24	1.602	47,74
	2008	2.604	281	10,79	284	10,90	1.059	40,67
Stendal	2004	16.206	1.677	10,35	1.508	9,31	7.695	47,48
	2006	13.436	1.547	11,51	1.464	10,90	n.s.	n.s.
	2008	10.659	1.083	10,16	1.384	12,98	n.s.	n.s.
Jerichower Land	2004	8.947	968	10,82	807	9,02	3.992	44,62
	2006	7.273	626	8,61	921	12,66	n.s.	n.s.
	2008	4.883	461	9,44	768	15,73	n.s.	n.s.
Börde	2004	16.179	2.723	16,83	1.571	9,71	6.734	41,62
	2006	11.859	1.471	12,40	1.552	13,10	n.s.	n.s.
	2008	9.023	1.123	12,45	1.404	15,56	n.s.	n.s.

\* Share in total unemployed

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2005, 2007, 2009; Statistische Ämter des Bundes und der Länder, 2010; Statistische Ämter des Bundes und der Länder, [www.regionalstatistik.de](http://www.regionalstatistik.de)

## 5.5 Tourism, recreational sector

The tourism and recreation sector in the study area is mainly determined by the landscape of the Elbe River and the natural conditions. Nature-oriented tourism development is also supported by the biosphere reserve administration, pursuing the goal of making nature a true experience for visitors without causing damage to the natural environment. For this reason special attention is being paid to nature-oriented activities, e.g. hiking, biking and horseback riding. But also the potential of the Elbe, with its unique river landscape, and the connected water tourism are in the focus of tourism concepts.

Particularly noteworthy in the tourism sector is the 340 km long Elbe Bike Trail North<sup>18</sup>, which runs through the entire study area, and was elected in 2010 for the sixth consecutive year as the most popular national cycle route<sup>19</sup>. The cultural landscape, which has a variety of experiences and impressions to offer, as well as the bicycle-friendly infrastructure along the trail are greatly appreciated by visitors.

Nature-oriented tourism in the study area is complemented by cultural and urban tourism. There are historic cities with a large number of listed buildings and town centers in the entire study area.

Furthermore, the water is also an important aspect of tourism development along the Elbe River. Water-based tourism includes shipping, rafting, fishing, sailing, water-related sports and day trippers. Already today, a number of moorings for pleasure boats, canoes and rowing boats are available in the analysed area. The development of these moorings and of the water-bound tourism, however, is being pushed by all counties<sup>20</sup>. The tourist attractions along the Elbe in the study area are supplemented by tourist offers at the Müritz-Elde Waterway, the Havel River, the Mittelland Canal and the Elbe-Havel Canal.

Usually, tourist offers in the region are coordinated, developed and marketed by tourism associations. Information centres serve as interfaces between visitors and tourist facilities and are the first starting point for visitors. To assure quality it is possible to get certified by the German Tourism Association as a information centre. There are such certified information centres<sup>21</sup> in all counties of the study area, except for the Counties Lüneburg and Börde. The work of tourism associations is limited, however, to the county level.

Based on the SWOT analysis in the master plan (2007), which has explored the marketing opportunities for the Lüneburger Heide and the Lower Saxon Elbe Valley, it became clear that the Elbe is marketed as a distinct tourist destination and that the destination will be further developed in a first step to Magdeburg. For this reason, the project of establishing a marketing umbrella for the Elbe was initiated by the KAG in 2009 – the County of Lüneburg was in charge here. Objectives of this project include the improving competitiveness, development of new tourism concepts and the development of the core tourism segments of water, nature and cycling<sup>22</sup>. Results of the project have been used for the development of the website [www.tourismusband-elbe.de](http://www.tourismusband-elbe.de), which represents the tourism regions of the Biosphere Reserve Flusslandschaft Elbe following an inter-state approach.

The success of this cooperation cannot be underlined by specific stats at the current stage, due to the short duration of the project. A general increasing interest in the tourist

<sup>18</sup> Biosphärenreservat Niedersächsische Elbtal (2008): Flusslandschaft mit (Modell)Charakter

<sup>19</sup> Koordinierungsstelle Elberadweg (11.03.2010): Elberadweg zum 6. Mal in Folge beliebtester Radfernweg; <http://www.elberadweg.de/start/aktuelles/browse/2/article/elberadweg-zum-6-mal-in-folge-beliebtester-radfernweg/46.html>

<sup>20</sup> cf. chapter. 5.7 Transport

<sup>21</sup> cf. annex, tab. 30: Tourism associations and tourist information centres in the study area

<sup>22</sup> Kommunale Arbeitsgemeinschaft zur Zusammenarbeit im Elbetal (KAG): Projektkennblatt „Aufbau eines Dachmarketings für die Elbe“; <http://www.elbetal.de/projekte/default.htm>

region of the river landscape Elbe, however, can be derived from the data on the development of guest arrivals, overnight stays and length of stay between the years 2000 and 2008 for the Counties of Prignitz, Ludwigslust, Lüneburg and Lüchow-Dannenberg. For the Counties of Stendal, Jerichower Land and Börde such a comparison is not possible, since there is no data available from the year 2000. The Counties of Börde and Jerichower Land are collecting these data since 2009 only.

**Table 20: Beds, overnight stays, duration of stay on county level (only businesses with  $\geq 9$  beds)**

County	Arrivals [number]		Beds [number]		Overnight stays [number]		Ø duration of stay [overnight stays / arrivals]	
	2000	2008	2000	2008	2000	2008	2000	2008
Prignitz	69.774	90.022	1.921	2.248	246.777	227.015	3,5	2,5
Ludwigslust	69.520	102.975	1.677	2.314	135.239	202.226	2,0	2,0
Lüneburg	171.897	218.594	2.919	3.577	372.992	478.422	2,2	2,2
Lüchow-Dannenberg	98.843	81.556	3.236	2.847	328.782	254.497	3,3	3,1
Stendal	n.s.	109.413	n.s.	1.680	n.s.	210.345	n.s.	1,9
Jerichower Land	n.s.	65.901	n.s.	1.172	n.s.	132.491	n.s.	2,0
Börde	n.s.	168.935	n.s.	3.079	n.s.	418.386	n.s.	2,5

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 2001, 2009; Statistisches Amt Mecklenburg-Vorpommern; Statistische Ämter des Bundes und der Länder; Amt für Statistik Berlin-Brandenburg; Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, [www.lskn.niedersachsen.de](http://www.lskn.niedersachsen.de); Statistisches Landesamt Sachsen-Anhalt 2010

As shown in the table, there is an increase in the number of tourist arrivals and offered guest beds in all counties for which comparable figures are available. Only in the Lüchow-Dannenberg County, these figures have decreased in the analysed period. Lüneburg County has by far the most tourist arrivals. The Lüneburger Heide and the Town of Lüneburg are two well-known and well-frequented tourist destinations located in the Lüneburg County.

Although the Lüchow-Dannenberg County has registered few tourist arrivals, the number of overnight stays is still relatively high. This is reflected in the average duration of stay. With 3.1 days in 2008 it is the highest in the analysed area. One explanation could be the focus of tourist offers. Lüchow-Dannenberg is placing emphasis on individual walking holidays. Guests can discover the region alone on foot, by bicycle or on horseback. Such offers do not appeal to day visitors, so the number of guests is rather low, but people tend to have a longer stay in the region.

The tourist attractions in the counties are summarized below.

#### Lüneburg County:

Tourism in the Lüneburg County is determined by two factors: firstly, the city tourism and secondly nature-oriented and cultural tourism. The City of Lüneburg plays a special role for the city tourism in the region. The Lüneburger Heide is of particular importance for nature-oriented tourism in the County. Because of its location along the Elbe, the region also has a great potential for water-based and cycle tourism.



Der im Konzeptgebiet liegende, östliche Teil des Landkreises Lüneburgs ist insbesondere durch den Natur- und Kulturtourismus geprägt. Durch die Lage direkt an der Elbe bietet die Region zusätzlich ein großes Potential für den Wasser- und Radtourismus.

The biosphere reserve Niedersächsische Elbtalaue is one of the main attractions for tourists in the region. The untouched natural landscape with unspoilt river courses and floodplains invite to guided walks to admire the flora and fauna of the region. The visitor centre of the biosphere reserve is located in the City of Bleckede, where there is an information center in Elbschloss Bleckede. The Elbschloss Bleckede is also a venue for numerous cultural events. The City of Scharnebeck is also a popular tourist destination. One of the biggest ship lifts in the world is located in Scharnebeck. Other tourist attractions include the Cities of Neuhaus and Dahlenburg with their historic centres.

The cycling, hiking and water-based tourism has a particular importance for the region. In particular, the numerous bike trails are very popular. In the region there is a large section of the Elbe bicycle trail and a link to the Wendland bicycle trail. Many bike trails lead through the biosphere reserve, thus enabling tourists to discover the natural environment individually.

#### Lüchow-Dannenberg County:

Nature-oriented tourism has a particularly high priority in the County of Lüchow-Dannenberg. The biosphere region Elbtalaue-Wendland and the biosphere reserve Niedersächsische Elbtalaue also offer a variety of holiday activities. In particular, the well-built bike, hiking and riding trails provide a major attraction for tourists in the region. Again, the well-known Elbe bicycle trail leads through the region.

There are also many cultural sights. An example is the well-known “Rundlingsdörfer”, which are well preserved and partially restored as museum villages like in Lübeln. The “Rundlingsdörfer”, together with the protected, historic city centres of Hitzacker (Elbe), Lüchow, and Dannenberg are part of the regional route “from the Elbe Valley to the Harz” of the German Fachwerkstraße.

Also, water-based tourism plays an important role in the region. Many guided boat tours and excursion boats start from Hitzacker. Individual canoe tours are offered here, too. In summer, a variety of swimming lakes can be used. A special attraction in the region is the 18-hole golf course in the town of Zernien.

#### Stendal County:

Nature-oriented tourism plays particularly important role in the Stendal County. Large parts of the County belong to the Altmark. The historic cultural landscape has a great potential for horseback riding, hiking and cycling. In addition, there are a number of historic trails, where half-timbered houses, monuments and historic buildings can be explored by visitors.

City tourism also has a great potential with regard to the many Hanseatic cities in the region. Above all, the City of Stendal, being the largest city in the Altmark, offers many opportunities for city tourists. Guided tours provide insights into the 800-year history. Sights include the Market Square, City Hall with Renaissance gables, St. Mary's Church and St. Nicholas Cathedral. There are also numerous museums and cultural events held regularly. Stendal is also suitable as a starting point for long bike tours.

#### Börde County:

The share of the study area in the Börde County is characterised by numerous architecturally significant buildings in the region, especially in the Cities of Haldensleben and



Wolmirstedt. Particularly noteworthy is the City of Haldensleben with the Market Square and the late-gothic St. Mary's Church and the neo-classical Town Hall from the 18th Century. There are also other historical monuments and tourist attractions. More information on the history of the region can be obtained in the Haldensleber County Museum.

A rural Baroque castle is located in Hundisburg, which dates back to the 12th century and was converted into a Renaissance castle in the 16<sup>th</sup> century. Today, the castle and the attached garden are regarded as the cultural center of the region. It is venue for many musical and cultural events.

A peculiarity in the county is a "mountain tour" in Zielitz. A potash mining waste tip forms the highest peak between Magdeburg and the Baltic Sea. The salt mines of K+S KALI GmbH provide a magnificent view of the surrounding villages, on Europe's largest waterway junction and the largest coherent lime tree forest and sometimes even up to the Brocken (Harz).

One of Germany's most modern campsites, the Heide Camp, is located just outside of Colbitz.

#### Jerichower Land County:

The Jerichower Land is characterised by the natural landscape just like the other sub-areas. The biosphere region particularly attracts people looking for. A well-developed bike and hike trail system allows for individual and active exploration of the Jerichower Land. Again, the Elbe bike trail leads through the area path with a length of 80 km. There are many campsites and swimming lakes along the Elbe. Tourist attractions in this area include the Abbey Church in Jerichow, the historic city centre of Burg with the history of towers, the County Museum in Genthin as well as the 48 metres high water tower carrying eight 3,20 metres high sculptures, the moated castle in Gommern, and the Zerben Palace of Plotho. Many other churches and mills are characteristic for the Jerichower Land.

The Magdeburg Waterway Junction is the world's largest trough bridge and represents together with giant ship lifts and sluices a special tourist attraction in the county.

The "Road of Romance", also leads through the area and offers opportunities for exploration of medieval and historic buildings and monuments. Important cultural institutions and attractions include the Abbey Church in Jerichow, the parish church of St. Peter and the late Bronze Age barrow cemetery in Großwulkow. There are also numerous museums and events in the area.

Another highlight is the „Straße der Technik“ which, like the „Road of Romance“, links outstanding attractions. In the area the route leads to the historic tannery in Burg and the old brickyard in Hundisburg.

**Tabel 21: Tourist routes in the IRDC area in Saxony-Anhalt**

Name	Route	Stops in the study area
Jakobsweg (Camino de Santiago)	Stendal- Tangermünde- Magdeburg; Jerichow- Stendal	---
Straße der Romanik Nordroute (road of romance, northern route)	Burg- Havelberg Magdeburg- Haldensleben	Burg- Oberkirche; Unterkirche Genthin- Grabstein d. Herrn von Plotho Redekin- Dorfkirche Jerichow- Stadtkirche, Prämonstratenserstift Melkow/Wust- Dorfkirchen Schönhausen- Dorfkirche, Willibrord Sandau- Pfarrkirchen Havelberg- Dom St. Marien Groß Ammensleben- Benediktinerkloster St.

Name	Route	Stops in the study area
		Peter und Paul Hillersleben- Benediktinerkloster St. Laurentius Hundisburg- Ruine Nordhusen
Gartenträume (garden dreams)	Tangerhütte Hundisburg Krumke Ortsteil von Osterburg	Stadtpark Schloss und Schlossgarten, Landschaftspark Schloss und Schlosspark, Landschaftspark
Altmarkrundkurs- Radrundkurs (Altmark circuit, bicycle circuit)	Altmark	Counties of Stendal, Jerichower Land
Elberadweg (Elbe bike trail)	Along the Elbe	Runs through the entire study area
Blaues Band (blue ribbon)	On the Elbe and its backwaters	Werben, Havelberg, Arneburg, Tangermünde, Ferchland, Bittkau, Rogätz, Genthin, Parey, Burg, Hohenwarthe, Niegripp Haldensleben

### Ludwigslust County:

The area within Ludwigslust County is characterised by water-based and cycling tourism as well as by nature-oriented, cultural and city tourism.

Central attractions include long distance cycling routes like the Elbe bike trail and the Mecklenburg Lakes bike trail. In addition to that, there are numerous marked cycling routes based on the Regional Bicycle Path Concept West Mecklenburg. Bike trails with a special thematic focus, such as Raseneisenstein-Radweg and Sakralbauten-Radweg complement the tourism offer. The so-called Griesegegend between the rivers Elbe and Sude is also very attractive for cycling. It is a flat sandy heathland landscape that is dominated by pine forests, meadows, fields and small marshy lowlands.

For the water-based tourism, the Elbe and the Müritz-Elde-Waterway are significant. Most important are the Dömitz Marina, the Eldena Marina, and the canoe facility Hechtforthschleuse near Grabow, each with 30 berths. Infrastructure, such as petrol station, waste disposal facilities or shops is widely available. In the biosphere reserve Flusslandschaft Elbe two observation towers are available for the observation of specific natural events, such as bird migration.

The City of Ludwigslust plays a prominent role with regard to city urban and cultural tourism. The late baroque city area with a park, castle and town church is the most valuable and best preserved in Northern Germany. In Dömitz, the only fully-preserved lowland fortress in northern Germany is a popular attraction.

The 160 km long "Gestütsweg" between the Mecklenburgisches Landgestüt Redefin and the Brandenburgisches Haupt- und Landgestüt Neustadt (Dosse) is of outstanding importance for equestrian tourism. The trail is particularly suitable for horseback riding tours, because there are restaurants, accommodation and horse facilities available at convenient one-day distances. The Gestütsweg links the Counties of Ludwigslust and Prignitz between Dömitz and Lenzen.

### Prignitz County:

In Prignitz County the emphasis is placed on nature-oriented tourism, cycle tourism, and horseback riding as well as on city and cultural tourism. Again, the Elbe bike trail is an important attraction for cyclists. In addition, the Elbe-Müritz bike trail is an important network between Elbe and Müritz area. There are, for example, special thematic bike trails such as the Gänsetour as well as tourist cycling events like the "Tour de Prignitz".

The cities of Prignitz, Lenzen, and Perleberg are important for city and cultural tourism, because of their attractive historic town centres. In addition, many manors, castles and churches are available. The Plattenburg is one of the most impressive castle buildings. It is the largest water castle in northern Germany. The annual event “Mittelalterliches Spektakel” attracts many visitors.

Nature tourism benefits from the combination of Biosphere Reserve and the Elbe bike trail. The accessibility of the area with its natural beauty is continuously improved by better networking of restaurant owners, accommodation providers and nature and landscape guides. For the water sports Wittenberge is an important spot. With 40 berths, the city has a major marina between Hamburg and Magdeburg.

## 5.6 Social infrastructure

The issue of social infrastructure becomes more and more the focus of public attention because of the demographic and structural trends with regard to settlement systems. In some social institutions, the number of users rises significantly, while other facilities have registered a decline in user numbers. Typical social infrastructure facilities include day care centers, schools, recreational facilities and senior residential and nursing homes. The consideration of the social infrastructure is to show the already existing need for restructuring in each county.

Particularly for families, the range of social infrastructure is directly related to the choice of a residence. The facilities of general public interest provided by municipalities and local authorities and communities shall meet the needs of different stages of life in the family - which includes the care for older people. Not least, the region's quality of life is determined by the quality and quantity of social infrastructure facilities.

In the following the primary indicators of social infrastructure of the analysed area will be outlined. The City of Lüneburg will be considered separately and not in the context of County data, because of its role as a high order centre the examination room.

The number of day care facilities for children varies per County based on the population and / or the number of children. The Börde County has a total of 174 day care centers and thus has the most facilities in the analysed area. The Counties of Stendal and Lüneburg have 100 day care centres each. Currently, there are 94 day care centres in Ludwigslust County and in Prignitz and Jerichower Land 77 and 78. In contrast, there are only 34 day care centres in the County of Lüchow-Dannenberg, although this can be explained by the low population and population density.

**Table 22: Day care facilities for children on county level (2008)**

County	Day care centres [number]
Prignitz	77
Ludwigslust	94
Lüneburg	100
Lüchow-Dannenberg	34
Stendal	100
Jerichower Land	78
Börde	174

Source: Statistische Ämter des Bundes und der Länder; [www.statistik-portal.de](http://www.statistik-portal.de);  
<http://www.sachsen-anhalt.de/LPSA/index.php?id=>

Not only is the availability of care facilities for small children of great importance for the overall development of the area but also the availability of schools. All counties in the analysed area provide an extensive range of general education. The number of schools amounts to 35-94, depending on the county. Börde County has the highest number of schools. There are 56 primary schools and 38 secondary schools, although the county ranks only fourth in the under 19 age group<sup>23</sup>. In contrast, there are only 18 primary schools and 17 secondary schools in the Lüchow-Dannenberg County. Secondary education facilities include Hauptschule (compulsory basic secondary school), Realschule (secondary modern school/junior high school), Gesamtschule (comprehensive school), Gym-

<sup>23</sup> cf. table 8: age structure in the study area (2008)

nasium (grammar school, high school), Förderschule (school for children with special needs), private schools, and vocational schools.

**Table 23: Number of schools by type on county level (2009)**

County	Total	Grundschulen	Hauptschulen	Realschulen	Gesamtschulen	Gymnasien	Förder-schulen	Vocational schools	Private schools
PR	33	19	4 <sup>1</sup>		0	3 <sup>2</sup>	4	1	3
LWL	46	18	13 <sup>4</sup>		2 <sup>5</sup>	4	5	2	2
LG	72	36	15 <sup>6</sup>		1 <sup>7</sup>	6	4	3	7 <sup>8</sup>
DAN	35	18	8 <sup>9</sup>		1	2	4	1	1
SDL	62	35	11 <sup>10</sup>		0	6	8	2	0
JL	37	19	9 <sup>10</sup>		0	3	5	1	0
BK	94	56	19 <sup>10</sup>		0	7	9	3	0

<sup>1</sup> Oberschule (comprehensive school without grammar school/high school level)

<sup>2</sup> including grammar school/high school level of Oberstufenzentrum (OSZ)

<sup>3</sup> Allgemeinbildende Schulen in Freier Trägerschaft (independent schools of general education)

<sup>4</sup> Regionale Schulen (regional schools): combination of Hauptschule and Realschule, including 6 Regionale Schulen with Grundschule

<sup>5</sup> Kooperative Gesamtschule mit gymnasialer Oberstufe (cooperative comprehensive school including grammar school/high school level)

<sup>6</sup> Hauptschule and Realschule: including 3 with Hauptschule and Realschule branches

<sup>7</sup> Integrierte Gesamtschule IGS (integrated comprehensive school)

<sup>8</sup> Private schools: including 5 vocational schools and 2 schools of general education

<sup>9</sup> Hauptschule and Realschule: including 3 with Hauptschule and Realschule branches (Hitzacker, Dannenberg und Gar-  
tow) and 1 separate Realschule (Lüchow)

<sup>10</sup> in Saxony-Anhalt there are only secondary schools which lead to Hauptschule or Realschule graduation

Source: Landkreis Ludwigslust 2009, Schulentwicklungsplanung; LK Lüneburg 2010, Fachamt Schule und Kultur; Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, www.lskn.niedersachsen.de; Landkreis Jerichower Land 2009, Schulentwicklungsplanung; LK Prignitz 2010, Sachbereich Planung/Unternehmensbetreuung

The numbers of students decreased in almost all districts between 2000 and 2008. Only Lüneburg is contrary to the trend. There, the number of students has increased by 9.2% in the above mentioned period. Even in absolute terms, the Lüneburg County reports the highest number of students in the analysed area (21,900).

**Table 24: Development of the number of students<sup>1</sup> on county level**

County	2000	2002	2004	2006	2008	2000 to 2008 [absolute]	[%]
Prignitz	12.158	10.194	8.546	7.366	6.488	- 5.670	- 46,6
Ludwigslust	17.845	15.822	13.857	11.838	10.221	- 7.624	- 42,7
Lüneburg	20.051	20.645	21.366	21.925	21.900	1.849	9,2
Lüchow-Dannenberg	6.441	6.376	6.246	6.047	5.794	- 647	- 10,0
Stendal	18.920	16.616	14.234	12.372	10.566	-8.354	- 44,2
Jerichower Land	12.690	11.058	9.171	7.883	6.984	-10.071	- 45,0
Börde	24.197	21.322	18.142	16.170	14.126	-5.706	- 41,6

<sup>1</sup> General education including evening schools, Kolleg (course of lectures), without vocational schools

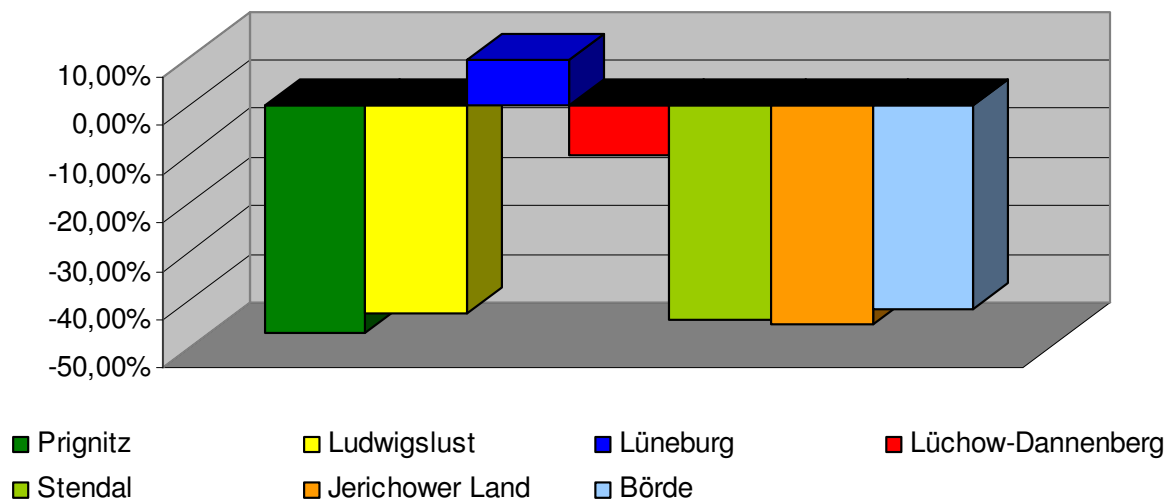
Source: Statistische Ämter des Bundes und der Länder; Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen, www.lskn.niedersachsen.de; Statistisches Landesamt Sachsen-Anhalt



The rather drastic decrease in the number of pupils is remarkable. In the Counties of Prignitz, Ludwigslust, Stendal, Börde, and Jerichower Land the number of students has decreased by more than 40% between 2000 and 2008. The Lüchow-Dannenberg County recorded a decline of 10% only, but has on the other hand the lowest number of students (5,794). The decline in student numbers in the eastern German federal states can be explained by the massive decline in birth rate after 1990. Cohorts from baby boom years prior to 1990 have left school now. The County of Lüneburg also benefits in terms of student numbers from the influx of many families. However, the influx is primarily limited to the City of Lüneburg, and direct neighboring communities. Communities in the eastern part of the county, on both sides of the Elbe, unfortunately do not benefit thereof.

Based on the already visible trends in the development of pupil numbers in connection with the age structure forecast<sup>24</sup> it is assumed that existing schools are no longer used to their full capacity in future. The school development planning of each county must therefore respond to this development. The closing down of some schools will also lead to a shift of attractive residential locations, especially for families.

**Figure 10: Development of the number of students between 2000 and 2008 [%]**



Source: own illustration

Other social institutions in the region include, for example, various retirement and nursing homes for the elderly.

<sup>24</sup> cf. table 10: age structure forecast on county level (2006 to 2025)

**Table 25: Retirement and nursing homes for the elderly on county level (2007)**

County	Nursing homes [number]	Beds [number]
Prignitz	11	816
Ludwigslust	23	1.257
Lüneburg	39	2.542
Lüchow-Dannenberg	9	511
Stendal	16	1.107
Jerichower Land	19	1.292
Börde	31	1.940

Source: Statistisches Jahrbuch Landkreis Prignitz 2008, Statistisches Amt Mecklenburg-Vorpommern; [www.lueneburg.de](http://www.lueneburg.de), [www.pflegelotse.de](http://www.pflegelotse.de); Statistisches Landesamt Sachsen- Anhalt

The number of nursing homes varies between 9 and 39 facilities. The number of nursing places is thus also quite different and ranges from 511 places in the Lüchow-Dannenberg County to 2,542 places in the County of Lüneburg.

Because of demographic change and the present age structure forecast<sup>25</sup> for the seven counties it is expected that the currently existing nursing places will no longer be sufficient in the future. This development must therefore be responded to in time.

In this context, the availability of health facilities should be described, too. In the following, the number of hospitals and physicians in private practice is presented.

**Table 26: Primary health care on county level (2008)**

County	Hospitals [number]	Physicians in private practice [number]
Prignitz	3	116
Ludwigslust	3	143
Lüneburg	5	75 <sup>1</sup>
Lüchow-Dannenberg	1	67
Stendal	5	163
Jerichower Land	3	100
Börde	3	209

<sup>1</sup> without City of Lüneburg

Source: Statistisches Jahrbuch Landkreis Prignitz 2008; Statistisches Amt Mecklenburg-Vorpommern; Kassenärztliche Vereinigung Niedersachsen, KVN; Internetrecherche

Only marginal differences can be observed with regard to the number of hospitals. There is at least one hospital in each county. The number of physicians in private practice differs in certain respects when comparing the different Counties. There are only 67 doctors in the County of Lüchow-Dannenberg, whereas the highest number of doctors is recorded in the Börde County, which has the highest population density on the other hand<sup>26</sup>. The relatively low number of physicians in private practice (75) Lüneburg County can be explained by the fact that the City of Lüneburg is excluded in the statistical data due to its role as a high order centre. On the other hand, many physicians in private practice are concentrated here.

<sup>25</sup> cf. *ibid.*

<sup>26</sup> cf. table 6: inhabitants and population density in the study area (2008)

The fact, that the number of physicians will decrease in future, must be taken into consideration. This is due to a lack of young physicians and, on the other hand, to the aging of doctors. The Association of Statutory Health Insurance Physicians (KBV) predicted in 2008, that about 34,000 doctors will give up their practice due to age by 2012<sup>27</sup>. Taking into account the age structure forecasts, a deficit must be expected in this social field. An aggravating factor for the peripheral areas of the study area is that local doctors often have no successor. In 2010, policy has responded to the recent development by proposing a "Landarztquote" (quota for country doctors)<sup>28</sup>. Medical students who are willing to commit themselves for several years to work as a country doctor should preferably get admission to university in future

**Table 27: Number of youth and recreational facilities on county level (2008)**

County	Youth recreational facilities <sup>1</sup>	Sports clubs <sup>2</sup>	Youth Fire Brigades
Prignitz	87	120	82
Ludwigslust	40	144	93
Lüneburg	84	44	72
Lüchow-Dannenberg	21	13	34
Stendal	42	145	70 <sup>3</sup>
Jerichower Land	52	95	71 <sup>3</sup>
Börde	116	210	147 <sup>3</sup>

<sup>1</sup> salaried/voluntary supervision; without baths, skate parks, playgrounds, sports; <sup>2</sup> including child and youth work; <sup>3</sup> including young children

Source: Amt für Statistik Berlin-Brandenburg; Statistisches Amt Mecklenburg-Vorpommern; Brandschutzstatistik im Landkreis Prignitz 2008; Kreisfeuerwehrverband Ludwigslust; Landkreis Prignitz; [www.statistik-portal.de](http://www.statistik-portal.de), [www.kreisfeuerwehr-lueneburg.de](http://www.kreisfeuerwehr-lueneburg.de), [www.kjv-dan.de](http://www.kjv-dan.de); Sozialbericht des Landes Sachsen-Anhalt 2005 – 2009; Bildungszentrum der Jugendfeuerwehr Sachsen-Anhalt, Jugendhilfeplaner Jerichower Land 2009, Jugendamt Landkreis Börde

Offers for young people in the region are available throughout the analysed area. Offers in the various planning areas include youth recreational facilities, sports clubs and youth fire brigades.

<sup>27</sup> Welt Online: Überalterung – Ärzte warnen vor Medizinemangel;  
[http://www.welt.de/politik/article1833950/Überalterung\\_Aerzte\\_warnen\\_vor\\_Medizinemangel.html](http://www.welt.de/politik/article1833950/Überalterung_Aerzte_warnen_vor_Medizinemangel.html)

<sup>28</sup> FAZ.net: Rösler plant „Landarztquote“ für Medizinstudenten;  
<http://www.faz.net/s/Rub0E9EEF84AC1E4A389A8DC6C23161FE44/Doc~E0424AFB17CC74927BCBB6206A9F7CCEF~ATpl~Ecommon~Scontent.html>

## 5.7 Transport infrastructure

From an overall perspective, there is an extensive transportation network available in the analysed area (see Annex: Table transportation infrastructure in the analysed area). However, the entire area is relatively poorly connected to the nationally significant roads.

In the north of the Ludwigslust County there is the A24 motorway, which connects Berlin and Hamburg. Other motorways in the analysed area include motorway A2, coming from Hannover and linking Magdeburg to the Berliner Ring (A10) and motorway A14, coming from Leipzig and connecting Magdeburg with the A2. In the north, motorway A14 runs from the motorway interchange Schwerin up to Wismar. Thus, there are motorways only in the north and south of the analysed area. The whole intermediate area is linked to the national transportation network by Federal roads (Bundesstraße) and State roads (Landesstraße).

An improvement of transport links is to be realised by closing the gap in motorway A 14. As can be seen from Figure 11, closing this gap is regarded as a high priority need according to the requirement plan for federal highways (Bedarfsplan für die Bundesfernstraßen). A plan approval order has already been issued in March 2010 for the first section at Colbitz. For further sections, the planning approval is being processed. A completion of the A 14 is not expected before 2020<sup>29</sup>.

**Figure 11: Construction and expansion of motorways - as of 1 January 2010 – according to requirement plan for federal highways (Bedarfsplan für die Bundesfernstraßen)**



Source: Bundesministerium für Verkehr, Bau und Stadtentwicklung;  
<http://www.bmvs.de/cae/servlet/contentblob/56074/publicationFile/27875/neubau-und-erweiterung-von-bundesautobahnen-uebersichtskarte-nicht-barrierefrei.pdf>

<sup>29</sup> Mitteldeutsche Zeitung: Weiterbau im Norden rückt näher, 08.03.2010; <http://www.mz-web.de/servlet/ContentServer?>

The counties are accessible through various Federal roads. B 195 runs through the Prignitz County in east-west direction. This road leads to the east of Prignitz then into the B 189, which runs from Magdeburg via Stendal to Wittenberg. Other Federal roads in the Prignitz County include the B 5 and B 107. B 5 and B 195 also run through the County of Ludwigslust. Here, the B 191 runs in a northeast-southwest direction and the B 106 in the eastern part of the County. In the Counties of Lüneburg and Lüchow-Dannenberg there are the B 191 (Uelzen - Dannenberg - Dömitz), B 195 (parallel to the Elbe to Dömitz), B 209 (Lüneburg - Artlenburg), B 216 (Lüneburg - Dannenberg), and B 248 (Lüchow - Dannenberg). The district of Stendal is accessible by major roads, including by the B 188, which runs from west to east, and the B 107 which runs from north to south. Furthermore, B 189 runs through the County of Stendal, which leads from Magdeburg via Stendal and Wittenberge to Wittstock. In the Counties Jerichower Land and Börde there is the B 1, which is main regional transport link. The B 1 runs from the far west of Germany at Aachen to the Polish border. The transportation network is supplemented by a variety of state roads and other smaller roads.

Crossing of the Elbe River for vehicles is possible by using ferries or bridges. Due to flood or winter events, such as ice, a ferry crossing can not be ensured all year round. The following Elbe crossings are located in the study area:

**Table 28: Elbe crossings in the study area**

Ferry	Bridge
Bleckede (LG) – Neu Bleckede (LG)	Kaltenhof (DAN) - Dömitz (LWL)
Neu Darchau (DAN) – Darchau (LG)	Geestgottberg (SDL) – Wittenberge (PR)
Hitzacker (DAN) – Herrenhof (DAN)*	Stendal (SDL) – Fischbeck (Elbe) (SDL)
Höhbeck (DAN) – Lenzen (Elbe) (PR)	Tangermünde (SDL) – Fischbeck (Elbe) (SDL)
Schnackenburg (DAN) – Lütkenwisch (PR)	Barleben (BK) – LOSTAU (JL)
Räbel (SDL) – Havelberg (SDL)	
Büttnerhof (SDL) – Sandau (SDL)	
Arneburg (SDL) – Neuermark-Lübbers (SDL)	
Grieben (SDL) – Ferchland (JL)	
Rogätz (BK) – Schartau (JL)	

\* foot passenger/bicycle ferry  
source: own survey

Apart from the infrastructure for private transport, there are also public transport links. Mainly, this refers to bus and rail-bound transportation. Public transport in the predominantly rural areas of the study area is focused primarily on school buses. Quality of the supply outside school hours is generally sufficient only to unsatisfactory. A positive aspect is that there are inter-regional transport associations in some of the Counties which makes public transport much more attractive for residents. The Lüneburg County is part of the Hamburg public transport association (HVV). Ludwigslust County is part of the West Mecklenburg Tariff System. Börde County is linked to the Magdeburg Tariff System. The Prignitz County is linked to the Berlin-Brandenburg public transport association.

Several rail links are operated by Deutsche Bahn (DB) or regional operators. Important junctions for the rail-bound public transport include the regular ICE stops Stendal, Wittenberge, and Ludwigslust, which link the region to the national rail network.

Furthermore, there are secondary lines in the study area running from Lüneburg to Dannenberg Ost (Wendlandbahn) and from Wittenberge via Perleberg and further towards



Pritzwalk, which are served by regional trains (RB) and the Regional Express (RE). From Stendal to Uelzen there is also a Regional Express (RE).

With regard to the accessibility of the biosphere reserve, the website of the Deutsche Bahn points to the railway stations of Wittenberge, Boizenburg and Hitzacker<sup>30</sup>. Not explicitly mentioned there is the biosphere station Brahlstorf, located on the Hamburg-Ludwigslust line, which is an important station for visitors from the region of Hamburg and Schwerin. This station will be made more attractive in the coming years<sup>31</sup>.

A general improvement of attractiveness of the rail-bound public transport is pursued by all, particularly regarding the accessibility of the biosphere reserve. Thus, for example, the Lüchow-Dannenberg County stated in its transportation plan that the county supports all efforts to provide an attractive and economical railway passenger service<sup>32</sup>.

The Elbe is an important component of transport infrastructure in the analysed area as well. The Elbe is classified as a Federal Waterway VI b and therefore of international importance. Another waterway in the analysed area is the Müritz-Elde-Waterway (MEW), which is a connection between the Elbe and the Mecklenburg Lake District. The Havel flows through a small part of the area and into the Elbe at Havelberg. The Federal Waterway Elbe-Havel canal leads through the southern part of the analysed area, starting from the Mittellandkanal near Magdeburg in a northeasterly direction. In the far north-western part of the analysed area there is also a small part of the Elbe-Seitenkanal.

The Elbe has a great potential for tourism, in particular for the water-based tourism sector. The importance of tourism is shown by the large number of marinas, which can be found along the river Elbe in the study area. Some planning concepts already recognize the importance and potential of existing ports and consider their further development. For example, the Regional Planning Program West Mecklenburg (Draft 2010) points out that the existing ports in Dömitz and Boizenburg/Elbe should be particularly developed for tourism. Also, the Regional Planning Program of the Lüneburg County stipulates that the infrastructure for water-based tourism is to be maintained and developed by further planning and measures. For this particular county the ports of Alt-Garge und Bleckede have a high potential for development. The other counties also have a variety of marinas with potential for further development, such as the marina Lenzen (Prignitz) or the marina Arneburg (Stendal). In the Counties of Börde and Jerichower Land there are marinas along the Elbe, but also ports along the Elbe-Havel Canal and the Mittelland Canal.

Ports that are important for freight traffic along the Elbe are rarely to be found currently. The only one to be mentioned here is the port of Wittenberge. In 2010 the further expansion of the port was started. The completion of two new piers is planned for spring 2011<sup>33</sup>.

Regarding the technical infrastructure, necessary supply and disposal facilities are available in all counties. However, it is assumed that due to the projected decline in population in large parts of the study area the supply and disposal infrastructure will be oversized in the future. Thus, this could lead for example to a over-dimensioning of the supply and disposal facilities for fresh and waste water, especially in residential areas with few com-

<sup>30</sup> Cf. Deutsche Bahn: Biosphärenreservat Flusslandschaft Elbe – Anreise und Mobilität vor Ort; [http://www.bahn.de/regional/view/fzn/bio\\_elbe/anreise.shtml](http://www.bahn.de/regional/view/fzn/bio_elbe/anreise.shtml)

<sup>31</sup> Der Landkreisbote: „Das hört sich gut an!“ – Informationsveranstaltung zum Biosphären-Bahnhof Brahlstorf; [http://www.kreis-lwl.de/cms2/LWL\\_prod/LWL/Ludwigslust/Aktuelles/Landkreisbote/2010/\\_Dokumente/Landkreisbote\\_Oktober\\_2010\\_2.pdf](http://www.kreis-lwl.de/cms2/LWL_prod/LWL/Ludwigslust/Aktuelles/Landkreisbote/2010/_Dokumente/Landkreisbote_Oktober_2010_2.pdf)

<sup>32</sup> Verkehrsgesellschaft Nord-Ost-Niedersachsen mbH (VNO) (2007): Nahverkehrsplan des Landkreises Lüchow-Dannenberg für den Zeitraum 2007 – 2012

<sup>33</sup> dvz.de: „Hafen Wittenberge wird weiter ausgebaut“, <http://www.dvz.de/news/politik/artikel/id/hafen-wittenberge-wird-weiter-ausgebaut.html>



mercial businesses. Nevertheless, funds for maintaining the sewers have to be provided - despite declining population.

The counties have already recognized and referred to this challenge in their regional development plans. Thus, the regional development plan for the planning region Altmark states as a principle that the settlement structure and the development of infrastructural conditions are to be adjusted to the needs of a declining population<sup>34</sup>. Also, the Regional Planning Program of the County of Lüneburg states that it must be a particular objective of local governments to adjust the spatial structures, especially public infrastructure, to answer the aging problem<sup>35</sup>. The current draft of the Regional Spatial Development Programme West Mecklenburg stipulates that appropriate adaptation strategies are to be developed for the sparsely populated rural areas to ensure primary public services in the long term. These strategies could include alternative service offers, increased interaction between public, private and civil society actors, enhanced inter-municipal cooperation and active citizenship<sup>36</sup>.

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<sup>34</sup> Regionale Planungsgemeinschaft Altmark, 2004: Regionaler Entwicklungsplan für die Planungsregion Altmark, S. 7

<sup>35</sup> Landkreis Lüneburg, 2010: Regionales Raumordnungsprogramm 2003 (Begründung), Fortschreibung/Änderung 2010, S. 10

<sup>36</sup> Regionaler Planungsverband Westmecklenburg, 2010: Regionales Raumentwicklungsprogramms Westmecklenburg, Entwurf zum 3. Beteiligungsverfahren, S. 99

## 6 SWOT Analysis

The following SWOT analysis is based on already existing plannings and analyses for the area, which will be discussed with regard to focal points of the Integrated Development Concept. The goal is to realise a SWOT analysis for the area taking into account regional differences and central focus points.

The results of the structural analysis of the Regional Development Concept incorporated into the presentation of the strengths, weaknesses, opportunities and risks. Thematically, the SWOT analysis is analogous to the framework established in Chapter four, inventory and structural analysis.

Location and size	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Area extends into the metropolitan region of Hamburg to the north-west and into the region of Magdeburg to the south</li> <li>- Location at the "Lower Middle Elbe," an internationally important river basin</li> <li>- Elbe as a "link" of the different (administrative) structures</li> </ul>	<ul style="list-style-type: none"> <li>- Most of the area is far away from economic centres</li> <li>- Most of the area consists of rural areas</li> <li>- Few economic and socio-economic links to strong economic regions</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Economic cooperation with the metropolitan regions in the "neighborhood"</li> <li>- Obtaining a new community spirit</li> <li>- Activate an identity for the Elbe area</li> </ul>	<ul style="list-style-type: none"> <li>- great location differences due to different developmental progress in the subspaces of the examined area</li> </ul>
Nature and landscape	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Location along the Elbe River having an international reputation (UNESCO) with the Elbe floodplains as a unique feature</li> <li>- A varied natural and cultural landscape</li> <li>- Nature conservation ensured by conservation area designations</li> <li>- 52.3% of the area of analysis are within designated protected areas</li> </ul>	<ul style="list-style-type: none"> <li>- contaminated land in the flood areas of the Elbe</li> <li>- Decline of characteristics species of the Elbe floodplains</li> <li>- Lack of visitor management within protected areas</li> <li>- Intensive agriculture</li> <li>- Delays in implementation of development goals within the protected areas</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Sustainable land use in accordance with UNESCO's basic principle - man and biosphere</li> <li>- Positive image of the region as a healthy living and recreational space</li> <li>- Use of natural potential for tourism sector (eco-tourism), and marketing of regional products</li> <li>- Agriculture as a partner for nature conservation</li> <li>- Living in harmony with nature</li> </ul>	<ul style="list-style-type: none"> <li>- further intensification of different forms of use such as tourism or agriculture (bio-energy)</li> <li>- Climate change poses problems for flood protection and management of groundwater</li> <li>- Changes in certain habitat types and communities as a result of climate change</li> <li>- Sustained damage from human activities (potash mining, wind power, infrastructure, etc.)</li> </ul>

Settlement and population structure	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Historically developed well-preserved structures</li> <li>- Mostly no urban sprawl - contrast between landscape and settlement given</li> <li>- Relatively powerful central places</li> <li>- Large civic involvement in cultural, political and social initiatives, particularly in Wendland and Altmark</li> <li>- Awareness of traditions and customs</li> <li>- Well-developed social networks</li> </ul>	<ul style="list-style-type: none"> <li>- Negative effects on single locations / sub-regions e.g. by potash mining waste tip at Zielitz, wind farms</li> <li>- Large parts of the area of analysis are sparsely populated rural areas - population density only 58.25 inhabitants / km<sup>2</sup></li> <li>- Ageing of the population - the largest increase in the age group over 65 years in the area of analysis</li> <li>- Steady population losses (except LK Lüneburg) of about 7.3% in the area of analysis</li> <li>- Widening of disparities of urban centers and rural areas</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Preservation of rural structures as an expression of quality of life</li> <li>- New inner-development opportunities for city and village development (green areas, restructuring of domestic parts, models)</li> <li>- Initiatives milieu: active citizen participation as part of social responsibility can help to influence future social and political developments positively</li> <li>- Use changing age structure adjustment for strengthening in selected areas</li> </ul>	<ul style="list-style-type: none"> <li>- Cityscapes and settlement patterns may change negatively (decline, vacancy)</li> <li>- Loss of function in the urban areas – risk of a downward spiral</li> <li>- No adjustment of legislation to demographic and energy-policy related changes</li> <li>- Risk of weakening social networks through segregation processes</li> <li>- Risk of abandonment of villages</li> </ul>
Regional Economy and Employment	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Soft locational advantages: culture, schools, residential areas</li> <li>- Powerful food industry</li> <li>- Regional growth centrecore Perleberg-Wittenberge-Karstädt generates growth for adjacent areas</li> <li>- Focus on the wood processing industry in the district of Stendal</li> <li>- Large existing industries in Wendland and growing number of newly established promising businesses in the area of analysis</li> <li>- Versatile existing economic structure in industry, trade and services</li> <li>- Well-developed potential for further commercial settlement in the central places</li> <li>- Armed forces sites with positive consequences for the labor market</li> <li>- Willingness of people to commute over medium distances</li> <li>- Wendland and County of Stendal are regions of competence in the energy sector</li> <li>- Available renewable resources for energy use in the analyse area</li> <li>- Concentration of organic farms (producer groups) in Wendland</li> <li>- Marketing of quality local products such as Elbe lamb, asparagus</li> </ul>	<ul style="list-style-type: none"> <li>- Anstieg der Pachtpreise durch Flächenkonkurrenz zwischen Energiepflanzen- und Nahrungsmittelanbau</li> <li>- Heterogeneous unemployment structures in the area</li> <li>- Migration of younger, employable people</li> <li>- Commercial transportation on the Elbe is of little importance so far</li> <li>- River affine economy is based mainly on a touristic usage of Elbe River and canals</li> <li>- Small number of industrial ports and shipyards available</li> <li>- Predominant share of low-skilled jobs</li> <li>- Small company-specific training and qualification program</li> <li>- Lack of innovation and growth Image</li> <li>- Loss of typical regional and historical trade procedures</li> <li>- Increase in rents as a result of competition between energy and food crop growing</li> </ul>

<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Competitive agricultural businesses can adapt to changing market situations and increase the added value in the food industry, maintain employment (primarily Saxony-Anhalt)</li> <li>- Stimulate the economy by commissioning industrial port Wittenberge</li> <li>- Large labour force in conjunction with low-cost commercial space has a positive impact on establishing of additional economic power in the analysed area</li> <li>- Further innovation transfer in the energy sector</li> <li>- Creation of new jobs in innovative industries; demographic change as an opportunity</li> <li>- Profiling towards a child-and family-friendly region</li> <li>- Connecting local economies of towns and villages to regional economic cycles</li> <li>- High residential and recreational value prevents imminent danger of further migration</li> <li>- Growing demand for age-based products, services, vocational training and jobs</li> <li>- Long-term commitment of the Bundeswehr in the analysed area</li> <li>- Potential stabilisation of the energy and food sector based on the agricultural character of the analysed area</li> <li>- Existing experience and expertise in the County of Lüchow-Dannenberg can be used for the whole Elbe region (vision of self-sufficient Elbe riparian communities)</li> <li>- Increased use of geothermal water deposits for example, in Boizenburg and Ludwigslust</li> <li>- Knowledge transfer in relation to organic agriculture and the energy in the entire area of analysis</li> </ul>	<ul style="list-style-type: none"> <li>- Equity capital weakness of commercial and agricultural businesses and municipalities discourage investment</li> <li>- Competitive disadvantage due to lack of high speed Internet access in rural areas</li> <li>- Limited development opportunities due to designation of protected areas in the analysed area</li> <li>- Skills shortage due to migration leading to relocation of production facilities and influencing location decisions</li> <li>- Lack of alternatives for job changes</li> <li>- Severe reductions in average wages</li> <li>- Migration of young women</li> <li>- Low qualification of school leavers for vocational training</li> <li>- Subsidy policies and changing framework conditions (feed-in remuneration)</li> <li>- Higher prices for organic and directly marketed products need broad potential customer base (demographics)</li> <li>- Uncertainties in the climatic evolution of the region (climate change)</li> <li>- Globalisation of agricultural products and food industry</li> </ul>
<b>Tourism, leisure and recreation</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Attractive landscape with great natural wealth</li> <li>- Extensive range of water-bound infrastructure</li> <li>- Waterways link to aquatic sport areas of North (East) Germany</li> <li>- Cultural landscape with evidence of the cultural heritage</li> <li>- Wide range of tourist infrastructures (cycling, riding and hiking trails, information centres)</li> <li>- Elbe bike path as a tourist link</li> <li>- Tourism hot spots included in brands such as "Gartenträume" (Garden Dreams), "Straße der Romantik" (Romanesque Road), "Blaues Band" (Blue Ribbon)</li> <li>- Outstanding individual tourist sites</li> <li>- Many remarkable sights</li> <li>- Potential in classical culture (arts and crafts, exhibitions, theater, etc.);</li> <li>- Region-specific activities, such as "Cultural outing" in Wendland and Elbtalaue, "Theater of the Altmark", "Kalimandscharo in Zielitz"</li> <li>- Rich culture and great artists</li> </ul>	<ul style="list-style-type: none"> <li>- Seasonality of tourism products</li> <li>- Inadequate networking of providers</li> <li>- Lack of supraregional awareness of cultural offers</li> <li>- Lack of long-term cultural offers</li> <li>- Inconsistent and uncoordinated structure of tourist and cultural offers</li> <li>- Lack of interdisciplinary coordination between the fields of tourism, culture and landscape</li> <li>- No coordinated regional tourism profile for the Elbe area</li> <li>- Potential of water tourism is not developed sufficiently</li> <li>- Lack of public transport and thus poor accessibility of the analysed area</li> <li>- Gaps in the development of regional cycling routes</li> <li>- Lack of tourist signs</li> <li>- Insufficient integration of tourism and direct marketing</li> <li>- Lack of accessibility for the handicapped in many tourist offers</li> <li>- Tourism in the analysed area often limited to single sites ("islands")</li> </ul>

<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Development potential in nature and water based tourism</li> <li>- Inter-regional connections to metropolitan regions of Hamburg and Berlin increase accessibility of the area for new target groups</li> <li>- Joint marketing increases number of overnight stays</li> <li>- Target group specific marketing of the area and thereby increasing the supraregional level of awareness</li> <li>- Establishing the region as a tourist destination</li> <li>- Strengthening cross-border cooperation and transferring the achievements of Elbe Cycle Trail to other niches in the tourism sector</li> <li>- The Elbe River links tourist offers in the region</li> <li>- Further development of target group specific services</li> <li>- Establishing and marketing of barrier-free offers</li> <li>- Enhancing tourism products by cross-linking with cross-regional routes (eg European pilgrimage route of St. James, Straße der Romanik, long distance bicycle trails)</li> <li>- Establishment of new regional tourist routes</li> <li>- Cooperation between tourism agencies under one umbrella</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate marketing reduces economic potential of the cultural tourism sector</li> <li>- Negative impact of competition due to lack of coordination of offers</li> <li>- Reshaping of tourism leads to loss of individual perceptibility of the Elbe area</li> <li>- No adequate consideration of regional characteristics</li> <li>- Lack of synergies (economy)</li> <li>- Decline in customer numbers in country tourism due to general population decrease</li> <li>- No ecologically sound development of the Elbe River</li> </ul>
<b>Social Infrastructure</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Central places ensure basic services provision in the area</li> <li>- Cooperation networks including various educational institutions and the biosphere reserve administration</li> <li>- Science hubs within and adjacent to the analysed area (eg university town of Magdeburg with university and colleges, the Fraunhofer Institute for Factory Operation and Automation IFF, Leibnitz Institute for Neurobiology, Max-Planck-Institut for Dynamics, University of Applied Science Stendal, University of Lüneburg, Institute for Environmental Communication)</li> </ul>	<ul style="list-style-type: none"> <li>- Few transfer facilities for current challenges in the analysed area (demographic change, integration of migrants)</li> <li>- Sharp fall in student numbers between 2000 and 2008 in the Elbe region within the New Laender</li> <li>- Multifaceted (vocational) school system is already being thinned out in the area</li> <li>- Primary health care in rural areas declined sharply, endangering health care</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Development of the Biosphere Reserve „Flusslandschaft Elbe“ as a model region for sustainable development</li> <li>- Municipal Association of Elbe Valley acts as coordinator of initiatives towards sustainable development in the region</li> <li>- Training of professionals according to the needs of economic development to meet future human resource demand</li> <li>- Cooperation between science, research and industry</li> <li>- Establishment of new school concepts, such as Dwarf school</li> <li>- Advertising campaigns for the recruitment and retention of qualified professionals including in relation to specific infrastructural challenges</li> <li>- Establishment of pilot projects with regard to health care in rural areas</li> <li>- Setting up citizen-centric community services</li> </ul>	<ul style="list-style-type: none"> <li>- Risk of losing the overall perspective due to a multitude of actors</li> <li>- Research findings are not transferred to and implemented in the Elbe region</li> <li>- Downsizing of public services (day care centres, schools, shops, medical practices); soft location factor vanishes</li> <li>- Low financial flexibility of local budgets</li> <li>- Exclusive support of central places, development deficits in rural areas extended</li> </ul>

<ul style="list-style-type: none"> <li>- Area with particular development challenges in the County of Stendal (Regulation LEP-ST)</li> </ul>	
Transport and Technical Infrastructure	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- National transport links available by motorways in peripheral areas of Hamburg and Magdeburg</li> <li>- High-capacity waterway network</li> <li>- Good local transport infrastructure consisting of a network of federal, provincial and district roads as well as local roads</li> <li>- Some areas have easy access to the short- and long-distance rail network: Ludwigslust, Wittenberge, Stendal, Magdeburg (railway junction points)</li> <li>- Guaranteed supply structure in primary centres</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of networks to the north by missing motorway links (Autobahnloch)</li> <li>- Limited number of Elbe bridges is an obstacle to further development</li> <li>- Broadband supply deficits in some regions</li> <li>- Lack of cross-regional transport associations</li> <li>- Thinned out public transport supply, particularly at weekends</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Inter-regional development of public transport, alternative mobility concepts (dial a ride busses, busses with trailer for bicycles)</li> <li>- Developing North Highway to shorten the connection to the metropolitan areas (tourist and economic impacts)</li> <li>- Enhancing connectivity between different transport systems between urban and rural areas (inter-regional and on County level)</li> </ul>	<ul style="list-style-type: none"> <li>- Delays in highway construction</li> <li>- Further decline in working rail connections in the area</li> <li>- Problems in the usage of infrastructure due to the impact of demographic changes (low birth rate, emigration, aging)</li> <li>- High cost because of decreasing habitat density</li> </ul>

## Conclusion:

The strengths and weaknesses of the analysed area are not much different from those of other rural regions. In particular, a dramatic demographic development which is characterised by the ageing of the population poses a major challenge for the region. This situation leads to further challenges in providing the necessary technical and social infrastructure.

The Elbe River as a connecting element provides chances for collaboration. So far, cooperation within the area of the Integrated Regional Development Concept is realised in the tourism sector only. There are, however, potentials including bioenergy and organic farming which could be exploited in the future, provided that actors in the region will be able to identify areas of common interest in the Elbe area. Coordinated action towards improved means of control within the analysed area could enable actors to transfer already gained regional experience to the whole Elbe area. Networking between existing initiatives and structures is of crucial importance for promoting further development in the whole area. Four focus issues including flood control, river economics, climate change and demographic change have been identified which could be used to bring together different networks and to initiate professional exchange in the whole area.



## 7 Overall concept and policy recommendations

### 7.1 Overall concept

#### *Introduction*

The developed model is based primarily on the overall concept for the Municipal Working-Group (KAG) in the Biosphere Reserve "Flusslandschaft Elbe". The model was adapted and supplemented taking into account the results of the inventory analysis, the strengths/weaknesses profile, the results of the conducted workshops on the cross-sectoral issues of river economics and development of settlement systems/demographic change as well as the developed basic principles with regard to flood control and climate protection.

#### *Global concept for the region of the Lower Middle Elbe*

The global concept of the analysed area is titled "Region Untere Mittelelbe: Zukunft erkennen – grenzenlos Handeln". The study area is a region with common economic, environmental, social and economic development goals, whose regional development is closely connected to the Elbe and the Biosphere Reserve "Flusslandschaft Elbe".

The analysed area will be understood as a "model area for sustainable and environmentally sound development" where economic, ecological and social development has equal weight. General requirements for biosphere reserves, such as general criteria and guiding principles of development are still to be taken into account in the development of the overall concept. The biosphere reserve is seen as a driving force for the entire study area.<sup>37</sup>

The special feature of the study area and the biosphere reserve is the Elbe with their tributaries, bayous and backwaters. This aquatic ecosystem is unique among Central European rivers and is thus to be emphasized as a distinctive feature to other regions and biosphere reserves. This feature requires joint action in the areas of water tourism development of the Elbe, economic activities, regional development, preservation of rural culture and landscapes and other subject areas.

The focus of the development is on the joint efforts of counties and municipalities for the development of the Biosphere Reserve "Flusslandschaft Elbe", even if regional differences in terms of both natural areas (flood plains, along with Geest, forest and park-like areas) and in the economic and social sector (poor infrastructure, sparsely populated and peripheral areas around the cities of Magdeburg and Hamburg) need to be taken into consideration<sup>38</sup>.

In this respect, the joint action of counties and municipalities in the area of analysis is based on the idea to benefit of the adjacent cities and metropolitan regions of Hamburg, Magdeburg and Braunschweig/Wolfsburg/Salzgitter and to enter into cooperation with these regions also to re-allocate tasks according to functional utilisation of the respective area. On the other hand, the independent, rural character of the cultural landscape should be preserved.

Joint action will be implemented by initiating and planning joint projects taking into consideration the goals of the biosphere reserve. This will be communicated within the framework of cross-border public relations activities. In particular, projects with significant

<sup>37</sup> cf. isw (2001): Leitbild für die Kommunale Arbeitsgemeinschaft (KAG) im Biosphärenreservat „Flusslandschaft Elbe“, p. 4

<sup>38</sup> cf. ibid., p. 4

impact on the region and related to the cross-sectoral issues of river-affine economy, demography and development of settlement systems, climate protection and flood control management are to be realised.

### ***Structured model according to cross-sectoral issues***

The Elbe is used by the river-based economy as near-natural waters and economic actors are supporting its preservation as such. In a sustainable and consensual framework, navigability of the Elbe River is improved by respective actions within the transport sector as well as within the tourism sector. At the same time, overall framework conditions are being improved too. The important issue of minimizing the potential for conflicts that may result from the use as Federal waterway and the designation as a biosphere reserve, which is defined in the overall concept of the Municipal Working Group (KAG) „Elbetal“, is thus being addressed.

The sustainable urban development in the region Lower Middle Elbe is adapted to the development of the demographic change. The region is strengthened as a residential and business location. Regional characteristics are taken into account with regard to the further development of settlement systems, because regional identity is strongly influenced by townscapes and rural landscapes. The increase in economic activities is directed to preserving villages as a manufacturing base and to strengthen the endogenous potential. Forms of production, manufactured products and services should be appropriate to the character of the biosphere reserve<sup>39</sup>.

In particular, sectors that are affected by climate change, such as agriculture, water management, inland water transportation, and tourism, will be prepared for the future by measures to mitigate the consequences of climate change and measures to adapt to these consequences to efficiently exploit the existing potentials in the Elbe region.

Flood retention areas are represented for the entire region and reviewed with regard to their function and development. Possible spatial usages take into account these findings, and alleviate flood-related risks. Flood protection areas along the Elbe are to be preserved in their important function for nature and landscape and as part of the ecological system. They must be kept clear of any new constructions for the safety of life and health of the population.<sup>40</sup>

### ***Conclusion***

Strategic recommendations for the development of the region which take into account the underlying overall concept are considered for each cross-sectoral issue. Because of many thematic overlaps of the cross-sectoral issues, a clear distinction is not always possible, but also not really necessary, since the overlaps often involve synergies. These synergies will be used to achieve the maximum benefit for the region of Lower Middle Elbe.

In general, counties and municipalities in the analysed area pursue goals and projects in mutual effort to emphasize the common identity of the region. The common identity is based on the biosphere reserve as a "model area for a sustainable and environmentally sound development". The rural area is being developed in a sustainable way in close cooperation with the metropolitan regions. This does not exclude sub-strategies and individual projects contributing to the development of a common identity.

The integration into regional processes is supported by the mutual effort of the counties and municipalities in the analysed area directed to a coordinated development of the region. The cooperation between the counties should be promoted and intensified.

<sup>39</sup> cf. ibid., p. 10

<sup>40</sup> cf. ibid., p. 8

Common PR - not just limited to the tourism sector - is of great importance to the creation of a common identity in the biosphere reserve and the study area<sup>41</sup>.

## 7.2 Strategic policy recommendations for cross-sectoral issues

The inventory analysis for the study area indicates that the present Integrated Regional Development Concept (IRDC) covers a rather heterogeneous area. While parts of the territory in the north and south of the study area can benefit economically from their proximity to the metropolitan regions of Hamburg/Hannover and Magdeburg/Berlin, the peripheral area located in between is seen as economically disadvantaged. Also with regard to the development of population, the disparity is apparent.

Furthermore, the inventory analysis also shows the great potential of the analysed area which is founded on the geographical location along the Elbe River and the Biosphere Reserve. The versatile and exciting natural environment is understood as an opportunity, especially in the tourism sector. The rising visitor numbers of the Elbe Bike Trail indicate a rising interest in nature-oriented holiday.

Counties and municipalities know of the problems and chances outlined here and have already established a number of regional initiatives, networks and development concepts, to respond to the current situation. However, initiatives or concepts are usually directed to a limited geographic area only, which is often based on administrative borders.

Recommendations are presented in the following, which, regardless of administrative boundaries, show opportunities to respond to negative developments, such as demographic change. Already existing experiences of single municipalities or counties could be benefiting other municipalities and counties, who have not yet dealt with these issues at all or at least not in detail. The IRDC shall pave the way for a common identity in the area and raise the awareness of common interests among the decision makers.

The IRDC provides recommendations for action, which can be implemented more efficiently against the background of a common awareness of the weaknesses, but especially the strengths of the study area. The aim of the counties and municipalities should be a sustainable development of the Lower Middle Elbe region through joint action, minimizing the weaknesses and exploiting strengths. The greatest potential for development of the Lower Middle Elbe region is found in the cross-sectoral issues of flood protection, climate protection, river affine economic and settlement development / demographic change.

The strategic recommendations with regard to the four cross-sectoral issues include classical tools – adaptation and counteraction – as well as innovative tools - modernisation.

Adaptation means adapting the planning to the changed needs. It is a reactive strategy that is necessary due to existing shortcomings. However, the implementation of such an adaptation strategy carries the risk of making already unattractive areas even more unattractive.

Counteraction is considered a strategy that can influence the causes of negative developments. A counteraction strategy, however, requires distributable growth. In areas with a negative growth success can only be achieved with great financial effort, if at all possible.

Modernisation strategies are dedicated to pursuing new approaches instead of following the beaten tracks. The focus is on finding creative solutions that exploit the available

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<sup>41</sup> cf. *ibid.*, p. 19

potential, rather than on complying with standards, guidelines and procedural rules. However, such solutions are often subject to bureaucratic obstacles, because their feasibility is not yet (or no longer) proven. On the other hand, the development of modernisation strategies could be understood as an opportunity for the Lower Middle Elbe region, because coordinated action could have a greater impact and could facilitate the overcoming of bureaucratic obstacles.

### 7.2.1 Flood protection

The Elbe and its catchment area are the central elements of natural landscape in the Regional Concept. The Lower Middle Elbe<sup>42</sup> part of the river belongs to seven Counties.

The topic of flood control affects various fields of activity of local authorities and private actors. Therefore, this issue is part of all four cross-sectoral issues and is being investigated under the respective thematic issues. Flood protection strategies and provisional measures for low water events are explored in connection with the topic of climate protection. Flood and low water events are of great importance, too, with regard to river economics taking into account navigability of the Elbe. In addition, aspects of residential and commercial construction as well as public services in connection with the cross-sectoral issue of settlement development/demographic change will be examined in detail.

These issues will not be discussed again at this point. Rather, the issue of flood protection will be complemented by other aspects and policy recommendations. Current publications will be referred to. These include the study "Review of flood retention areas and assessment of flooding, especially pollution-related risks and recommendations on appropriate uses within the INTERREG IVB project LABEL", drawn up by the Technical University of Kaiserslautern and the engineering company Ellmann & Schulz GbR. A core element is the development of a flood-usage-matrix which is used to explore various possible usages and their impact on water drainage patterns. Based on the matrix a possible usage can be rated noncritical, problematic, or critical with regard to water drainage. In case of problematic or critical ratings, an individual analysis of the situation is recommended by the authors of the study to get to an appropriate decision. The application of the flood-usage-matrix is illustrated by a couple of examples (Example area A: Werben, Example area B: Polder Vehlgast)<sup>43</sup>.

From a historical perspective, the protection of people and property from flood events has a long tradition in the Elbe area. The Elbe area has been a preferred settlement area for centuries. Fertile soils and good transport links were important factors for a broad settlement activity in the immediate vicinity of the river. Inhabitants have protected their houses and fields by ring walls (polders) from early on<sup>44</sup>. From the 15<sup>th</sup> Century, navigability of the Elbe was gradually improved by locks, river regulation, navigation channel development, jetty construction, and bank reinforcements. Primary flood protection was ensured by dykes and walls.

In today's world, a protection is needed against extreme Elbe floods, which originate from regions in Bohemia and Erzgebirge. The goal is to transfer flood waves without them causing damage through the flood discharge profile of the Elbe between the dykes. The flood discharge profile must therefore be preserved in its capacity, for example, by minimizing runoff obstacles<sup>45</sup>.

<sup>42</sup> Geomorphologic classification

<sup>43</sup> Contact: Dr.-Ing. Manuela Gretzschel, TU Kaiserslautern, email: gretzsch@rhk.uni-kl.de

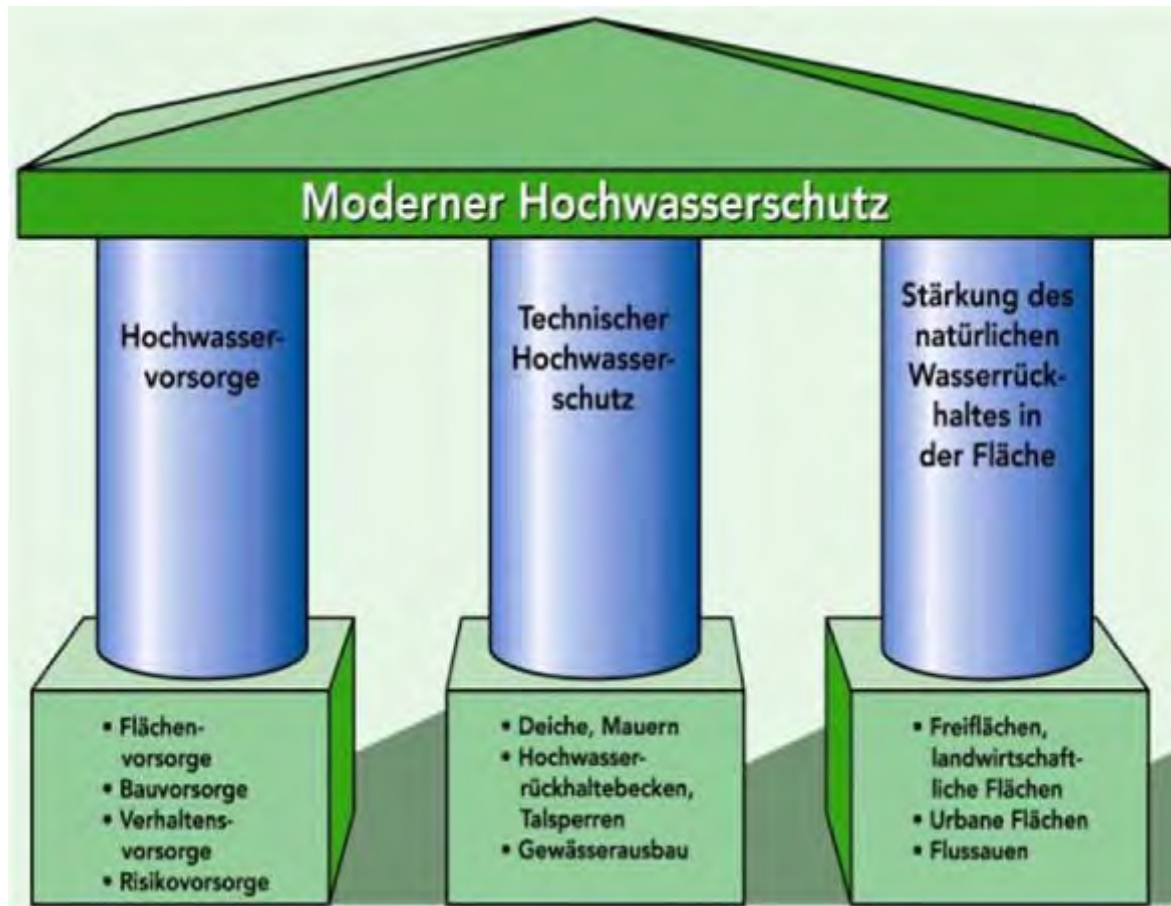
<sup>44</sup> [www.urstromtalelbe.de](http://www.urstromtalelbe.de): Regional cooperation in the Elbe glacial valley – between Dömitz and Hamburg

<sup>45</sup> County of Ludwigslust, Fachdienst Umwelt, 23.12.2010

Flood control is in the responsibility of the Länder. Local authorities are the key players in the process. Cities and municipalities may extend retention areas and reduce potential damage by controlling the spatial usage, infrastructure and urban development. Through the instrument of urban land use planning the designation of general land use areas in floodplains can be prevented through the application of § § 30, 34 and 35 Town and Country Planning Code<sup>46</sup>.

Factors of a state-of-the-art flood control are shown for example in the flood brochure, published by the district of Stendal<sup>47</sup>.

**Figure 12: Three pillar model of flood control**



Source: Hochwasserbroschüre – Hinweise und Tipps für die betroffene Bevölkerung

Flood prevention measures are understood as measures to adapt to flood events to minimize potential harmful impacts. This includes

- provisions with regard to land use, for example by designation of flood plains and flood-prone areas,
- provisions with regard to construction through an adapted design (bracing, baseplate gaskets, pile foundations, building without basement) and use of buildings
- behavior-based and insurance-based and risk management.

<sup>46</sup> Ed.: Deutscher Städt- und Gemeindebund – Vorbeugender Hochwasserschutz – eine Querschnittsaufgabe von Bund, Ländern und Gemeinden; Bonn, 2010

<sup>47</sup> Ed.: County of Stendal – Umweltamt: Hochwasserbroschüre – Hinweise und Tipps für die betroffene Bevölkerung, 2008



Measures of technical flood protection still have high priority, although they are most expensive. Primarily, these measures include flood protection devices, such as dykes, polders, dams, pumping stations and sluices.

A strengthening of natural water retention is becoming increasingly important. The aim is to increase the water retention capacity (storage capacity) of the landscape in the catchment area of the river. This is made possible by:

- creation of retention areas, mainly by the recovery of former flood plains,
- renaturation of waters,
- site-specific, flood-adapted agriculture and forestry, and
- transformation of impervious surfaces into pervious surfaces as well as precipitation management in settlement areas.

However, it has to be noted, that a higher retention of water in the area and the reduction of discharge rates, for example by flooding of polders, cannot reduce the discharge threshold significantly. Flood protection facilities such as dykes, etc., are still indispensable.

The importance of the three pillars of modern flood protection is confirmed by the "Aktionsplan Hochwasserschutz Elbe"<sup>48</sup>, and reports on its fulfillment. In particular, the objectives of the Action Plan include:

- strengthening of the water retention capacity of catchment areas, waters and wetlands,
- protection of sensitive areas through technical measures,
- reducing the potential for damage in vulnerable areas, especially based on the mapping of flood risks,
- improvement of flood detection and forecasting systems,
- public information and raising awareness for flood issues.

Flood prevention becomes increasingly important, too. This aspect of flood protection is described more in detail in the following chapter.

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<sup>48</sup> Ed.: Internationale Kommission zum Schutz der Elbe (IKSE): Zweiter Bericht über die Erfüllung des „Aktionsplans Hochwasserschutz Elbe“ im Zeitraum 2006 bis 2008; Magdeburg, 2009



## 1<sup>st</sup> field of action:

### **Flood risk management as a systemic approach to the three-pillar model of modern flood control**

#### ***Description of the field of action***

So far, the focus of the activities was on pure technical flood protection. In particular, this includes dyke elevations, construction of barriers and the establishment of controlled flood polders, apart from the new construction of dykes. The strong focus on these expensive hydraulic engineering measures has not yet led to the desired results<sup>49</sup>. The damage caused by the large Elbe flood of 2002 has proved that. Therefore, flood risk management concepts prevail. These include further strengthening of flood protection systems and improvement of flood prevention, strengthening of the natural retention in the area as well as intensified public relations.

#### ***Strategic recommendations for action and approach***

- Flood protection requires mutual effort. Therefore, municipalities must intensify collaboration with water engineers, farmers, conservationists, regional planners and residents. This approach corresponds to the EU Floods Directive<sup>50</sup> and will be taken up into the Amendment to the Water Resources Act.
- Reduction of harmful impacts by adjusted settlement activity: Flood areas should be kept free of buildings as far as possible. If this is should not be appropriate, damage may be prevented by an adapted design which is tailored to flood events.
- Better involvement of people affected by flood hazards: This includes educating residents regarding flood risks and development of early warning systems even for second order waters. This will take into account different lead times for flood events in first or second order waters.
- Establishment of a central flood control concept for the entire Elbe River: This is only possible through the cooperation of all decision makers. So far, the Länder are building flood protection systems, but these are not based on mutually agreed, consistent concepts. The aim should be to develop a common strategy as a basis of flood protection measures which are implemented in cooperation with upstream and downstream riparians. Informal, regional cooperation between municipalities in the catchment area can also lead to valuable results. A facilitator should be in charge of guiding the process to ensure a long-term success.

#### ***Challenges***

Various cooperation projects in the Elbe area have not been sustainable in the long-term<sup>51</sup>, although they are absolutely necessary after all. Actors in the field will need to meet challenges such as lack of financial resources, unclear objectives and different views on inter-municipal co-operation

### **7.2.2 Climate protection**

Based on the results of the investigation of the Elbe area, strategic recommendations will be developed with regard to climate protection, giving directions for the sustainable

<sup>49</sup> Ed.: Deutsche Gesellschaft für Gartenkunst und Landschaftskultur e.V.: Garten + Landschaft, Zeitschrift für Landschaftsarchitektur; Berlin, 11/2010; p. 8 ff.

<sup>50</sup> of 25 April 2007 (2007/60/EC)

<sup>51</sup> „Regionale Kooperation im Urstromtal Elbe – zwischen Dömitz und Hamburg“, „Kommunale Arbeitsgemeinschaft zur Zusammenarbeit im Elbetal (KAG)“

development of the analysed area. New challenges for the development of the Elbe region arise from the impacts of climate change. In addition to avoiding greenhouse gas emissions, efforts to adapt to the consequences of climate change, such as heat, floods and storms are increasingly brought into focus of regional planning.

The examination of the study area from the perspective of climate change indicates that the consequences of climate change correlate with the image of the ecologically valuable Elbe region. The Elbe is one of the few remaining near-natural rivers in Germany. Together with the Biosphere Reserve "Flusslandschaft Elbe" it represents a unique ecosystem that is home to many animals and plants. Man is using the Elbe region in many ways. Selected anthropogenic usages of the Elbe region include agriculture, inland shipping, water management and tourism. The effects of climate change on the natural dynamics of Elbe region can be very versatile and require cross-disciplinary and cross-use examination. This will prevent future mistakes. It is important to develop long-term adaptation strategies that will allow responding to these changes, identifying potentials and using it for a balanced development of the Elbe area

In the following, fields of action will be introduced, including agriculture, water management, inland navigation and tourism. These fields of action correspond to the four typical uses of the Elbe area and are complemented by related recommendations for action. The strategic recommendations are intended to give particular feasible practical advice to mitigating possible effects of climate change and to provide a basis for the development of measures to adapt to the inevitable climate change.

### **1<sup>st</sup> field of action: agriculture**

#### ***Description of the field of action***

Agriculture is of particular importance in the analysed area. Due to the groundwater, being located near the surface, inactive floodplains are mainly in agricultural use. This use will be affected by the drying up of wetlands. In general, the high sensitivity of agriculture to climate change-related drought is the worst problem. By this, the fundamental dependence of agriculture on the performance of natural surface water and ground water balance becomes apparent. Frequent periods of low water of the Elbe due to climate change effects will most probably lead to a significant drawdown. In addition, agriculture in the Elbe region is subject to an increasing uncertainty, because extreme weather events such as heat waves and heavy precipitation are expected to lead to higher crop losses.

As a major emitter of particularly climate-relevant greenhouse gases, agriculture adds massively to climate change by livestock breeding and use of nitrogen fertilizers.

The field of action agriculture is primarily directed to efficient approaches to climate change. The main focus is on climate-friendly economic activities and structural improvements in agricultural usage.

#### ***Strategic recommendations for action and approach***

Water is the limiting factor in biomass production. The changes in precipitation distribution and increased evaporation caused by temperature rise will have a negative impact on agriculture. The development of water-saving cultivation methods and improved water efficiency has thus a high priority. The necessity for irrigation of cultures will increase, as will the need for water regulation (flush irrigation). There is no efficient irrigation consultancy. The technical basis for this must be further developed. Taking into account other usage requirements, a regular update of existing and the creation of new water management regimes becomes necessary.

An essential measurement of climate protection is the reduction of greenhouse gases in the primary sector. In the agricultural sector there are several possibilities to sequester carbon dioxide and other greenhouse gases and prevent their emission. Energy efficiency of farms can be continuously increased and emission of greenhouse gases reduced by climate-friendly farming practices, and structural improvements including instruments of land consolidation. Low-emission stock breeding facilities (eg. optimized low-emission stables) will be established with the help of consultancy services. By better feeding and manure management as well as by performance optimization, livestock-based emissions can be reduced in the long term. An optimization and minimization of the use of nitrogen fertilizers in agriculture and a further extensive organic farming contribute to further reductions in emissions of greenhouse gases.

Research efforts in the area of energy crop production are dedicated to the development of new cultivation methods with new crops and crop varieties for the supply of raw materials from crop production. In general, the availability of resources for the production of renewable energy is a strong stimulus for agricultural businesses to generate energy from renewable sources. Tapping the potential of agriculture can be sustainably supported by information and advice. Important instruments of consultation are checklists that can be used as practical guidelines for the farmers

### ***Challenges***

Resources for the development and implementation of greenhouse gas-reducing measures are not sufficiently available in municipal budgets or for farmers. Deficits exist in the field of comprehensive gathering and analysis of data on climate-related effects on agriculture in the Elbe area and regular update of forecasts of climate change.

## **2<sup>nd</sup> field of action: water management**

### ***Description of the field of action***

A further spatial usage in the Elbe region that also depends on the performance of the natural surface water and ground water balance is water management. Low-water periods of the Elbe because of the climate change and the related reduction in water level threaten the performance of the natural surface water and ground water resources. Consequently, temporary regional shortages of drinking water supply can not be ruled out in this area. Moreover, higher expenses for water treatment are to be expected. In addition to that, flood events will be caused by heavy precipitation, because the sewer design is not capable of such floods. This results in increased flood damage with the corresponding economic consequences.

The focus of the action field is the development and establishment of sustainable flood control and drought prevention strategies and the design of an integrated water resources management.

### ***Strategic recommendations for action and approach***

Water management is primarily responsible for the implementation of flood control and low-water prevention. In this context it is directly affected by the impact of climate change on the river catchment area. The regulatory designation of floodplains is the most effective instrument with the laws pertaining to water and waterways. Possibilities for risk and damage prevention are provided by flood prevention in the components area usage, construction behavior and risk management. Consequently, sustainable flood protection has a high priority in the Elbe region. In this sense, natural retention and technical flood protection should be further developed and implemented in accordance with local

conditions in the Elbe region. Water retention facilities, which can be created, include flood control reservoirs and controlled flood polders (see Section 7.2.1).

The consequences of global climate change appear to pose a threat to vital water resources in the Elbe area. In extremely dry years, the river level is by now reaching a very low level, which affects the waterway and the river ecosystem. To respond to this development, an integrated water resources management should be implemented together with management plans. It should emphasize the improvement of sanitation as well as the estimation of the long-term availability and quality of water. In addition, low-water provision is not equally laid down in law, compared to flood protection. Consequently, a legal framework should be created that embodies low-water issues into regional planning. Low-water prevention requires an integrated and spatial, community –based and coordinated action across sectors. Flexible adaptation methods must be developed to meet the uncertainties of climate projections, for example, so-called "win-win" strategies: measures which benefit all, even if the climate change effects will be less drastic as expected. With regard to the Elbe area these include measures that are appropriate for both low-water provision and flood protection, in particular: improvement of water retention in the area, measures of transformation of impervious surfaces into pervious surfaces, restoration measures to slow down the flow rate of the river, extension of multifunctional water reservoirs to raise water level in case of low-water and water retention in case of floods.

Against the background of increasingly frequent extreme events a forward-looking land use with regard to the prevention of flood and low-water is to be pursued generally. In view of this, the existing water management planning principles (including flood and water protected areas) are to be continuously updated and to be adapted to conditions of the changing climate. Furthermore, weather scenarios for expected storm events and heat waves (frequency, duration, intensity) as well as weather warning services are to be improved and further developed.

### **Challenges**

In addition to a lengthy process of creating legal/formal basis for planning in the field of low-water provision, the high financial and time expense for updating and monitoring of factors and influences of climate change is a challenge.

### **3<sup>rd</sup> field of action: Inland water transportation**

#### ***Description of the field of action***

The use of the Elbe region for inland water transport is also dependent on the performance of the natural surface water and ground water balance. The waterway triangle between Elbe, Elbeseitenkanal and Mittellandkanal has to be taken into consideration at any stage. Because of frequent and excessive low-water periods caused by climate change, the ecosystem Elbe region cannot be used for inland water transportation as usual anymore. If this trend is not responded to, there is a risk that the competitiveness of inland navigation on the river as well as on Elbeseitenkanal and Mittellandkanal will further decline in comparison to other transport modes due to climate change-related decrease of surface water and increase of flood risk.

Analyses have to be carried out in the Elbe area for the waterways, but also for other rivers to determine whether future adequate drainage for the continuation of navigation will be possible and how it can be ensured.

### ***Strategic recommendations for action and approach***



Appropriate water management scenarios are to be calculated on the basis of new global and regional climate scenarios including the international Elbe catchment areas. For forward-looking, ecology-friendly water management scenarios in particular the lower and more variable inferior water supply, declining groundwater levels and more frequent floods and low water are to be taken into account. On the basis of sound scenarios and their impacts adaptation strategies should be developed on behalf of municipalities and counties by professional planners in the field of water management.

In the adaptation strategy for the development of waterways the focus shall be on an efficient approach to the following negative impacts of are climate change: rising temperatures, decreasing yearly sum of precipitation, possibly increasing precipitation in winter (floods ), decline in summer rainfall and increased variability in rainfall and more frequent intense heavy rainfall.

A controversial issue in the development of inland waterways in the Elbe area is the expansion of the Elbe. This very controversial project is supported by the fact that the expansion and new construction of transportation infrastructure on land can be replaced by this. In contrast to this, the morphological structure and water quality of the Elbe and the conservation of protected shorelines are threatened by the expansion of the Elbe. With the help of mediation (including round table, brainstorming) a consensus between these two development directions shall be reached, which promotes the environmentally conscious, nature-friendly development of the river. This should lead to the sustainable economic development of Elbe navigation (see Section 7.2.3).

### **Challenges**

Freight transport is based on an exact schedule. Delays in transit can be bad for business. In addition, the uncertainties increase against the background that the risk for high water periods and related bans is increasing. These risks are therefore connected to economic losses. In the Elbe region, the inland shipping has little effect on employment. This is one of the major arguments against the expansion of the Elbe.

### **4<sup>th</sup> field of action: tourism**

#### **Description of the field of action**

There are both positive and negative effects for tourism in the Elbe region caused by climate change. Higher air and water temperatures lead to a longer season and stronger demand for Elbe recreation areas. The increasingly deteriorating water quality, flooding of beaches and resulting bans have a negative effect. The sector of water tourism, apart from extreme high and low water events and their impact on navigability, is likely to remain untouched by climate-related restrictions. Other relevant risks related to extreme climatic events include navigability of inland waterways, drinking water supply and flood.

In the field of action, the focus is on the one hand on the good use of already existing positive effects of climate change on tourism such as extended summer season and vegetation periods, on the other hand, on the efficient response to negative impacts of climate change for the effective strengthening of tourism in the Elbe region.

#### **Strategic recommendations for action and approach**

The climate changes have a negative impact on tourism also during the winter season due to extreme weather events. These changes demand investments and new infrastructure needs to be prepared by regional planning. The development of new climate-adapted concepts is to be supported by pilot projects of spatial planning.



The biosphere reserve Elbtalaue is a major issue for the region in the field of nature-oriented tourism. The Elbe is seen as a platform for various activities in the field of water sports and river adventures. The nature-based sustainable tourism in the biosphere reserve shall be developed by cross-sectoral concepts which combine for example the expansion of water sports in close cooperation with nature conservation with nature-oriented types of accommodation as well as with typical regional and organic products in gastronomy.

The results of monitoring and forecasting the development of drinking water consumption and the utilization of the beaches are to be questioned and to be updated in regular intervals. In potential flood areas, tourist buildings are to be replaced if possible. The water sports infrastructure is structurally to be adapted to the changing water levels.

In terms of water quality there is a need for new communication strategies to inform tourists about potential hazards and their consequences and active measures to improve water quality of the waters in order to raise awareness of this issue in public. Communication strategies in the context of public relations are to be designed and implemented.

### **Challenges**

Drinking water supply for the population will be a serious challenge for the future. Especially in the main tourist season a rapid increase in demand can be expected.

### **Conclusion:**

To address climate change effectively and thus ensure long-term, ecologically friendly use of the Elbe region anthropogenic uses of the Elbe area are to be considered more in connection with climate. Furthermore, the interrelations between these uses are to be observed and to be evaluated. Moreover, the intensification of climate research is recommended to answer the remaining scientific questions and to reduce the uncertainties. In particular, the research in the fields of frequent and sometimes more intense extreme events such as heat/dry summers with low-water events, winter/autumn heavy precipitation and seasonal flood events is to be intensified and continued. A crucial prerequisite for the development of sustainable and successful adaptation strategies for the Elbe region is a complex, both national and international cooperation with environmental groups and Elbe users (between the actors).

### **7.2.3 River economy**

The structural analysis shows that the region Lower Middle Elbe in Germany has limited economic potential (see section five). The Elbe is the essential unifying element for these states in the cross-border area. Better use of the river to enhance economic development in the region would strengthen the economically weaker communities while contributing to the development of a regional identity. The development of the river affine economy is therefore much hoped for in the cities, towns and counties along the lower middle Elbe.

River economy is understood at this point as economic activity that is directly connected to the river Elbe. This includes in detail

- inland water transportation for freight transport,
- related services of the port industry, such as cargo handling activities and logistics,
- the industry, which handles their flow of goods on the barge,
- agriculture, whose products are transported this way,
- tourism inland navigation.



The issue of "river affine economy" is closely linked to the question of the navigability of the Elbe. All the subjects mentioned herein require the use of the Elbe as a waterway. The Elbe is one of the few unregulated rivers in Germany.

**Figure 13: Elbe as one of the few unregulated rivers in Germany**



Source: BUND

The same was the busiest river in Europe 100 years ago. After the Second World War, the internal navigation on the Elbe, however, has lost much of its importance. One reason for this is seen in some locations where the Elbe has not the necessary reliability for use as a permanent waterway from today's perspective.

Against this background, an expert discussion on the navigability of the Elbe has been initiated. On the one hand, of course, fluctuating water levels are affecting shipping. In order to improve the navigability one would have to ensure a reliable minimum water level in the entire course of the Elbe. On the other hand, regulatory measures to the water regime could possibly be harmful to the environment.

The two positions, proponents of greater use of the Elbe as a waterway on the one hand (Pro-position), and supporters of maintaining the status quo on the other hand (Contra-position), face off controversy. The discussion is already taken up in the media.<sup>52</sup>

<sup>52</sup> Currently in: DER SPIEGEL, No. 46/2010, p.48 ff.: Nasser Alptraum – Seit Jahren investiert die Bundesregierung Milliarden in die Güterschifffahrt im Osten der Republik. Bislang ohne sichtbaren Erfolg: Nur selten fahren dort Schiffe.

Main actors Pro include:

- Verein zur Förderung des Elbstromgebiets (shippers, shipping companies, logistics companies, office at Chamber of Commerce Hamburg)..
- Water and Shipping Authorities as the responsible subordinate authorities of the Federal Ministry of Transport

Main actors Contra include:

- environmental groups, notably BUND, with their ELBE project.

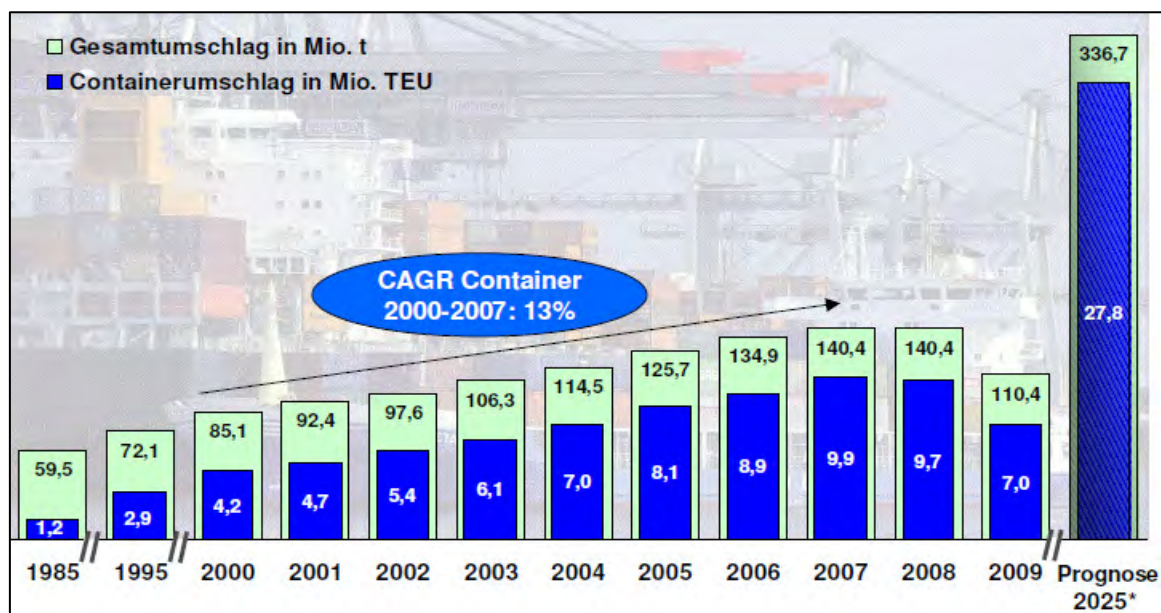
Expert interviews have been conducted with representatives from each of these parties to work out the position clearly.<sup>53</sup>

The following are the positions in concise form to allow an overview of the state of discussion and possible action areas for the strategy to derive.

#### Position pro increased use of the Elbe for goods transport

*The Elbe has potential as a waterway for the transport of containers and large-volume goods. Here, the Elbe should be seen in particular in connection with the development of the port Hamburg.*

**Figure 14: Container handling in the Hamburg Port**



Source: Chamber of Industry and Commerce Hamburg after Hafen Hamburg Marketing e.V. and PLANCO Seeverkehrsprognose (2007)

*The Port of Hamburg lacks the land to manage such an increase in container handling process. The hinterland connections of the Hamburg Port must therefore be improved. The share of inland waterways to the hinterland traffic should be increased from currently only 1.6% to the values of the competitors, Rotterdam and Antwerp, both of which handle about 22% of their container hinterland traffic on the barge.*

<sup>53</sup> With Mr Koop, Head of WSA Magdeburg and with Dr. Dörfler, Leader of the BUND Elbe project, both on 13 September 2010, both in Magdeburg.

*The inland ports along the Elbe could be used for logistics services in the container handling, such as unpacking and cleaning of containers or sorting, converting, storing, and distribution of goods. The storage of empty containers in the hinterland would result in a significant relief of the Port of Hamburg.*

*The transport of large goods is also increasing: Rotor blades for wind turbines, generators, large machines. High quality and large items can be moved preferably on the water.*

*In order to develop the potential in container traffic and the transport of large goods to be fully effective, a deep dive destination (of water) can be achieved from 1.60 m to 345 days a year. This is enough for 2ply Freight with the European ship, together with 3 containers. 3-layer, requires a water depth of 1.80 m (currently at about 320 days a year), where empty containers can be easily transported 3-layer now.*

*On the "rest of line" at Dömitz 1.60m are to be achieved (not yet fallen below 2009 33 days). About 120 groynes are still to be built, a measure which was already planned since the 30s of the 20th Century.*

*Another limiting factor for the inland waterways is the bridge height. The needed height of 7 m is generally achieved apart from a few exceptions. The allowed water levels should not be exceeded on more than 10 days a year (currently in Wittenberge Ø 12 days).*

*An alternative in theory is the Elbeseitenkanal, which has a sufficient depth. Because of the bridge height no 3-layer container transport is possible here, the expansion of the bridges would be too expensive. In addition, the Elbeseitenkanal is not free of charge. Container traffic to Hamburg is almost always realised on the Elbe.*

*Container transport on the Elbe has tripled from 2006 to 2009. A regular service by the Deutsche Binnenreederei AG was established. This shows the great potential on the Elbe. In the Port of Lauenburg also a new container terminal was built to take advantage of the described development.*

#### Position contra increased use of the Elbe for goods transport

*The Elbe as a waterway is obsolete. In 1913 18 million tonnes / year were transported, now only 5% of this amount. The barge was pushed aside by truck and rail as a mode of transport. The reason is that in the past mainly bulk cargoes were carried on the Elbe, whereas now small amounts must be transported flexibly, a vessel is not suitable for this.*

*The Elbe is also inefficient as a waterway. The network in the Elbe leads to broken transport chains<sup>54</sup>, which are uneconomical. As a result only 0.2% of the traffic volume is directed to the Elbe waterway in the Elbe-Mulde area. The economic benefit-cost ratio of transport on the Elbe River is poor. Each tonne of goods transported on the Elbe is subsidized with 50 €. If future infrastructure costs are charged (such as user fees, increasing the eco-tax), the costs will rise even further.*

*High quality (= expensive) goods need quick transport routes, not the Elbe. Transport of empty containers on the Elbe is technically possible but may not be economical.*

*The Elbe is also technically not suitable as a waterway. Low-water and flood events are increasing in the course of climate change. This makes it difficult to schedule traffic and container traffic. "In contrast to the Rhine, the water level in the river is often too low. Logistics companies avoid this."<sup>55</sup>*

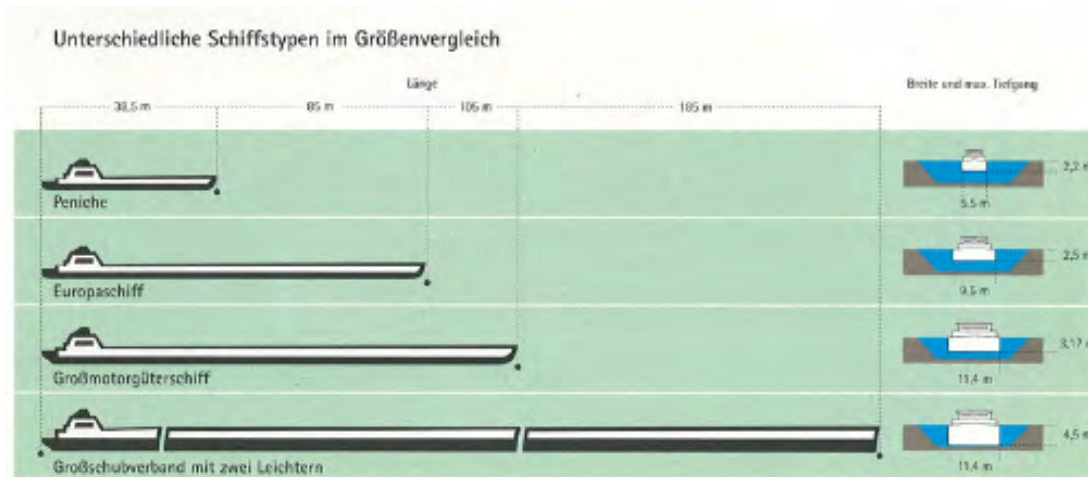
<sup>54</sup> Definition „broken transport chain“: Transport of goods with two or more different modes of transport (rail, road, inland water transport, sea shipping, air cargo, pipeline).

<sup>55</sup> s. DER SPIEGEL Nr.46/2010, S.50.



Moreover, the current standard for profitable inland waterway transport is not the Euro€ ship, but the large motor cargo ship. It has a cargo capacity of 100-200 containers, but can not drive on the same due to the not sufficient water depth. Large barges, however, can go on the Elbeseitenkanal, where they cannot pass the ship lift in Scharnebeck, however.

**Figure 15: Types of ships and draught**



Source: BUND

Increases in container transport in recent years start from a very low level. It is just 2-3 ships per week of the new regular shipping services. This confirms the marginal status of the container traffic on the Elbe.

Port sites can not benefit from the goods transport on the Elbe either. Development measures for the ports are bad investments, port operators are in the red. Port development becomes attractive only with the financial support of the Federal Government, which promotes the redevelopment of the port with up to 80% of the investment. Magdeburg is the only site with potential, as the city is located on a waterway crossing. After all, the turnover amounts to currently around 3 million tons / year. All other Elbe ports together could reach only 0.2 - 0.3 million tonnes / year.

The main reason for the rejection of the Elbe as a waterway for transportation of goods is that development projects at the Elbe would be ecologically highly questionable. Daming of the river, which is necessary to maintain a reliable water depth, could solve the economic problems. On the other hand, a construction of the necessary 30 barrages is not only extremely expensive, but also the resulting loss of living and retention areas would be irreparable.

Even if the established planning state of 30's (the development of groynes at Dömitz) is being implemented, this will not meet the current requirements of the economy. Besides, the effect of the measures is also a carving of the river in the sandy river bed. The Elbe is deepened with it. This soil erosion leads to a dry fall of floodplains. Negative impacts for fishery must be expected, because spawning grounds fall dry and the existence of wide floodplains is threatened.

The potential of the Elbe is in tourism, not freight. Regional economic effects of tourism are greater as of freight transport by a factor of 100. The development of cruise tourism and water sports with accompanying services is Elbe-friendly, as the draught of ships used in this sector is limited to 1.00 meters. The destination Elbe as a brand with its

*unique features (free-flowing river, natural and cultural heritage, continuous system of protected areas) must be further developed. The aim is to establish an appropriate image to develop sites taking the river into consideration and to assist bicycle and canoe tourism.*

### **Conclusion in comparison of both positions**

Despite the differences in the positions shown here, there are points of consensus, in which the representatives of both parties agree:

- Preserving the Elbe same as free-flowing river, no damming.
- Elbe is not or only partly suited for bulk shipments.
- Transportation of empty containers on the river is possible in general.
- The tourist cruising sector can be developed.

These positions serve as the basis for the subsequent derivation of strategic fields of action and recommendations for action.

### **1<sup>st</sup> field of action: Elbe as waterway for freight transportation**

#### ***Description of the field of action***

Although the Elbe is discussed controversially as a waterway for freight transport, there may be some starting points for development, without disregarding the risks. None of the current participants in the discussions is pursuing a damming or canalising of the Elbe. Expansion projects will be limited primarily to the remaining part at Dömitz. The possibility of container transport on the Elbe River is also not disputed, and certainly not in terms of empty containers. The non-suitability of the Elbe for bulk transport is considered obsolete by the Ministry of Transport of Saxony-Anhalt in case that the Elbe-Saale-canal is completed. For this case, an increased transport volume can be expected on the Elbe for instance for potash<sup>56</sup>.

The field of action refers to measures that are appropriate to improve the navigability of the Elbe River for barges without losing its character as a free-flowing river

#### ***Strategic recommendations for action and approach***

In order to evaluate the actual feasibility of the relocation of container traffic from the port of Hamburg on the Elbe and the storage of empty containers in the hinterland, more information is needed. Shippers, carriers, chambers and local authorities have to communicate across borders, analyse needs and potentials to develop joint activities and concrete decisions, etc. The development of the Elbe can only be pursued in the form of strategic alliances, for which a platform must be established first. A possible platform could be, for example, the existing logistics initiatives in Hamburg and the Länder.

The State governments with their Ministries of Transport and Environment should try to facilitate and initiate an appropriate dialogue with view at the current debate on the navigability of the Elbe. There may be more common interests in the positions as the course of recent discussions may suggest.

The statement that the Elbe is not suitable for bulk transport should be reviewed in light of the development of the Elbe-Saale-Canal. This will only work if this issue would not put an additional strain on the necessary dialogue between the conflicting parties as mentioned above.

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<sup>56</sup> Statement of a MLV representative at the regional workshop in Dömitz on 8 November 2010

The Elbeseitenkanal has to be taken into consideration when discussing the use of the Elbe as a waterway. The level of consideration must be the Elbe waterway triangle between Elbe, Elbeseitenkanal and Mittellandkanal. A division of labour must be pursued that ensures optimum transport ways for each type of goods. The criteria for evaluation could be, for example, the economy, the reliability of the transport path and the environmental compatibility.

A neutral review of all technical requirements for the redevelopment of the Elbe as waterway should include: water depths, bridge heights, capacities, lifts, construction of Elbe-friendly vessels etc.

### **Challenges**

The expected challenge for the issue of increased use of the Elbe for goods transport is in the controversy and the opposed positions of the involved persons and institutions. This relates to the risk that available potential, which could in principle be tapped in an environmentally sound way, in fact can not be exploited.

## **2<sup>nd</sup> field of action: Development of port sites**

### ***Description of the field of action***

The increase in transport volumes, which are moved on the Elbe by vessels, brings no economic gain for the region Lower Middle Elbe, if vessels pass the region in transit only. Rather, goods transport should be combined with the development of river-based economy in the river port locations along the waterway triangle. Jobs and added value can be created only if handling facilities, container storage and services dedicated to inland water transport can be established in the port sites. Locations worthwhile for a development towards goods handling include Boizenburg, Wittenberge and Arneburg, which were pointed out at the regional participation workshop. In general, all port locations along the Elbe come into consideration.

In the cities and towns along the Elbe, the conditions are to be created to possibly benefit from the potential of freight transport on the water.

### ***Strategic recommendations for action and approach***

Joint action of communities along the Lower Middle Elbe and the waterway triangle, creating a common platform of action, formulating a clear strategy, establishing a division of work between the communities

Realisation of needs analyses: What handling and service facilities are required at what location to what extent?

Realisation of site analyses: How much land is needed in which location for river-based economy? Which spatial potential is there? How is the legal planning situation? What must be done to exploit the spatial potential and how much does it cost? How can this be financed? What support is available on Federal Government and Länder level?

### **Challenges**

There is no platform yet at the level of cities and municipalities, which would allow for a mutual action. The experiences with the KAG Elbetal clearly show the coordination difficulties on County level.



### **3<sup>rd</sup> field of action: Tourist shipping**

#### ***Description of the field of action***

There is a consensus between all participants in the discussion of the issue of river-based economy as regards the high development potential in the tourism sector. The already established Elbe bicycle trail, which is regarded a model for success, clearly shows that. For the tourist cruise sector the region Lower Middle Elbe is very interesting because it links the water sports areas of Western Germany via Müritz-Elde Waterway with the Mecklenburg Lake District and across the Elbe-Havel Canal to Brandenburg and the Berlin water sports area. The individual water sports tourism has therefore a greater potential as the river cruise tourism. Cruise tourists enjoy all-inclusive services on the ship, they spend less money in the region<sup>57</sup>.

The region Lower Middle Elbe also has a potential for further growth in the future<sup>58</sup>. A prominent role plays the tourist cruise sector that takes advantage of the Elbe as a waterway. In order to maximize the regional economic effects on the tourist cruise sector, appropriate framework conditions have to be ensured.

#### ***Strategic recommendations for action and approach***

Municipalities, tourism associations and private providers along the Elbe should collaborate across State and County borders.

The Elbe must be developed as its own tourism brand, with an associated image as a (water) tourism region.

Necessary water sports infrastructure of excellent quality should be developed in the port locations along the Elbe. Urban links between ports and urban and village centers, excellent gastronomy and an attractive townscape are important as well.

Mobility services must be developed that connect port locations with the hinterland to link sights and landscapes for water tourists. This includes bike rentals as well as mini-buses, cab services, and draisines on old railway lines.

#### ***Challenges***

There is no tourist destination “Elbe” yet. The responsibilities for the marketing of the tourist region Lower Middle Elbe are allocated to the regional tourism associations of the Counties. Foundations for a cooperation have been laid under the umbrella of the KAG Elbetal, but its continuation is uncertain. It is difficult to establish a mutual tourism marketing, regardless of the administrative borders of Counties and Federal States

<sup>57</sup> This opinion has been put forward by tourism experts at the regional participation workshop in Dömitz.

<sup>58</sup> Source: Project M GmbH, presentation „Destinationsmanagement-Agentur Elbe“ at the steering committee meeting of the KAG Elbetal on 18 December 2007

#### 7.2.4 Development of settlement systems/demographic change

Demographic change is one of the biggest challenges for the future economic and social development not only in the New Länder. Its main aspects, namely decrease in population, changes in the age structure of the population, migration processes have a strong influence on the future development potential of the country, its communities and its businesses.

The more, by demographic change, the population declines, the more young and well qualified people are driven into the centres where they expect an appropriate infrastructure and an economic perspective for themselves and their children. Inevitably, the competition between municipalities for citizens, taxpayers and especially young families gets tougher. Metropolitan areas and centres continuously draw people from peripheral rural areas. For rural areas the prospects for a lasting, sustainable development deteriorate more and more.

The development outlined here affects the very peripheral rural areas of the analysed area, representing about 90% of the total area, particularly hard. These rural areas can not benefit from growth effects of the two cities of Hamburg and Berlin. Among the general problems of rural areas are the special transformation processes in the course of the German Reunification, resulting in challenges in the New Länder (share within the analysed area 83%).

The decline in birth figures below the level of sustainment in Germany as well as in the analysed area leads to a negative natural population development. In growth regions, these losses can be balanced by population gains. The result is a juxtaposition of growth areas and declining regions. The study area is among the declining regions, characterized by a population decrease of -7.3% in the period from 2000 to 2008, in comparison to Germany of 0.3%. Additionally, there is a negative migration balance of, for example, 1% in 2008. The population forecast for 2006 to 2025 indicates a significant negative trend for the level of Counties<sup>59</sup> with 15.6%. As shown in 5.3 "spatial and settlement structure, population" the total territory shows different effects partly.

In Western Germany, especially in growth areas a particular increase of the number of elderly people can be noted whereas in declining regions a decrease in the number of school-agers becomes apparent. In rural areas of Eastern Germany there is a double fault in age structure, a decrease in the school-agers group with simultaneous increase of the elderly. Exceptions with population growth or stagnation can be found in larger cities and / or their urban hinterland. The accumulation of problems in the rural regions of Eastern Germany leads to the largest adapting to the conditions of demographic change. These statements are true with regard to the study area. Taking into account the prognosis, the entire study area is more or less strongly affected.

For declining or migration regions this results in the conflict, either to maintain the infrastructure for basic services beyond economic reasons or further cuts in site quality and thus add further population losses and negative economic development. The decision between countermeasures and adaptation is no single option anymore especially for municipalities and regions with already long-lasting selective migration.

With increasing decline of the population is increasingly difficult to maintain a comprehensive infrastructure according to previously accepted standards. An adaptation to demographic change through the reduction or dismantling of infrastructure is thus inevitable. In peripheral rural regions with long-term emigration and decline the "classical" ways of adaptation, however, are already largely exhausted. A further reduction of infrastructure for

<sup>59</sup> The population forecast on County level does not imply clear statements for the whole study area but is nevertheless an essential benchmark for the planning necessary action.

basic services would threaten the functional suitability of such areas as residential and living locations. In addition, even removal and close-down of structures will cause high follow-up costs for municipalities for maintenance, personnel contracts, etc.

As a results, the need for new and innovative approaches as a response to the challenges of demographic change for the regions with selective migration and decline becomes apparent. One possible course of action would be the shifting of infrastructure focus towards middle and primary centers in the spatial regional planning. Content, structure and processes of spatial and sectoral planning must be adapted to demographic change, for example by the reation of flexible standards in order to respond quickly to demographic changes, ex-ante assessment of demographic readiness in case of infrastructure investments, adaptation of sectoral plannings to demographic-sensitive criteria, etc.

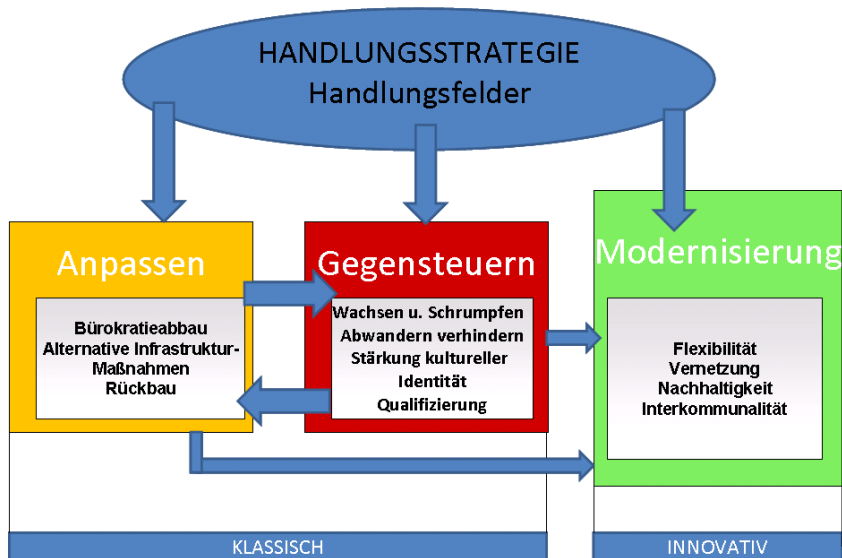
In the following possible strategies to meet demographic change are presented:

Adjusting refers to adapting infrastructure and regional planning guidance to reflect the changing needs. This may mean, for example, the thinning of the central place system, the dismantling of networks or the closure of school sites and concentration. It is a reactive strategy, which helps to adjust infrastructure costs in the medium term to the limits of the population capacity of an area. The implementation of such an adaptation strategy involves, however, the risk to make already unattractive areas even less attractive, thus accelerating the demographic changes.

Countermeasures are dedicated to influencing the causes of demographic change. If people are leaving a specific region because it is unattractive, and because jobs are lacking, then new jobs have to be created and the region should be made more attractive to make people stay and settle down. Instruments include business development and location marketing. A strategy of countermeasures, however, requires distributable growth. In declining areas little or no success can be achieved even with extensive financial efforts.

Another path is modernization. Modernization strategies try to find new approaches by leaving old ways of thinking. Not standards, guidelines and procedures are important, but creative solutions that exploit the full potential to help maintaining infrastructure at reasonable cost. Examples include cross-age-group teaching methods, use of e-services in the public service sector, decentralized, ecological sanitation systems, etc. These solutions are, however, often subject to bureaucratic obstacles, because their viability is not yet (or not anymore) proved to be true.

Figure 16: Strategy of action



Source: own illustration LGSA mbH

Based on the analyzed and outlined challenges of demographic change fields of action will be identified and described in detail in the following, which are designed to provide the solutions for the reduction of impact, mitigation and management of demographic change in terms of structural aspects of settlement.

### 1<sup>st</sup> field of action: Regional and municipal planning

#### *Description of the field of action*

In regional and municipal planning the creation of spatial concepts is necessary which are integral to the development of the regions, the prospects and quality of location. At the same time these plans serve as a foundation to take account of possible consequences of demographic change, but also of climate change and flood-related effects in the spatial development of settlements and infrastructure planning. There is a clear distinction between formal planning (regional development, land use plans) and informal planning (urban and village development plans, regional development strategies, etc.). In the pilot project of the Federal Government (BMVBS) „Masterplan Daseinsvorsorge - Regionale Anpassungsstrategien“, a discursive, analysis-based adaptation strategy for public services has been developed, which takes into account the decline in population in the pilot regions. This showed that the master plan for public services may be particularly effective due to the regional perspective and cooperation.

### ***Strategic recommendations for action and approach***

- The consequences of demographic change and the forecasted natural events do not respect "administrative borders" and are thus rather related to specific regions or areas than to administrative structures. Therefore, closer collaboration is needed in the preparation / modification of adjacent regional plans in national and regional planning. Planning parameters and representations are interpreted differently in each of the Länder as clearly indicated by this IRDC.
- In regional planning basic centers are represented in regular. Besides the basic centers with some allocated functions, the role of the municipalities should be strengthened to be able to contribute more flexibly to the development, for example by division of duties of public infrastructure and public services.. This requires few but clear guidelines for Regional Planning.
- The urban land use planning on municipal level should incorporate the needs of demographic change. If needed sectoral planning should be included. Even in declining regions (qualitative) developments should be allowed.
- Initiation and implementation of informal planning processes for the management of demographic change is strongly recommended. Tools for all planning levels include the demography / sustainability assessment, and the master plan public services.
- Future tasks of the complex spatial development will no longer be solved by each individual. Existing collaborations and partnerships are to be extended and new networks are to be developed. Cross-border collaborations and partner cities can be strong actors in the cooperation between the cities / centers (Hamburg, Berlin, Magdeburg ...) both internally and externally. There are good approaches with regard to the establishment of a Elbe destination (Elbe Bicycle Trail) and in the field of flood control.
- Cooperation and communication can be organized in a series of events on "land use and demographic change". As already stated on several occasions, the space is to be differentiated. In a series of events, good practice examples from the study area can be presented with regard to different issues and thereby indicate potential areas for development in other regions. On the other hand, information of the responsible government ministries are important for regional actors.

### ***Challenges***

The financial situation of public budgets is more or less difficult in Germany. Ensuring financial scope, especially for future generations, is becoming more and more difficult. There are no financial resources for key regional planning, especially informal planning processes available in the local budgets.

There are no accompanying funding instruments. Necessary resources can impede access as well.

Smaller administrative structures often cannot fulfill these complex tasks due to lack of qualified personnel.

**2<sup>nd</sup> field of action: Housing and settlement systems** (removal as well as urban redevelopment)

#### ***Description of the field of action***

Housing is one of the essential basic needs of people. Because of the decline in population and reinforced by net migration losses, there is the necessity of a quantitative adjust-

ment in the residential real estate sector to avoid excessive vacancies. The housing development is a central part of the urban redevelopment process.

Renewal and maintenance of a functioning housing market include the renovation or reconstruction, removal or deconstruction and the new development.

Renovation, reuse and removal of buildings to improve the attractiveness of locations, with the aim of saving the maintenance costs, reducing risks and additional land use, where this contributes to the

- preservation of rural infrastructure,
- creation or safeguarding of jobs and
- preservation and further development of typical settlement structures to preserve the cultural heritage.

### ***Strategic recommendations for action and approach***

- Especially in declining regions control elements and tools to revitalize the inner cities and villages should be used and further developed. This includes proceedings for the reorganisation of inner zone land holdings, vacancy and cadastre, urban renewal and rural renewal.
- Operational platforms for housing development of housing should be strengthened or established. For example, collaborations and partnerships between the public sector, the housing companies and social organizations, could establish and implement a common development strategy.
- A controlled removal of buildings is essential. The example of the City of Stendal is a good practice solutions „Kernige Altmark – Zurück in die Mitte!“<sup>60</sup>
- Buildings and settlement systems in declining regions must increasingly be adapted in terms of qualitative development.
- Centralization of public service facilities, especially by reuse of old (residential) buildings or follow-up use of urban waste land.
- Existing facilities should be extended by building development and extension for new on-site uses of buildings.
- A follow-up use of space, especially in connection with the removal of buildings, can contribute to upgrading the residential environment.
- In addition to renovation and improvement of technical standards, more complex conversions like floor plan changes and set-up of configurations which are barrier-free as well as suitable for senior citizens can improve the attractiveness of residential locations.
- By new buildings, additional housing offers are created. In particular, these include property ownership, flexible floor plans and barrier-free or senior-friendly housing. Construction activities in the field of housing only make sense in areas with a perspective of a fully utilised infrastructure. The construction of new buildings is, therefore and despite declining population and vacancy an indispensable part of the development of the housing market.
- Housing projects for the elderly, for example, by converting former tourism (hotels, vacation homes) or public buildings (schools / administration buildings) including new financing options, such as financing the reconstruction of buildings by their future users.

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<sup>60</sup> Cf.: Plan 2025 Future strategy „Zentraler Ort im ländlichen Raum“ within IBA 2010 Stadtumbau Ost



- The functions of living and working (tourism, agriculture, crafts and small businesses) should be brought into focus in the development of villages and towns. Settlement systems must be aligned to a multifunctional approach by planning law.

### **Challenges**

Legal requirements and usually very limited available capital restrict the initiative of private individuals and communities and complicate it. Available instruments of urban renewal and community development can not meet current requirements in many cases. The implementation of the instruments in the focus of "demography" is handled differently in different States of Germany.

### **3<sup>rd</sup> field of action: Technical infrastructure – drinking water and waste water management**

#### **Description of the field of action**

Challenges of demographic change also exist, particularly in the fields of water supply and sanitation. The supply of drinking water and disposal of waste water is part of the minimum features of services in general public interest. Decreasing population figures, declining per capita consumption, increasing environmental awareness and economic structural change lead to under-utilization up to the total loss of function of the supply and disposal infrastructure, thereby increasing specific expenditures for the protection of health and environmental standards. Because of miscalculations in the early nineties of the last century as regards the development of needs with regard to drinking water and wastewater, considerably over-sized facilities and pipings have been installed with corresponding pressures on the local budgets and with a long-term commitment of budgetary resources. In the field of municipal sewage in East Germany that is a serious problem. The rising costs cannot be passed on to the consumers because of limited private resources. In addition, piping systems have depreciation periods of 60-70 years. Since there no regional population projection over this period, this must be regarded as an additional challenge for the providers.

Infrastructure development should still be adequate for regional and local situation.

#### **Strategic recommendations for action and approach**

The options in dealing with these problems are extremely limited in the short term. The systems are still almost completely existent, often newly built or renovated after 1990 and designed for very long periods of use. Conceptional opportunities are therefore limited to measures which address functional disorders and to gradual adaptations which can only be realised in the rather long-term maintenance and rehabilitation. These include:

- Inner zone development of settlement systems to establish efficient technical infrastructure.
- Infrastructure removal and/or adaptation of the technical regulations to the impacts of demographic change, such as regarding the dimensions of drinking water systems for fire protection purposes, the obligations to connect to central wastewater treatment facilities or by installing smaller sized pipes into existing systems. Providers of the technical infrastructure prefer compactness before selective, small-scale and dispersed structures.
- Conversion of drinking water and wastewater facilities based on long-term water management plans. Since the periods of use of facilities include several decades, these plans have to be extended to periods of more than 20 years.

- Taking into account technological advance, lower limits of the technical rules and regulations should be the basis for orientation, fire water should be made available in separate facilities and equipment shall be installed for the use of rain water in sewage systems.
- Facilities should be constructed as flexible and modular as possible.
- Use of wastewater to produce renewable energy as a contribution to improving the environment and reducing the cost to tackle climate change.

### **Challenges**

For many reasons short-term solutions are not very feasible. The costs continue to rise at a shrinking population. Given the enormous challenges and difficult budget situations, the local authorities can hardly still be able to provide the committed maintenance and operation of their supply and disposal systems adequately.

### **4<sup>th</sup> field of action: Accessibility and mobility**

#### **Description of the field of action**

Good accessibility by road or rail reduces the tendency for emigration. Spatial mobility is a need to avoid unemployment. Peripheral regions are far from urban labor markets, training centers and metropolitan areas. Consequently, if people want to successfully participate in the labor market, they have to be mobile as commuters. Since this is rarely the case in very remote areas, peripheral regions suffer in particular of a high level of migration. Primarily, well-educated young people leave these regions, especially young women. On the other hand, just these people are needed to make these regions more attractive for investors.

"Die Qualität der verkehrlichen Infrastruktur bemisst sich u. a. an der Erreichbarkeit der Region und relevanter Punkte innerhalb einer Region" (Wirtschaftsministerium Brandenburg 2005: 50f.).“

Strategically important for rural areas is the accessibility of urban centers and metropolitan areas. Lower population density leads to problems in public transport (PT). Small towns are in fact completely without public transport services.

This field of action concerns the maintenance and improvement of accessibility by road or rail to reduce migration, the creation of innovative passenger transport offers in addition to public transport.

#### **Strategic recommendations for action and approach**

Transport infrastructure is indeed "used" less by declining population figures and thus subject to a lower "wear", but decreasing resources for maintenance lead to prioritization or even abandonment of roads. Only effective way to reduce consistently high or increasing costs is a reduction- of the local road network, which is true especially for rural communities with many districts. Accordingly, adaption strategies must be negotiated in rural areas beyond the level of individual villages, but on regional and State level. Especially in rural areas the individual mobility plays an important role. Commuting to the middle-order or high-order centers together with the need for centralization of public services will be disproportionately time-consuming.

With the increasing centralization of public services, demands as to the accessibility of these facilities are also increasing. Some solutions could be:

- supplementing public transport by dial-a-ride offers as well as
- hailed shared taxis and taxis.

- Strengthening or establishment of mobility service points and citizens bus lines.
- Potential water transport (eg Elbe / channel) for public transport should be investigated. Innovative solutions should be explored as pilots.
- Testing of regional, integrated systems with classic rail and bus services and additional, flexible transport services, including the dial-a-ride offers, event and shuttle services, civil buses<sup>61</sup>
- Measures to shorten journey times by creating bypass roads and / or additional lanes<sup>62</sup>, improved accessibility to highways and the creation of parking spaces for use by car-pools.

### **Challenges**

Very different, legal requirements and responsibilities restrict initiative of private individuals and communities and complicate it.

### **5th field of action: Data networks**

#### ***Description of the field of action***

Many rural areas are still poorly equipped with fast Internet connections. Businesses, education, training institutions and residents have fewer opportunities in relation to other regions. The new wireless technology Long Term Evolution (LTE) plays a specific role (in the study area it is already offered in Lower Saxony and Mecklenburg-Vorpommern). Fast Internet access is of special importance now in very remote regions because it enables innovative possibilities of decentralization and flexibility of jobs (eg, telecommuting) as well as administrative, public participation, education, service and supply offers. This in turn creates other, more extensive uses in the settlement structures of smaller towns and villages. Fast Internet access have become as important for businesses and self-employed as accessibility and mobility.

#### ***Strategic recommendations for action and approach***

- Federal and State initiatives support the preparation and implementation stage through investment and training of broadband providers. A broad information campaign on the possibilities and the conditions should be implemented by the Counties or ministries.
- Restrictions related to the Elbe (flood) should be identified and communicated.
- The local authority may assist investors through the provision of public facilities (such as the installation of technical equipment) and in matters relating to licensing procedures.
- To develop and implement a regional broadband supply, regional and local associations, including their external support have to be established.

### **Challenges**

Large-scale, technical requirements and necessary financial resources for implementation are often missing.

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<sup>61</sup> Accompanied by scientific research (TU Berlin, GTZ) and supported by Verkehrsverbund Berlin-Brandenburg these regional systems or single modules have been tested e.g. in North-east Brandenburg and in the Counties of Elbe-Elster and Potsdam-Mittelmark

<sup>62</sup> Example; Traffic research B 216/B 248 County of Lüchow-Dannenberg

### Conclusion:

The goal of maintaining living spaces and the preservation of historic cultural landscapes in the biosphere reserve for future generations can only be achieved by immediate action at regional / local level. EU and Federal Government have developed strategies for action and plans, tested instruments in pilot regions, developed new pilot projects and competitions. The first tools to tackle the demographic challenges are offered by the Federal Government and partly also in the States. The growing divergence between metropolitan regions and very peripheral rural areas can be avoided through greater cooperation for mutual benefit. The IBA process in Saxony-Anhalt *Zentraler Ort im ländlichen Raum – Hansestadt Stendal* and the participation of Lüneburg, Lüchow-Dannenberg and Ludwigslust in the MORO project *Ermittlung von Entwicklungspotenzialen in Norddeutschland und Erarbeitung eines Strategiepapiers zu deren kooperativen Stärkung im Sinne einer Partnerschaft von Stadt und Land* laid a foundation for a further exploration of the issue. Municipalities have to be integrated into informal processes even more than previously done. This requires that communities and citizens are enabled for self-sustainable action. The aim must be to maintain the viability of towns and villages in varying degrees.

## 8 Projects

To implement the recommendations and solutions, project ideas are presented in the following, related to the respective fields of action and to cross-sectoral issues mentioned in the IRDC. The project ideas were initiated during the the regional participation workshop, which was realised in course of IRDC development. A detailed further development of project ideas in the follow-up of the workshop has not yet been accomplished, however. The aim of these project ideas is to promote the further development and creation of a sense of identity throughout the region Lower Middle Elbe and increase the potential available through nationwide cross-border co-operation.

The order of the projects listed constitutes no prioritization, but a collection for the cross-sectoral issues. The project ideas do not necessarily represent an exhaustive list, but are understood as proposals and may be adapted as part of future recommendations and guidelines.

## Climate protection projects

Title of the project	Field of action
Climate research project	Water management/tourism/regional planning

## River economy projects

Title of the project	Field of action
Strategic alliance inland water navigation Development of a waterway triangle cooperation	Elbe as waterway for freight transport
Construction of Elbe compatible vessels Adaption of Elbe vessels to differing water depths	Elbe as waterway for freight transport
String of ports Connecting port locations to tap the full potential for freight handling	Development of port locations
Metropolitan garden Linking the Elbe region to Hamburg and Berlin	Tourist shipping
Strengthening of the sports boat sector Improvement of infrastructure for boat tourism	Tourist shipping
Project coordinator for promoting the Elbe cruise tourism and cross-border water tourism	Tourist shipping



## Settlement systems/demographic change projects

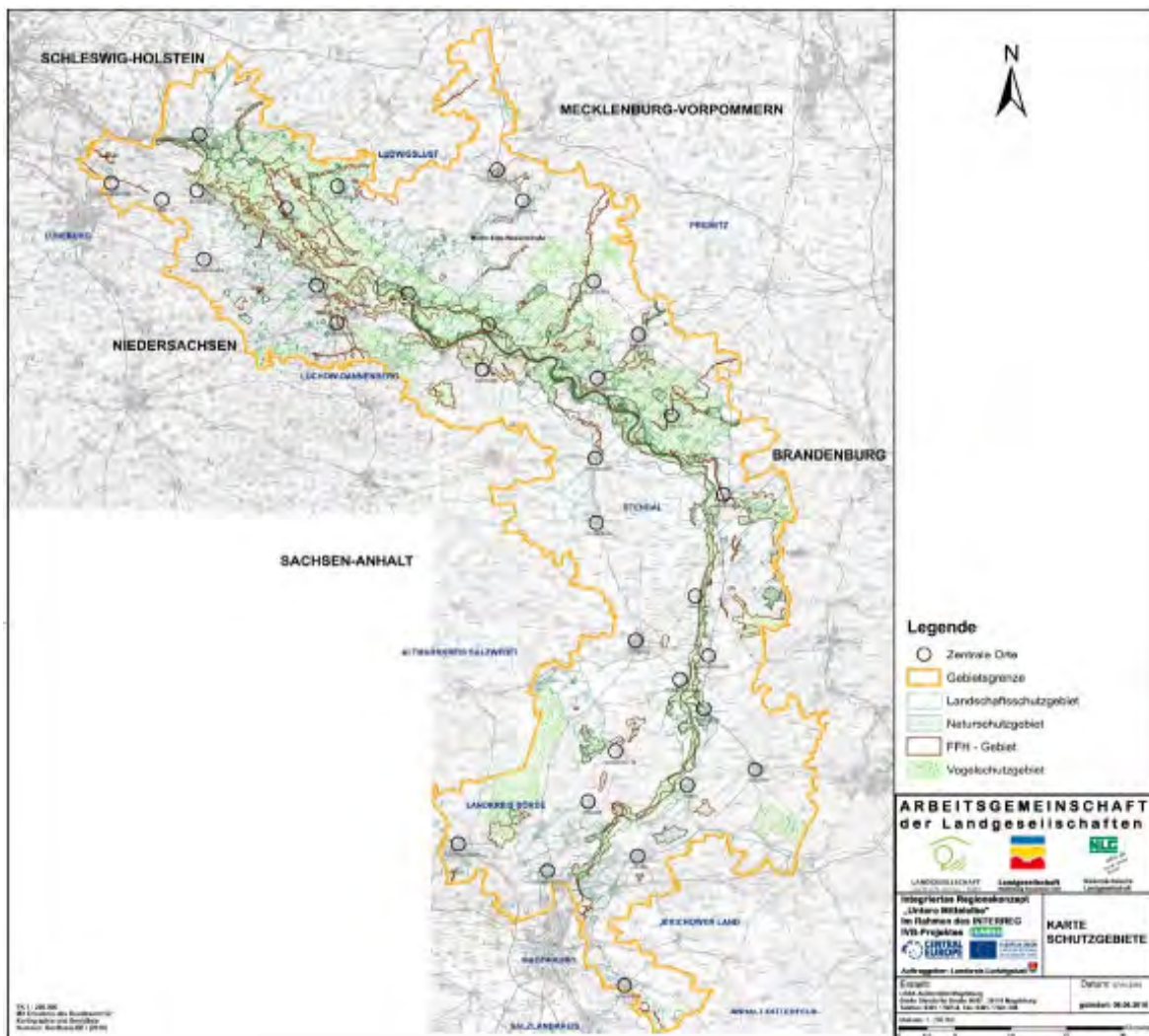
Title of the project	Field of action
Conference series „Siedlungsentwicklung im demografischen Wandel – Chancen der elbnahen Städte und Dörfer“	Regional and municipal planning
Strategic master plan 2030 for the Altmark region	Regional and municipal planning
Web portal family-friendly region	Regional and municipal planning
Pilot project Adaptation planning of a city/town with regard to climate change and demographic change	Regional and municipal planning
Maps and information material of subregions	Regional and municipal planning/accessibility and mobility
Concept for tourist trails	Regional and municipal planning/accessibility and mobility
Living on the water Development of attractive housing offers on houseboats	Housing

## Project related to several cross-sectoral

Title of the project	Field of action
Improvement of the tourist infrastructure in the region Lower Middle Elbe	Regional and municipal planning/tourism/ accessibility and mobility
Regional Council Lower Middle Elbe Development of a sense of regional identity	Regional and municipal planning/tourism
Natural treasures of the region Lower Middle Elbe	Regional and municipal planning/tourism
Culinary Elbe Valley	Tourism
Marketing Destination Elbe	Tourism/tourist shipping
Concept for tourist trails	Regional and municipal planning/accessibility and mobility
Living on the water Development of attractive housing offers on houseboats	Housing



## A 2 Protected areas in the IRDC „Lower Middle Elbe“



## B Annex

### B 1 Summary of plannings and concepts with regard to the region Lower Middle Elbe between Lüneburg und Magdeburg

#### Spatial planning and state planning objectives according to chapter 3.1

Issue	Spatial reference	Title	Principal	Editor	Year
Europäische Raumentwicklung	Europäische Union	Europäisches Raumentwicklungskonzept (EUREK) Auf dem Wege zu einer räumlich ausgewogenen und nachhaltigen Entwicklung der Europäischen Union	Europäischen Kommission	Ausschuss für Raumentwicklung	1999
Europäische Raumentwicklung	Europäische Union	"Leitlinien für eine nachhaltige räumliche Entwicklung auf dem europäischen Kontinent" (CEMAT-Leitlinien)	Europarat	---	2000
Deutschlandweite Raumentwicklung	Bundesweit	Leitbilder und Handlungsstrategien für die Raumentwicklung in Deutschland	Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS)	Geschäftsstelle der Ministerkonferenz im Bundesministerium für Verkehr, Bau und Stadtentwicklung	2006
Deutschlandweite Raumentwicklung	Bundesweit	Raumordnungsbericht 2005	Deutscher Bundestag	Bundesamt für Bauwesen und Raumordnung (BBR)	2005
Raumordnung	Region Altmark	Regionaler Entwicklungsplan Stendal		Regionale Planungsgemeinschaft Altmark	LEP 2010 2. Entwurf vorliegend
Raumordnung	Landkreis Lüneburg	Regionales Raumordnungsprogramm (RROP) (Entwurf) für den Landkreis Lüneburg	Landkreis Lüneburg	Landkreis Lüneburg Bauen - Regionale Raumordnung Herr Burkhard Kalliefe	2009
Raumentwicklung	Brandenburg	Landesentwicklungsplan Berlin-Brandenburg			2009



Issue	Spatial reference	Title	Principal	Editor	Year
Raumordnung	Brandenburg	Raumordnungsbericht 2008 Hauptstadtregion Berlin- Brandenburg	Landesregierung Branden- burg sowie Landesregierung von Berlin	Gemeinsame Landesplanungsab- teilung	2008
Raumentwicklung	Westmecklenburg	Entwurf des Regionalen Raumentwicklungspro- gramms Westmecklenburg (2009)	---	Regionaler Planungsverband Westmecklenburg	2009
Raumordnung	Region Magdeburg	Regionaler Entwicklungsplan Magdeburg		Regionale Planungsgemeinschaft Magdeburg	2006
Raumordnung	Gebietskulisse des Lan- des Sachsen- Anhalt	Landesentwicklungsplan			Stand 2005
Raumordnung	Gebietskulisse des Lan- des Sachsen- Anhalt	Landesentwicklungsplan			Stand 2005
Raumordnung	Landkreis Lüchow-Dannenberg	Regionalen Raumordnungs- programms (RROP) für den Landkreis Lüchow- Dannenberg	Landkreis Lüchow- Dannenberg	Landkreis Lüchow-Dannenberg	2004
Raumordnung	Landkreis Lüchow-Dannenberg	Regionalen Raumordnungs- programms (RROP) für den Landkreis Lüchow- Dannenberg	Landkreis Lüchow- Dannenberg	Landkreis Lüchow-Dannenberg	2004
Raumordnung	Bundesland Niedersachsen	Landes- Raumordnungsprogramm Niedersachsen (LROP)	Niedersächsisches Ministe- rium für Ernährung, Land- wirtschaft, Verbraucher- schutz und Landesentwick- lung	siehe Auftraggeber	1994, novelliert 2008



### Regional initiatives and networks according to chapter 3.2

Issue	Spatial reference	Title	Principal	Editor	Year
LEADER (LAG „Elbe-Saale“ (ES))	Gebiet vorrangig im Salzlandkreis, kleiner Anteil im Jerichower Land - Stadt Gommern	Wettbewerbsbeitrag LEADER-Konzept	Verwaltungsgemeinschaft Elbe-Saale	Dipl.-Geogr. Michael Schmidt, Planungsgemeinschaft Kontext!	2007
		Management	Salzlandkreis	Gudrun Viehweg	2009-2011
LEADER (LAG „Im Gebiet zwischen Elbe und Havel“ (EH))	Landkreis Stendal, Gebiet östlich der Elbe	Wettbewerbsbeitrag LEADER-Konzept	Im Auftrag der LAG Carsten Wulfänger, Vorsitzender der LAG	Bauplanungsbüro Hackel & Preß GbR	2007
		Management			2009-2011
LEADER (LAG „Colbitz-Letzlinger Heide“ (CLH))	Landkreis Börde, Altmarkkreis Salzwedel, Region nördlich von Magdeburg zwischen Haldensleben und Tangerhütte – im Norden Gardelegen	Wettbewerbsbeitrag LEADER-Konzept		Herr W. Westhus Landschaftsarchitekt	2007
		Management			2009-2011
LEADER (LAG „Uchte-Tanger-Elbe“ (UTE))	Landkreis Stendal, Verwaltungsgemeinschaften Stendal-Uchtetal, Tangerhütte-Land und Tangermünde	Wettbewerbsbeitrag LEADER-Konzept	Verwaltungsgemeinschaft „Tangerhütte-Land“	LandLeute GbR - Agentur für Regionalentwicklung	2007
		Management	Regionale Planungsgemeinschaft Altmark		2008-2011
LEADER (LAG „Zwischen Elbe und Fiener Bruch“ (EFB))	Landkreis Jerichower Land, Gebiet nördlich der A2	Wettbewerbsbeitrag LEADER-Konzept	Stadt Burg, Gemeinde Elbe-Parey, Verwaltungsgemeinschaft Ele-Stremme-Fiener, Stadt Genthin	LGSA mbH	2007
		Management	Landkreis Jerichower Land	LGSA mbH	2008-2011

Issue	Spatial reference	Title	Principal	Editor	Year
LEADER (LAG „Mittlere Altmark“ (MA))	Landkreise Stendal und Altmarkkreis Salzwedel,	Wettbewerbsbeitrag LEADER-Konzept	Verwaltungsgemeinschaft Bismark-Kläden im Auftrag der LAG	LGSA mbH und Dr. Bock und Part- ner GbR	2007
		Management	Regionale Planungsgemein- schaft Altmark		2008-2011
LEADER	Landkreis Ludwigslust	Gebietsbezogene lokale Entwicklungsstrategie „SüdWestMecklenburg“	Landkreis Ludwigslust	Landgesellschaft Mecklenburg- Vorpommern mbH	2007
ILE/LEADER	Landkreis Prignitz	Gebietsbezogene Lokale Entwicklungsstrategie Storchenland Prignitz		Regionalförderung Prignitzland e.V.	2007
LEADER (LAG Elbtalaue)	Region Elbtalaue: LK Lüchow-Dannenberg Östliche Kommunen des LK Lüneburgs	Regionales Entwicklun- gskonzept (REK) der Loka- len Aktionsgruppe (LAG) Elbtalaue; Leitbild: „Elb- talaue – Flussland schafft Neue Wege“	Entscheidungsträger: Lokale Aktionsgruppe (LAG) mit den Räten der Städten, Samtge- meinden und Gemeinden	Regionales Entwicklungskonzept der Lokalen Aktionsgruppe Elbtalaue (REK der LAG Elbtalaue):  Unter Mitarbeit von regionalen 12 Akteuren, Wirtschafts- und Sozial- partner (WiSo- Partner) und öffentli- che Partner: Alle 8 Samtgemeinden und Einheitsgemeinden sowie die beiden Landkreise Biosphärenreser- vatsverwaltung und Verwaltung der Naturparks	2007
INTERREG	Elbraum (CZ bis D)	Ergebnisse und Hand- lungsfelder ( <a href="http://www.ella.de">www.ella.de</a> ), Vorsorgende Hochwas- serschutzmaßnahmen durch transnationale Raumordnung für das Einzugsgebiet der Elbe	INTERREG III B Freistaat Sachsen in Zusam- menarbeit mit Projektpartnern	Infrastruktur und Umwelt / Prof. Böhm und Partner Darmstadt und Potsdam	2006

Issue	Spatial reference	Title	Principal	Editor	Year
REGION AKTIV	Region Wendland/Elbetal: Kreise: Lüchow-Dannenberg, Lüneburg Gemeinden: Clenze, Dannenberg, Gartow, Hitzacker, Dahlenburg, Amt Neuhaus, Scharnebeck, Bleckede  (Übersichtskarte: <a href="http://www.wendland-elbe.tal.de/index.php?geogr_bereich">http://www.wendland-elbe.tal.de/index.php?geogr_bereich</a> )	Region Wendland/Elbetal "Regionen Aktiv - Land gestaltet Zukunft"	Bundesministerium für Verbraucher, Ernährung und Landwirtschaft (BMVEL)	REGION AKTIV WENDLAND / ELBETAL e.V.	2002
LEADER	LEADER+ Aktionsraum Ludwigslust	Regionales Entwicklungskonzept LEADER+ Südwestmecklenburg	Landkreis Ludwigslust	Landgesellschaft Mecklenburg - Vorpommern mbH	2001
Regionales Netzwerk Urstromtal Elbe	Flussabschnitte zwischen Dömitz (Mecklenburg) und Hamburg; Bundesländer Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein und Hamburg.  (Übersichtskarte: <a href="http://www.urstromtalelbe.de/karte.html">http://www.urstromtalelbe.de/karte.html</a> )	Regionale Kooperation Urstromtal Elbe	Gemeinde Amt Neuhaus, Stadt Bleckede, Stadt Boizenburg/Elbe, Stadt Dömitz, Samtgemeinde Elbmarsch, Freie u. Hansestadt Hamburg/ Bezirk Bergedorf, Stadt Geesthacht, Samtgemeinde Hitzacker (Elbe), Stadt Lauenburg/Elbe, Samtgemeinde Scharnebeck, Stadt Winsen (Luhe)	Stadt Geesthacht	2003
Regionales Netzwerk im Kooperationsraum Süderelbe	Landkreise Harburg, Lüneburg und Stade	Kooperationsraum Wachstumsinitiative Süderelbe AG	Land Hamburg (vertreten durch die Behörde für Wirtschaft und Arbeit), niedersächsische Landkreise Harburg, Lüneburg, Stade, Stadt Lüneburg, Unternehmen der Region	Wachstumsinitiative Süderelbe AG	2004

### Other development concepts according to chapter 3.3

Issue	Spatial reference	Title	Principal	Editor	Year
Naturschutz	Elbtalaue	Biosphärenreservatsplan Niedersächsische Elbtalaue	Niedersächsischen Ministers für Umwelt und Klimaschutz		2009
Strategie	Hamburg, Niedersachsen, Mecklenburg- Vorpommern, Schleswig- Holstein	Ermittlung von Entwick- lungspotenzialen in Nord- deutschland und Erarbeitung eines Strategiepapiers zu deren kooperativer Stärkung im Sinne einer Partnerschaft von Stadt und Land	Freie und Hansestadt Hamburg	dsn Analysen & Strategien	2010
Klimaschutz	Sachsen-Anhalt	Klimaschutzprogramm 2020 Klimaschutzkonzept 2008	Land Sachsen-Anhalt		Entwurf 12.01.2010
Klimaschutz	Landkreis Lüchow- Dannenberg	Integrierte Klimaschutzkon- zept	Landkreis Lüchow- Dannenberg	Target GmbH	2010
Tourismus	Gebiet der KAG	Einheitliche, gezielte touristi- sche Vermarktung der Regi- on Hamburg und Magdeburg entlang der Elbe	KAG	Fachgruppe Tourismus Elbe in der KAG Tourismusverbände der Länder	2009, 2010 Beschluss
Naturschutz	Elbtalaue	Integriertes Auenmanage- ment Elbe	Niedersächsisches Landwirtschaftsministeri- um	Koordinator: Joachim Roemer Behörde für Geoinformation, Land- entwicklung und Liegenschaften Lüneburg	2009
Naturschutz	Elbe – Brandenburg	Biosphärenreservat Fluss- landschaft Elbe – Branden- burg Landschaftsrahmen- plan mit integriertem Rah- menkonzept	Ministerium für Landwirt- schaft, Umweltschutz und Raumordnung des Landes Brandenburg	MLUR, Abteilung Naturschutz und Landschaftspflege LAGS, Biosphärenreservatsverwal- tung Flusslandschaft Elbe – Bran- denburg	2002

Issue	Spatial reference	Title	Principal	Editor	Year
Naturschutz	<p>Repräsentierter Landschaftsraum: Mittelelbniederung und Norddeutsche Tiefebene</p> <p>Repräsentative Lebensräume: Flusslauf, Auengrünland, Altwässer, angrenzende Laub- und Mischwälder</p> <p>(Übersichtskarte: <a href="http://www.elbetal.de/biosphaeren/karte.htm">http://www.elbetal.de/biosphaeren/karte.htm</a>)</p>	Biosphärenreservat „Flusslandschaft Elbe“	UNESCO	Ministerium für Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein; Ministerium für Ernährung, Landwirtschaft, Forsten und Fischerei des Landes Mecklenburg-Vorpommern; Niedersächsisches Umweltministerium; Ministerium für Ländliche Entwicklung, Umwelt und Verbraucherschutz des Landes Brandenburg; Ministerium für Landwirtschaft und Umwelt des Landes Sachsen-Anhalt	Jahr der Anerkennung durch die UNESCO: 1997 (länderübergreifend), 1979 (Bereich Mittelelbe)
Naturschutz	<p>Elbaue bei Sandau LK Stendal</p> <p>Gesamtgebiet</p> <p>Gesamtgebiet</p> <p>Landkreis Schönebeck in Kooperation mit dem Biosphärenreservat, Feuchtgebiete der Saale-Elbe-Mündung, Feuchtgebiete im Biosphärenreservat</p>	<p>Monitoring und Effizienzkontrolle an Altarmabindungen im Bereich Sandau; Technische Aktualisierung der Datenbank für das Bibermonitoring S-A; Genetische Untersuchung von Schwarz-Pappeln im Biosphärenreservat; EU-Projekt "Integriertes Management von Feuchtgebieten" (WETLANDS 2); Vergleichstudie zwischen dem Biosphärenreservat Mittelelbe und dem "Lower Wisconsin State Riverway",</p>			



Issue	Spatial reference	Title	Principal	Editor	Year
Naturschutz	Elbaue bei Bertingen, LK Bördekreis Elbaue zwischen Sandau und Schönhausen, LK Stendal Elbaue südlich Rogätz mit Ohremündung, LK Bördekreis Elbaue Werben und Alte Elbe Kannenberg, LK Stendal Elbaue zwischen Derben und Schönhausen, LK Jerichow Land/ Stendal	FFH Managementpläne	Landesamt für Umweltschutz Sachsen-Anhalt	RANA, Halle IHU Stendal u. biota Bützow MILAN Prof. Hellriegel Institut e.V., Bernburg LPR Dr. Reichhoff, Dessau	2009
Wirtschaft	Region Wendland: Elbetal Samtgemeinden Scharnebeck, Ostheide und Dahlenburg sowie die Stadt Bleckede und die Gemeinde Amt Neuhaus aus dem Landkreis Lüneburg und die Samtgemeinden Elbtalaue, Gartow und Lüchow (Wendland) aus dem Landkreis Lüchow-Dannenberg und Lüchow-Dannenberg	Regionalentwicklungskonzept der Region Wendland-Elbetal zur Bewerbung für den Wettbewerb „Bioenergie-Regionen“ „WIR WACHSEN NACHHALTIG MIT UNSERER ENERGIE“	Wirtschaftsförderung Lüchow-Dannenberg, ein Projekt der GLC Glücksburg Consulting AG, Martina Grud (Projektleiterin)	Region Aktiv Wendland-Elbetal und die Wirtschaftsförderung Lüchow-Dannenberg mit Netzwerkpartnern die Region	2009

Issue	Spatial reference	Title	Principal	Editor	Year
Bioenergie	Sachsen-Anhalt, Altmark	Bioenergieregion Altmark			
Naturschutz	Untere Havel (Bereich der Elbmündung) Niedersachsen / Brandenburg-Sachsen / Anhalt	PEP Gewässerrandstreifenprojekt „Untere Havelniederung zwischen Pritzerbe und Gnevsdorf“	Naturschutzbund Deutschland (NABU) e. V.	Arbeitsgemeinschaft	2008
Wirtschaft	Landkreis Lüchow-Dannenberg	Kreisentwicklungs- und Wachstumskonzept für den Landkreis Lüchow-Dannenberg	Kreistag des Landkreises Lüchow-Dannenberg und die Räte der drei Samtgemeinden Elbtalaue, Gartow und Lüchow (Wendland)	Fachdienst für Kreisentwicklung, Regional- und Verkehrsplanung in Kooperation mit der Wirtschaftsförderung	2009
Strategie	Landkreis Prignitz	Regionales Leitbild Prignitz – Oberhavel			2007
Tourismus	Landkreis Prignitz	Marketingkonzept Reisegebiet Prignitz		Tourismusverband Prignitz e.V.	2007
Wirtschaft / Tourismus	Gemeinde Seevetal und Stelle, die Stadt Winsen (Luhe) und die Samtgemeinde Elbmarsch, LK Harburg sowie die Gemeinde Barum, LK Lüneburg	ILEK "Achter-Elbe-Diek" – Wirtschaftsraum Winsener Elbmarsch –	Niedersächsische Landgesellschaft Lüneburg und der Landwirtschaftskammer Niedersachsen, Bezirksstelle Uelzen	Niedersächsische Landgesellschaft (NLG, Geschäftsstelle Lüneburg) in Zusammenarbeit mit der Landwirtschaftskammer Niedersachsen (LWK, Außenstelle Buchholz)	2007
Naturschutz	Gebiet der KAG	Hochwasserbroschüre	LK Stendal	Hochschule Magdeburg-Stendal	2006
Wirtschaft	Landkreis Prignitz	Standortentwicklungskonzeption Regionalen Wachstumskerns Prignitz / Brandenburg			2006

Issue	Spatial reference	Title	Principal	Editor	Year
Wirtschaft	Landkreis Börde, Landeshauptstadt Magdeburg, Salzlandkreis und Jerichower Land  (www.regionmagdeburg.de)	Integriertes ländliches Entwicklungskonzept für die Region Magdeburg mit den Landkreisen Bördekreis, Jerichower Land, Schönebeck, Ohrekreis und den ländlichen Gebieten der Landeshauptstadt Magdeburg	Regionale Planungsgemeinschaft Magdeburg im Auftrag der Landkreise	Agro-Öko-Consult	2006
Wirtschaft	Landkreise Stendal und Altmarkkreis Salzwedel (www.altmark.eu)	Integriertes Ländliches Entwicklungskonzept - Strategie einer nachhaltigen Entwicklung in der Region Altmark	Landkreise SDL und SAW	Regionale Planungsgemeinschaft im Auftrag der Landkreise	2006
Wirtschaft	Landkreis Stendal und Altmarkkreis Salzwedel	„Nachhaltige Entwicklung der Tierproduktion in der Altmark“	Amt für Landwirtschaft und Flurneuordnung Altmark	Agro-Öko-Consult Berlin GmbH	2003-2005
Klimaschutz	Mecklenburg-Vorpommern	Auswirkungen des Klimawandels auf M-V im Bereich Regionalentwicklung/ Tourismus	Ministerium für Wirtschaft, Arbeit und Tourismus Mecklenburg-Vorpommern	Landgesellschaft Mecklenburg-Vorpommern mbH	2008
Tourismus	Region Hagenow	Konzeption Radwanderweg „Sakralbauten der Griesen Gegend	Amt Hagenow-Land	Landgesellschaft Mecklenburg - Vorpommern mbH	2004
Tourismus	Müritz-Elde-Wasserstraße	Erste Gästebefragung Müritz-Elde-Wasserstraße		BATZ e.V. Neustadt Glewe	2004

Issue	Spatial reference	Title	Principal	Editor	Year
Wirtschaft	Landkreis Ludwigslust	Agrarstrukturelle Entwicklungsplanungen Landkreis LWL	Amt für Landwirtschaft Wittenburg	Landgesellschaft Mecklenburg - Vorpommern mbH	2004
Tourismus	Dömitz-Malliß	Handlungskonzept für die Freizeit- und Erlebnisregion Dömitz-Malliß	Amt Dömitz-Malliß	Landgesellschaft Mecklenburg - Vorpommern mbH	2004
Wirtschaft	LK Stendal und LK Jerichower Land	AEP Tangermünde/ Jerichow, Biosphärenreservat Flusslandschaft mittlere Elbe (Konsens zwischen Landbewirtschaftung und ökologischer Zielstellung)	Land S-A, Amt für Landwirtschaft, Flurneuordnung und Forsten Altmark	Planungsbüro Bethge	2001–2004
Wirtschaft	Amtsbereich Vellahn	Marketing-Konzeption Amt Vellahn	Amt Vellahn	Landgesellschaft Mecklenburg - Vorpommern mbH	2003
Wirtschaft	Region Hagenow	Integriertes Regionales Entwicklungskonzept	Stadt Hagenow und Amt Hagenow-Land	Landgesellschaft Mecklenburg - Vorpommern mbH	2003
Tourismus	Landkreis Stendal und Altmarkkreis Salzwedel	Urlaub und Freizeit auf dem Lande	LSA, Amt für Landwirtschaft und Flurneuordnung Altmark	Reppel + Partner	2003
Tourismus	Griese Gegend Amt Ludwigslust-Land	Konzeption „Radwanderweg Raseneisenstein“	Amt Ludwigslust-Land	Landgesellschaft Mecklenburg - Vorpommern mbH	2003
Wirtschaft	Landkreis Jerichower Land	AEP Burg/Parey Biosphärenreservat Flusslandschaft mittlere Elbe	Land S-A, Amt für Landwirtschaft, Flurneuordnung und Forsten Altmark	Ingenieurbüro Bethge	Entwurf 2002-2003
Wirtschaft	Landkreis Stendal	AEP Elbe 1	Land S-A, Amt für Landwirtschaft, Flurneuordnung und Forsten Altmark	LGSA mbH	2002

Issue	Spatial reference	Title	Principal	Editor	Year
Tourismus	Westmecklenburg	Regionales Radwegekonzept Westmecklenburg		Regionaler Planungsverband Westmecklenburg	2009
Tourismus	Brandenburg	Wassersportentwicklungsplan des Landes Brandenburg	Ministerium für Bildung, Jugend und Sport des Landes Brandenburg		2009
Tourismus	Sachsen-Anhalt	Handbuch Tourismus in Sachsen-Anhalt	Ministerium für Wirtschaft und Arbeit	MW Ref. Tourismus, Hochschule Harz e.V., Institut für Tourismus- und Dienstleistungsmarketing	Dez. 2004 (Aktualisierung 2009?)
Tourismus	Sachsen-Anhalt	Landesradwegeverkehrsplan 2009	LSA, MLV	MLV / PGV / plan&rat	Entwurf 2009
Wirtschaft	Bundesland Niedersachsen	Regionalreport	Niedersächsischen Ministeriums für den ländlichen Raum, Ernährung, Landwirtschaft und Verbraucherschutz	Prof. Dr. Hans-Ulrich Jung (Projektleiter) Dipl.-Geogr. Matthias Franck, Dipl.-Geogr. Lars Masurek	2008
Tourismus	Brandenburg	Landestourismuskonzeption Brandenburg	Ministerium für Wirtschaft des Landes Brandenburg	Dwif-Consulting GmbH ift-Freizeit- und Tourismusberatung	2006
Naturschutz	Elbe – Brandenburg	Biosphärenreservat Flusslandschaft Elbe – Brandenburg Landschaftsrahmenplan mit integriertem Rahmenkonzept	Ministerium für Landwirtschaft, Umweltschutz und Raumordnung des Landes Brandenburg	MLUR, Abteilung Naturschutz und Landschaftspflege LAGS, Biosphärenreservatsverwaltung Flusslandschaft Elbe – Brandenburg	2002
Wirtschaft	Landkreis Prignitz	Regionalplan Prignitz Oberhavel/ Teilplan Rohstoffsicherung - Windenergienutzung			2008



Issue	Spatial reference	Title	Principal	Editor	Year
Tourismus	Mecklenburgisches Elbetal	Naturparkplan Mecklenburgisches Elbetal	Landesamt für Forsten und Großschutzgebiete, Amt für Raumordnung und Landesplanung, Landkreis Ludwigslust	Landgesellschaft Mecklenburg - Vorpommern mbH	2001
Wirtschaft	Gebiet des Amtes Ludwigslust-Land	Integriertes Regionales Entwicklungskonzept	Amt Ludwigslust-Land	Landgesellschaft Mecklenburg - Vorpommern mbH	1999





## B 2 Overview of important dates

Termin	Zeitpunkt
Treffen der Fachgruppe Regionalentwicklung in Ludwigslust	29. Januar 2010
Konsortialtreffen in Magdeburg	08. Februar 2010
Steuerungsgruppensitzung in Stendal	08. März 2010
Konsortialtreffen in Stendal	08. April 2010
Konsortialtreffen in Salzwedel	19. Mai 2010
Steuerungsgruppensitzung in Perleberg	10. Juni 2010
Erweiterte Steuerungsgruppensitzung in Ludwigslust	06. Juli 2010
Teilnahme an der Tagung Strukturentwicklung – ein Kulturerbe-ereignis?, Deutsches Nationalkomitee für Denkmalschutz	24. Juni 2010
Konsortialtreffen in Lüneburg	17. August 2010
Experteninterview mit Herrn Koop, Wasser- und Schifffahrtsamt Magdeburg	13. September 2010
Experteninterview mit Herrn Dörfler, BUND Magdeburg	13. September 2010
Teilnahme an der Fachtagung Demografischer Wandel und Stadtentwicklung in Stendal, IBA 2010	23. September 2010
Experteninterview mit Herrn Michaelis, Landkreis Stendal	28. September 2010
Mitwirkung am Workshop im Rahmen des Forschungsprojektes „Entscheidungssystem für die langfristige Infrastruktur und Flächenplanung“, BMFB	22. Oktober 2010
euregia 2010 in Leipzig	25. bis 27. Oktober 2010
Konsortialtreffen in Stendal	02. November 2010
Regionaler Beteiligungsworkshop in Dömitz	08. November 2010
Steuerungsgruppensitzung in Dömitz	08. November 2010
Steuerungsgruppensitzung in Ludwigslust	28. März 2011
Abschlussveranstaltung in Haldensleben	06. April 2011

### B 3 Distribution of work within the consortium

Die Aufgaben bei der Erarbeitung des IREK wurden unter den Konsortialpartner aufgeteilt, hinsichtlich der Gebietskulisse (räumlich) und der Erstellung der Kapitel (inhaltlich). Damit konnte jeder Partner die Landkreise analysieren, in dem die meisten Regionskenntnisse vorhanden sind. Darüber hinaus wurden für die Erstellung der einzelnen Kapitel des Regionskonzeptes Gesamtverantwortliche festgelegt. Sie sind dafür zuständig, Zuarbeiten der Partner zu einzelnen Kapiteln zusammenzuführen. Dadurch wird gewährleistet, dass ein Kapitel durchgängig einheitlich aufgebaut ist und verständlich gelesen werden kann.

**Table 29: Distribution of work for the IRDC Lower Middle Elbe**

Partner	Analysed counties	Responsible for the elaboration of chapters	Other responsibilities
LGMV	Ludwigslust Prignitz	1.0 – Anlass und Zielstellung 2.0 – Methodik und Arbeitsablauf 3.1 – Grundsätze und Ziele der Landesplanung 4.1 – Lage, Größe, administrative Gliederung 4.4 – Regionalwirtschaft und Beschäftigung 6.1.1 – Hochwasserschutz 6.1.2 – Flusssaffine Wirtschaft	Projektleitung; zusammenfassende Darstellung; Layout, Druck, Vervielfältigung; Abschlussveranstaltung
NLG	Lüneburg Lüchow-Dannenberg	3.3 – Sonstige Entwicklungskonzepte 4.5 – Tourismus, Freizeit und Erholung 4.6 – Soziale Infrastruktur 4.7 – Verkehr und Technische Infrastruktur 6.1.2 – Klimaschutz 6.2 – Leitbild 7.0 – Projekte	Regionaler Beteiligungsworkshop
LG S-A	Stendal Jerichower Land Börde	3.2 – Regionalinitiativen und Netzwerke 4.2 – Natur und Landschaft 4.3 – Bevölkerung und Siedlungsstruktur 5.0 – SWOT-Analyse 6.1.4 – Siedlungsentwicklung/ demografischer Wandel	Kartenerstellung (GIS);

## B 4 Administrative structure of the study area

County	Joined community	Municipality	Remarks
<a href="#">Prignitz:</a>			
	Amt Lenzen-Elbtalaue	Lanz	---
		Lenzerwische	---
		Lenzen	---
		Cumlosen	---
	Amt Bad Wilsnack/Weisen	Stadt Bad Wilsnack	---
		Breese	---
		Rühstädt	---
		Weisen	---
		Legde Quitzöbel	---
	---	Perleberg	Kreisstadt, amtsfrei
	---	Wittenberge	amtsfrei
	---	Karstädt	amtsfrei
	---	Plattenburg	amtsfrei
<a href="#">Ludwigslust:</a>			
	Amt Boizenburg-Land	Besitz	---
		Gresse	---
		Greven	---
		Bengerstorf	---
		Neu Gülze	---
		Nostorf	---
		Schwanheide	---
		Teldau	---
		Tessin b. Boizenburg	---
		Brahlstorf	---
		Dersenow	---
	Amt Dömitz-Malliß	Stadt Dömitz	---
		Grebs-Niendorf	---
		Karenz	---
		Malk Göhren	---
		Malliß	---
		Neu Kaliß	---
		Vielank	---
	Amt Grabow	Stadt Grabow	---
		Balow	---
		Brunow	---
		Dambeck	---
		Eldena	---
		Gorlosen	---
		Karstädt	---
		Kremmin	---
		Milow	---
		Möllenbeck	---
		Muchow	---

County	Joined community	Municipality	Remarks
		Prislich	---
		Steesow	---
		Zierzow	---
	Amt Ludwigslust-Land	Alt Krenzlin	---
		Bresegard b. Eldena	---
		Göhlen	---
		Groß Laasch	---
		Leussow	---
		Lübesse	---
		Lüblow	---
		Rastow	---
		Sülstorf	---
		Uelitz	---
		Warlow	---
		Wöbbelin	---
	---	Stadt Boizenburg	amtsfrei
	---	Stadt Lübtheen	amtsfrei
	---	Stadt Ludwigslust	amtsfrei
<b>Lüneburg:</b>			
	SG Scharnebeck	Flecken Artlenburg	---
		Brietlingen	---
		Echem	---
		Hittbergen	---
		Hohnstorf (Elbe)	---
		Lüdersburg	---
		Rullstorf	---
		Scharnebeck	---
	SG Dahlenburg	Tosterglope	---
		Nahrendorf	---
		Dahlem	---
		Boitze	---
		Flecken Dahlenburg	---
	---	Neetze	zugehörig zur Samtge- meinde Ostheide
	---	Stadt Bleckede	---
	---	Amt Neuhaus	---
<b>Lüchow-Dannenberg:</b>			
	SG Elbtalaue	Stadt Dannenberg (Elbe)	---
		Stadt Hitzacker (Elbe)	---
		Damnatz	---
		Göhrde	---
		Gusborn	---
		Jameln	---
		Karwitz	---
		Langendorf	---
		Neu Darchau	---

County	Joined community	Municipality	Remarks
		Zernien	---
	SG Gartow	Stadt Schnackenburg	---
		Gartow	---
		Gorleben	---
		Höhbeck	---
		Prezelle	---
	---	Trebel	zugehörig zur SG Lüchow (Wendland)
<b>Stendal:</b>			
	Tangerhütte-Stadt	Stadt Tangerhütte	Einheitsgemeinde
		Bellingen	
		Birkholz	
		Bittkau	
		Cobbel	
		Demker	
		Grieben	
		Hüselitz	
		Jerchel	
		Kehnert	
		Lüderitz	
		Ringfurth	
		Schelldorf	
		Schernebeck	
		Schönwalde	
		Uchtdorf	
		Uetz	
		Weißewarte	
		Windberge	
	Arneburg-Goldbeck	Stadt Arneburg	Gemeinden in der Verbandsgemeinde
		Eichstedt (Altmark)	
		Goldbeck	
		Hassel	
		Hohenberg-Krusemark	
		Iden	
		Rochau	
		Werben (Elbe), Hansestadt	
		Klein Schwechten	
		Schwarzholz	
	Seehausen (Altmark)	Aland	Gemeinden in der Verbandsgemeinde
		Altmärkische Höhe	
		Altmärkische Wische	
		Zehrental	
		Seehausen (Altmark), Hansestadt	
		Wahrenberg	
		Schönberg	

County	Joined community	Municipality	Remarks
	Elbe-Havel-Land	Stadt Sandau (Elbe)	Gemeinden in der Verbandsgemeinde
		Kamern	
		Klietz	
		Schollene	
		Schönhausen (Elbe)	
		Wust-Fischbeck (Elbe)	
	---	Tangermünde	Einheitsgemeinde Stadt
	---	Havelberg	Einheitsgemeinde, Hansestadt
	---	Stendal	Einheitsgemeinde Stadt; ab 2011 werden Dahlen und Insel eingemeindet
	---	Osterburg (Altmark)	Einheitsgemeinde, Hansestadt
Jerichower Land:			
	---	Jerichow	Einheitsgemeinde Stadt
	---	Biederitz	Einheitsgemeinde
	---	Burg	Einheitsgemeinde Stadt
	---	Elbe-Parey	Einheitsgemeinde
	---	Genthin	Einheitsgemeinde Stadt
	---	Gommern	Einheitsgemeinde Stadt
	---	Möser	Einheitsgemeinde
Börde:			
	Elbe-Heide	Angern	Gemeinden in der Verbandsgemeinde
		Burgstall	
		Colbitz	
		Heinrichsberg	
		Loitsche-Hillersleben	
		Rogätz	
		Westheide	
		Zielitz	
	---	Niedere Börde	Einheitsgemeinde
	---	Barleben	Einheitsgemeinde
	---	Haldensleben	Einheitsgemeinde Stadt
	---	Wolmirstedt	Einheitsgemeinde Stadt



## B 5 Materials for structural analysis

**Table 30: Tourism associations and information points in the study area (2008)**

County	Tourism association [name]	Tourist information	
		[place]	[DTV-certified, „red sign, white I“]
Prignitz	Tourismusverband Prignitz e.V. im Rahmen des Landestourismusverbandes Brandenburg (LTV)	Touristinformation Lenzener Elbtalaue, Tourist-Information Wittenberge, Stadtinformation Bad Wilsnack, Gemeinde Plattenburg - Touristinformation, Stadtinformation Perleberg	nein ja nein nein ja
Ludwigslust	Tourismusverband Mecklenburg-Schwerin e.V. im Rahmen des Tourismusverbandes Mecklenburg-Vorpommern (TMV)	Ludwigslust-Information, Stadt-Grabow-Information, Museum „Altes Küstenhaus“ Lübtheen, Stadtinformation Boizenburg, Biosphärenreservat Flusslandschaft Elbe-MV, Boizenburg, Dömitz-Information	ja nein nein nein nein ja
Lüneburg	Tourismusverband Lüneburger Heide e.V.	Tourist-Information ElbSchloss Bleckede, Tourist-Information Dahlenburg, Tourist-Information Amt Neuhaus, Tourist-Information Scharnebeck	nein nein nein nein
Lüchow-Dannenberg	Tourismusverband Elbtalaue-Wendland Touristik GmbH	Tourist-Information Lübeln Tourist-Information Gartow, Kur- und Touristinformation Hitzacker (Elbe), Gäste-Information Dannenberg (Elbe) Tourist-Information Lüchow	nein ja ja nein nein
Stendal	Tourismusverband Altmark e.V.	Tourist-Information Stendal, Tourist-Information Arneburg, Stadtreisebüro "Tourist-Inn" Osterburg, Touristinformation der Stadt Sandau (Elbe), Tangermünder Tourismus Büro, Schollene-Information Gemeindeverwaltung, Bismarck-Museum Schönhausen und Touristeninformation, Tourist-Information der Stadtverwaltung Havelberg, Tangermünde-Altmark-Information "Hanse-Kontor", Information der Stadt Tangerhütte Stadtinformation Seehausen, Tourismusbüro der Hansestadt Werben (Elbe), NABU-Umweltzentrum / Touristinformation Buch, Verbandsgemeinde Arneburg-Goldbeck- Information Verbandsgemeinde Elbe-Havel-	ja nein ja nein ja nein ja ja nein nein nein ja ja nein nein nein nein nein nein

County	Tourism association [name]	Tourist information	
		[place]	[DTV-certified, „red sign, white I“]
		Land- Information	
Jerichower Land	Tourismusverband Elbe-Börde-Heide e.V.	Burg-Information, Touristinformation Genthin, Gommern-Information, Bürgerhaus Jerichow	nein ja nein nein
Börde	Tourismusverband Colbitz-Letzlinger Heide e.V. Magdeburger Tourismusverband Elbe-Börde-Heide e.V.	Infopunkt im Klosterhof Groß Ammensleben, Haldensleben Information Colbitz	nein nein nein

Source: Tourismusverband Prignitz e.V.; Tourismusverband Mecklenburg - Schwerin e.V.;  
Verbesserung der freizeit-touristischen verkehrlichen Infrastruktur in den LEADER-Regionen Achtern-Elbe-Diek und Elbtalaue; Internetrecherche zu den Gemeinden; Landkreisseite des Landkreises Stendal

**Table 31: System of protected areas Special Protection Areas (SPA) for birds (SPA) und Flora-Fauna-Habitat-areas (FFH) in the study area**

Protected area	Location/course in the study area
<a href="#">Prignitz, Ludwigslust:</a>	
<b>FFH</b>	
DE 2935-306: Elbe	folgt dem Elbeverlauf im Bereich der Ämter Lenzen-Elbtalaue und Bad Wilsnack/Weisen sowie südlich von Wittenberge
DE 2833-301: Werder Besandten	westlich von Baarz, Amt Lenzen-Elbtalaue
DE 2934-303: Elbaue Wootz	östlich von Besandten, Amt Lenzen-Elbtalaue
DE 2933-301: Werder Kietz	südlich von Kietz, Amt Lenzen-Elbtalaue
DE 2934-303: Elbaue Wootz	südlich von Kietz, Amt Lenzen-Elbtalaue
DE 2934-304: Werder Mödlich	südlich von Mödlich, Amt Lenzen-Elbtalaue
DE 2934-305: Werder Mödlich Ergänzung	südlich von Mödlich, Amt Lenzen-Elbtalaue
DE 2934-302: Lenzen-Wustrower Elbniederung	südlich von Gandow, Amt Lenzen-Elbtalaue
DE 2935-303: Gandower Schweineweide	südöstlich von Gandow, Amt Lenzen-Elbtalaue
DE 2833-302: Untere Rhinowwiesen	nordöstlich von Baarz, Amt Lenzen-Elbtalaue
DE 2834-301: Untere Löcknitzniederung	folgt dem Verlauf der Röcknitz zwischen Breez und Gandow
DE 2836-301: Mittlere und Obere Löcknitz	folgt dem Verlauf der Röcknitz bis Lanz
DE 2835-302: Nausdorfer Moor	im Bereich der Ortslage Nausdorf, Amt Lenzen-Elbtalaue
DE 2835-301: Rambower Moor	südöstlich von Mellen
DE 2935-305: Gadow	im Bereich Gadwo, Amt Lenzen-Elbtalaue
DE 2936-302: Silge	ein Gebiet nordöstlich von Bernheide
DE 2836-301: Mittlere und Obere Löcknitz	folgt dem Löcknitzverlauf zwischen Lenzersilge und Stavenow
DE 2836-302: Stavenower Wald	östlich von Stavenow
DE 2936-302: Silge	westlich von Schilde
DE 2937-302: Untere Stepenitzniederung und Jeetzbach	nördlich von Wittenberge in Richtung Perleberg
DE 2936-301: Perleberger Schießplatz	südlich von Perleberg, östlich der B 189
DE 2937-302: Mörickeluch	zentrale Lage im Perleberger Stadtforst

DE 2937-301: Mendeluch	zentrale Lage im Perleberger Stadtforst
DE 2837-302: Weinberge-Klüssenberge bei Perleberg	nördlich von Perleberg
DE 2738-302: Stepenitz	folgt dem Verlauf der Stepenitz nordöstlich von Perleberg
DE 2837-301: Schlatbach	bei Groß Buchholz, nördlich von Perleberg
DE 2937-304: Weißer Berg bei Spiegelhagen	bei Spiegelhagen nordöstlich von Perleberg
DE 3037-301: Jackel	südlich von Karthan, Amt Bad Wilsnack/Weisen
DE 3037-302: Karthan	östlich von Karthan, Amt Bad Wilsnack/Weisen
DE 3037-303: Karthane	folgt dem Verlauf der Karthane, Amt Bad Wilsnack/Weisen
DE 3038-301: Plattenburg	östlich der Ortslage Plattenburg
DE 3037-303: Karthane	folgt dem Verlauf der Karthane zwischen Groß- und Klein Leppin
DE 3036-304: Elbdeichvorland	südlich von Cumlosen
DE 3036-302: Elbdeichhinterland	zwischen Cumlosen und Wittenberge
DE 3036-303: Krähenfuß	westlich von Wittenberge
DE 3036-303: Krähenfuß	westlich von Wittenberge, zweites Gebiet
DE 3036-304: Elbdeichvorland	östlich von Wittenberge
DE 3036-302: Elbdeichhinterland	zwischen Garsedow und Scharleuk
DE 3036-304: Elbdeichvorland	westlich von Rühstädt, der Elbe folgend
DE 3036-302: Elbdeichhinterland	westlich an Rühstädt angrenzend
DE 3036-304: Elbdeichvorland	zwischen Gnevsdorf bis südlich Quitzöbel
DE 3137-301: Lennewitzer Eichen	südöstlich von Quitzöbel
DE 3138-303: Quitzöbler Dünengebiet	östlich von Quitzöbel
DE 2736-301: Löcknitz-Oberlauf und angrenzende Wälder (MV)	im Osten des Amtes Grabow, folgt dem Verlauf der Löcknitz
DE 2635-303: Ludwigscluster-Grabower Heide, Weißes Moor und Griemoor	nördlich der Ortslage Grabow
DE 2735-301: Alte Elde zwischen Wanzlitz und Krohn	folgt dem Eldeverlauf zwischen Eldena und Grabow
DE 2835-303: Meynbach bei Krinitz	im Süden des Amtes Grabow
DE 2634-301: Schlosspark Ludwigslust	westliches Stadtgebiet von Ludwigslust
DE 2834-303: Karenzer und Kalißer Heide	zwei Gebiete, einmal südlich von Karenz und nördlich von Kaliß im Amt Malliß-Dömitz
DE 2833-306: Elbtallandschaft und Löcknitzniederung bei Dömitz	folgt dem Elbeverlauf und der Landesgrenze zu Niedersachsen und Brandenburg
DE 2733-301: Lübtheener Heide und Trebser Moor	östlich von Lübtheen
DE 2533-301: Sude mit Zuflüssen	folgt dem Sudelauf nördlich von Lübtheen
DE 2732-371: Rögnitzniederung	folgt der Rögnitz und der Landesgrenze zu Niedersachsen im südwesten von Lübtheen
DE 2630-303: Elbtallandschaft und Sudeniederung bei Boizenburg	im Süden des Amtes Boizenburg-Land
DE 2531-303: Schaaletal mit Zuflüssen und nahegelegenen Wäldern und Mooren	folgt der Schaaale zwischen Gülze und Klein Bengerstorf
DE 2630-301: Wiebendorfer Moor	östlich von Zahrendorf, Amt Boizenburg-Land
DE 2530-301: Bretziner Heide	nördlich von Wiebendorf, Amt Boizenburg-Land
DE 2530-373: Kleingewässerlandschaft zwischen Greven und Granzin (LWL)	im Norden des Amtes Boizenburg-Land

DE 2530-372: Kleingewässer bei Leisterförde (LWL)	westlich von Greven im Bereich der Landesgrenze zu Schleswig-Holstein
DE 2529-304: Stecknitz-Delvenau	folgt der Stegnitz westlich von Boizenburg, im Bereich der Landesgrenze zu Schleswig-Holstein
<b>SPA</b>	
SPA 7: Agrarlandschaft Prignitz-Stepenitz	im nordöstlichen Bereich der amtsfreien Kreisstadt Perleberg
SPA 17: Agrarlandschaft Prignitz-Stepenitz	im westlichen Bereich der amtsfreien Gemeinde Karstädt
SPA 31: Unteres Elbetal	folgt dem Elbeverlauf im Amt Lenzen-Elbtalaue
SPA 28: Unteres Elbetal	nördlich von Lenzen, bis in den südlichen Bereich der Gemeinde Karstädt
SPA 34: Agrarlandschaft Prignitz-Stepenitz	bei Neu Premslin, südöstlich der B 5
SPA 38: Unteres Elbetal	nördlich von Cumlosen
SPA 48: Unteres Elbetal	Nördlich von Wittenberge
SPA 61: Unteres Elbetal	an das östliche Stadtgebiet von Wittenberge angrenzend
SPA 66: Unteres Elbetal	östlich von Wittenberge
SPA 70: Unteres Elbetal	folgt dem Elbeverlauf im Bereich der Stadt Wittenberge und des Amtes Bad Wilsnack/Weisen
SPA 50: Unteres Elbetal	zwischen Wittenberge und Bad Wilsnack
SPA 54: Unteres Elbetal	südlich von Perleberg
SPA 79: Unteres Elbetal	südöstlich von Bad Wilsnack
SPA 68: Unteres Elbetal	Östlich von Bad Wilsnack, erstreckt sich bis in die Gemeinde Plattenburg
SPA 19: Feldmark Stolpe-Karrenzin-Dambeck-Werle	östlicher Bereich des Amtes Grabow
SPA 65: Feldmark Eldena bei Grabow	nördlich von Eldena
SPA 40: Elbetal	Elbetal im Bereich der Ämter Malliß-Dömitz, Stadtgebiet Lübtheen und Amt Boizenburg-Land
SPA 51: Lübtheener Heide	östlich von Lübtheen
SPA 45: Feldmark Wöbbelin-Fahrbinde	nördlich von Ludwigslust
SPA 43: Feldmark Rastow-Kraak	nördlich von Ludwigslust und südwestlich von Rastow
SPA 56: Schaale-Schilde	Der südliche Bereich des SPA bei Groß Bengerstorf
SPA 41: Wallmoor und Mühlenbach bei Leisterförde-Schwanheide	im Westen des Amtes Boizenburg-Land
<b>Lüneburg, Lüchow-Dannenberg:</b>	
<b>FFH</b>	
DE 2528-331: Elbeniederung zwischen Schnackenburg und Geesthacht	Entlang der Elbe durch die SG Scharnebeck, die Stadt Bleckede, die SG Elbtalaue, die SG Lüchow /Wendland) und die SG Gartow
DE 2526-331: Gewässersystem der Luhe und der unteren Neetze	Vorwiegend im nördlichen Gebiet der Gem. Brietlingen (SG Scharnebeck, LK Lüneburg)
DE 2830-331: Buchen- und Eichenwälder in der Göhrde (mit Breeser Grund)	Im nord-östlichen Bereich der Gem. Göhrde (SG Elbtalaue, LK Lüneburg-Dannenberg)
DE 2934-301: Nemitzer Heide	In den Gem. Trebel und Prezelle (SG Lüchow (Wendland) bzw. Gartow, LK Lüneburg-Dannenberg)
<b>SPA</b>	
DE 2832-401: Niedersächsische Mittelbe	Großflächiges Gebiet in der SG Scharnebeck, Stadt Bleckede, Amt Neuhaus (LK Lüneburg) und SG Elbtalaue, SG Lüchow (Wendland), SG Gartow (LK Lüneburg-Dannenberg)

DE 2931-401: Drawehn	Einzelne Flächen in den Gem. Hitzacker (Stadt), Gohrde und Zernien (LK Lüchow-Dannenberg)
DE 2933-401: Lucie	Gebiet u. a. innerhalb der Gem. Dannenberg (Elbe), Gusborn, Langendorf (SG Elbtalaue, LK Lüchow-Dannenberg)
DE 3034-401: Nemitzer Heide	Gebiet u. a. in den Gem. Trebel und Prezelle (SG Lüchow (Wendland) bzw. Gartow, LK Lüchow-Dannenberg)
<b>Stendal, Jerichower Land, Börde:</b>	
<b>FFH</b>	
Der Most bei Harpe (FFH0006LSA)	Untersuchungsgebietsgrenze, Moor südwestlich Gollensdorf
Aland-Elbe-Niederung nördlich See- hausen (FFH0007LSA)	Niederungsgebiet nördlich Seehausen bis zur Elbmündung
Elbaue Beuster-Wahrenberg (FFH0008LSA)	Elbbereich ab Werben bis Wahrenberg entlang der Grenze zu Brandenburg
Elbaue Werben und Alte Elbe Kan- nenberg (FFH0009LSA)	Elbaue zwischen Sandau und Werben
Havel nördlich Havelberg (FFH0010LSA)	Havelbereiche nördlich Havelberg
Untere Havel und Schollener See FFH0011LSA	Schollene bis Havelberg entlang der Havel und Schollener See
Elbaue zwischen Sandau und Schön- hausen (FFH0012LSA)	Elbaue zwischen Sandau und Schönhausen
Jederitzer Holz (FFH0013LSA)	östlich Havelberg
Kamernscher See und Trübengraben (FFH0014LSA)	Gewässer nordöstlich von Wust, westlich Scharlibbe und westlich Kietz
Binnendüne bei Scharlibbe (FFH0015LSA)	Trockenstandort südöstlich von Scharlibbe
Klüdener Pax-Wanneweh östlich Cal- vörde (FFH0025LSA)	Plangebietsgrenze nördlich von Haldensleben bei Uthmöden
Colbitzer Lindenwald (FFH0029LSA)	auf 220 Hektar geschlossener Lindenwald in der Letzlinger Heide
Paxförde nordöstlich Haldensleben (FFH0030LSA)	Heideflächen in der Letzlinger Heide nordöstlich von Haldensle- ben
Schießplatz Bindfelde östlich Stendal (FFH0032LSA)	Trockenstandort nördlich Bindefelde
Fenn in Wittenmoor (FFH0033LSA)	Kesselmoor südöstlich der Ortslage Fenn
Tanger-Mittel- und Unterlauf (FFH0034LSA)	westlich von Lüderitz bei Brunkau
Mahlpfuhler Fenn (FFH0035LSA)	Hangmoor westlich Tangerhütte
Süpling westlich Weißewarte (FFH0036LSA)	Waldflächen westlich Weißewarte
Elbaue bei Bertingen (FFH0037LSA)	Anschluss an FFH 0038 bis Schleuse Parey
Elbaue südlich Rogätz mit Ohremün- dung (FFH0038LSA)	Anschluss an FFH 0050 bei Burg bis südlich Rogätz
Güsener Niederwald (FFH0039LSA)	Waldflächen östlich von Güsen
Bürgerholz bei Burg (FFH0040LSA)	Waldgebiet nördöstlich Burg
Der Most bei Harpe (FFH0006LSA)	Untersuchungsgebietsgrenze, Moor südwestlich Gollensdorf
Olbe- und Bebertal südlich Haldensle- ben (FFH0048LSA)	Niederungsbereiche westlich von Hundisburg
Heide südlich Burg (FFH0049LSA)	Grünlandbereich südlich Burg zwischen Waldgrenzen
Elbaue zwischen Saalemündung und Magdeburg (FFH0050LSA)	südwestliche Untersuchungsgebietsgrenze entlang der Elbe zwischen Gommern und Burg
Ringelsdorfer-, Gloine- und Dreibach- system im Vorflämung (FFH0055LSA)	Waldbereich südlich von Tucheim
Elbaue zwischen Derben und Schön-	Elbaue zwischen Derben und Schönhausen

hausen (FFH0157LSA)	
Fiener Bruch (FFH0158LSA)	flache Niederungslandschaft bei Genthin
Klietzer Heide (FFH0159LSA)	Heideflächen östlich Hohengören
Binnendüne Gommern (FFH0166LSA)	Binnendüne südlich an Ortslage Gommern direkt angrenzend
Eschengehege nördlich Tangerhütte (FFH0171LSA)	Waldflächen nördlich Tangerhütte
Erlen-Eschenwald westlich Mahlwinkel (FFH0184LSA)	Zusammenhängende Waldfläche zwischen Mahlwinkel und Wenddorf
Tanger-Mittel- und Unterlauf (FFH0034LSA)	Waldbereich südlich Brunkau
<b>SPA</b>	
Zerbster Land	Ackerflächen südlich von Leitzkau zwischen Lübs und B184
Untere Havel/Sachsen-Anhalt und Schollener See	Havelniederung entlang der Landesgrenze von Schollene bis Havelberg, Gebiet um den Schollener See
Aland-Elbe-Niederung	nördliche Landesgrenze zu Brandenburg, entlang der Elbe von Werben bis Wittenberge/ Aulosen
Vogelschutzgebiet Klietzer Heide	Heidegebiet südöstlich von Klitz
Elbaue Jerichow	im Verlauf mit der Elbe in unterschiedlicher Ausdehnung von Hohenwarthe bis Werben
Vogelschutzgebiet Colbitz-Letzlinger Heide	nordöstlich Haldensleben bis Uchtspringe, entlang der Plangebietsgrenze
Vogelschutzgebiet Fiener Bruch	östlich der B107- nördlich Tucheim bis Karow (Landesgrenze)
Mahlpfuhler Fenn	Waldgebiet westlich von Tangerhütte

Source:  
[http://www.umwelt.niedersachsen.de/live/live.php?navigation\\_id=2540&article\\_id=9124&psmand=10](http://www.umwelt.niedersachsen.de/live/live.php?navigation_id=2540&article_id=9124&psmand=10), Stand: 05.05.2010; ROK-Daten Sachsen- Anhalt; Landesumweltamt Brandenburg; Landesamt für Umwelt, Natur und Geologie Mecklenburg-Vorpommern

**Table 32: System of protected areas Landschaftsschutzgebieten (LSG) and Naturschutzgebieten (NSG) in the study area**

Protected area	Location/course in the study area
<b>Prignitz, Ludwigslust:</b>	
<b>LSG</b>	
Brandenburgische Elbtalaue	Amt Lenze-Elbtalaue bis Wittenberge, südlicher Teil der amtsfreien Gemeinde Karstädt
Brandenburgische Elbtalaue	östlich von Wittenberge, Amt Bad Wilsnack/Weisen, südlicher Teil der Kreisstadt Perleberg
Osargebiet bei Perleberg	Nördlich von Perleberg bis Groß Linde
L 73: Stecknitz/Delvenau-Niederung	westlich von Boizenburg, der Landesgrenze zu Schleswig-Holstein folgend
L 63: Mecklenburgisches Elbetal	verläuft im südlichen Bereich der Ämter Boizenburg-Land und Malliß-Dömitz sowie im Bereich von Lübtheen
L 133: Boize	folgt dem Verlauf der Boize, zwischen Boizenburg in Richtung Zarrentin
L 105: Wanzeberg	im Bereich von Malliß, Amt Dömitz-Malliß
L 131: Unteres Elde- und Meynbachtal	folgt den Flussläufen zwischen Krinitz, Eldene, Grabow in Richtung Neustadt-Glewe
L 6: Schlosspark Ludwigslust mit anschließendem Bruch- und Mischwald sowie oberer Rögnitzniederung	westlich von Ludwigslust
L 22a: Lewitz (Ludwigslust)	nördlich von Wöbbelin, Amt Ludwigslust-Land
<b>NSG</b>	



Werder Besandten	Gemeinde Lenzerwische bei Besandten, Amt Lenzen-Elbtalaue, dem Elbeverlauf folgend
Werder Kietz	Gemeinde Lenzerwische bei Kietz, Amt Lenzen-Elbtalaue, dem Elbeverlauf folgend
Werder Mödlich	Gemeinde Lenzerwische, südlich von Mödlich, dem Elbeverlauf folgend
Lenzen-Wustrower Elbniederung	Gemeinde Lenzen, Amt Lenzen-Elbtalaue, dem Elbeverlauf folgend
Gandower Schweineweide	Gemeinde Lenzen, südöstlich von Gandow
Elbdeichvorland	von Cumlosen bis Wittenberge, dem Elbeverlauf folgend
Elbdeichhinterland	Gemeinde Cumlosen bis westlich von Wittenberge
Breetzer See	Südwestlich von Breetz, Amt Lenzen-Elbtalaue
Rambower Torfmoor	im Norden des Amtes Lenzen-Elbtalaue, zwischen Mellen und Boberow
Gadow	Gemeinde Lanz, im Raum Gadow, nördlich der B 195
Kuhwinkel	Gemeinde Karstädt, südlich von Nebelin
Wittenberge-Rühstädter Elbniederung	dem Elbeverlauf folgend zwischen Wittenberge und Rühstädt
Heideweiher	Amt Bad Wilsnack/Weisen, nordöstlich von Kuhblank
Jackel	Amt Bad Wilsnack/Weisen, südlich von Karthan
Elbdeichvorland	Amt Bad Wilsnack/Weisen, zwischen Abbendorf und südlich von Quitzöbel
Plattenburg	Gemeinde Plattenburg, östlich der Ortslage Plattenburg
Karthane-Niederung	Gemeinde Plattenburg, im Bereich von Klein Leppin, Schrepkow und Schönhagen
Mörickeluch	südlich von Perleberg, in zentraler Lage im Perleberger Stadtforst
Mendeluch	
Stepenitz	Perleberg, folgt dem Verlauf der Stepenitz über Retzin und Groß Pankow
Schlatbach	nördlich von Perleberg, zwischen Groß Linde und Gulow-Steinberg
Der Weinberg bei Perleberg	nördlich von Perleberg und südlich von Groß Buchholz
N 235: Steckenitz-Delvenau	westlich von Boizenburg, der Landesgrenze zu Schleswig-Holstein folgend
N 233: Pipermoor/ Mühlbachtal	nördlich von Schweinheide, Amt Boizenburg-Land
N 236: Wallmoor	südlich von Leisterförde, Amt Boizenburg-Land
N 152: Elbhang „Vierwald“	südwestlich von Boizenburg, dem Elbeverlauf folgend
N 151a: Elbdeichvorland	südlich von Boizenburg, dem Elbeverlauf folgend
N 165: Sudeniederung zwischen Boizenburg und Besitz	der Sude folgend zwischen Boizenburg und Besitz
N 169: Schaaleniederung von Zahrendorf bis Blücher	zwischen Zahrendorf und Blücher
N 113b: Schaalelauf	zwischen Zahrendorf bis nördlich von Bengerstorf
N 106: Bretziner Heide	östlich von Badekow,
N 148: Bollenberg bei Gothmann	südlich von Boizenburg
N 174: Togerwiesen bei Garlitz	westlich von Lübtheen
N 167: Rögnitzwiesen bei Neu Lübtheen	südwestlich von Lübtheen
N 172: Rüterberg	westlich von Dömitz
N 177: Löcknitztal-Altlauf	südwestlich von Dömitz
N 55: Binnendünen bei Klein Schmölen	östlich von Dömitz

N 48: Blaues Wasser	östlich von Eldena
N 77: Weißes Moor	nördlich von Grabow bei Heidehof
<b>Lüneburg, Lüchow-Dannenberg:</b>	
<b>LSG</b>	
Weckenstedt	Nord-östlicher Bereich der Gemeinde Brietlingen, nord-westlicher Bereich Gemeinde Echem, LK Lüneburg
Adendorfer Moor	Teilbereich in der Gemeinde Scharnebeck, LK Lüneburg, an der Grenze zur Gemeinde Adendorf
Gebiet um Neumühlen	Südlicher Bereich der Gemeinde Lüdersburg, LK Lüneburg
Forstort Spröckel	Gemeinde Bleckede, LK Lüneburg, süd-westlich von Bleckede
Dünengelände ostwärts von Forst Spröckel	Gemeinde Bleckede, LK Lüneburg, östlich vom LSG Forstort Spröckel, süd-westlich von Bleckede
Waldgebiet zwischen Alt Garge und Barskamp	Süd-östliches Gebiet der Gemeinde Bleckede, LK Lüneburg, zw. K 24 und L 231
Steilufer der Elbe zwischen Alt Garge und Walmsburg	Süd-östliches Gebiet der Gemeinde Bleckede, LK Lüneburg, nördlich der K 24
Staatsforst Schieringen	Süd-östliches Gebiet der Gemeinde Bleckede, LK Lüneburg, zw. L 231 und L 232 bei Schieringen
Elbhöhen-Drawehn	Großes zusammenhängendes Gebiet im westlichen Teil des LK Lüchow-Dannenberg, mit Teilbereichen im süd-östlichen LK Lüneburg
In der Elbmarsch	Gemeinde Dannenberg (Stadt), LK Lüchow-Dannenberg
Langendorfer Berg	Nördlicher Bereich der Gemeinde Trebel, südlicher Bereich der Gemeinde Langendorf, sowie Teilbereiche in den Gemeinden Gusborn und Gorleben
<b>NSG</b>	
Bennerstedt	Gemeinde Scharnebeck, LK Lüneburg, Teilgebiet nördlich der Kreisstraße 29
Fehlingsbleck	Westlich von Echem am Elbe-Seitenkanal, LK Lüneburg
Maujahn	Nördlich von Schmarsau, zwischen B 216, B 248 und B 191, LK Lüchow-Dannenberg
Die Lucie	Südlich von Gusborn, zwischen L256 und K 2, LK Lüchow-Dannenberg
<b>Stendal, Jerichower Land, Börde:</b>	
<b>LSG</b>	
Ostrand der Arendseer Hochfläche (LSG0005)	Nordwestlich Arneburg bis westlich Seehausen
Untere Havel (LSG0006)	Niederungsbereich der Havel; zieht sich weiter linear bis Tangermünde
Arneburger Hang (LSG0009)	Steilhang der Elbe nördlich Arneburg bis Billberge
Uchte-Tangerquellen und Waldgebiete (LSG0010)	nordwestlich Tangerhütte bis zur Untersuchungsgebietsgrenze
Flechtinger Höhenzug (LSG0013)	ragt bei Haldensleben in das Untersuchungsgebiet
Lindhorst - Ramstedter Forst (LSG0014)	zwischen Zielitz und Colbitz
Barleber und Jersleber See m. Ohre- Elbniederung (LSG0015)	Bereiche zwischen Hohenwarthe und Wolmirstedt
Umflutehle- Külzauer Forst (LSG0016)	südwestlich Burg bis Untersuchungsgebietsgrenze
Möckern- Magdeburgerforst (LSG0017)	Kleiner Teilbereich des LSG ragt in das Untersuchungsgebiet bei Hohenseeden
Mittlere Elbe (LSG0023; LSG0051)	ragt in Untersuchungsgebiet nordwestlich bis südöstlich

	von Gommern
Aland-Elbe-Niederung (LSG0029)	Niederungsbereiche von Aland und Elbe zwischen Aulosen und Sandau
Zerbster Land (LSG0030)	ragt östlich von Lübs in das Untersuchungsgebiet hinein
Altmarkische Wische (LSG0074)	Niederungsgebiet nördlich Altenzaun bis Schönberg grenzt an LSG Aland-Elbe-Niederung und Untere Havel
Hohe Börde LSG0080	Tangiert das Gebiet im Bereich bei Dahlenwarleben
Elbtalaue (LSG0092)	Elbbereiche Tangermünde- Hohenwarthe
Tanger - Elbeniederung (LSG0097)	südlich Tangermünde bis Bittkau
<b>NSG</b>	
Garbe-Alandniederung (NSG0003)	Stromtalaue, 9 km westlich von Wittenberge
Stremel (NSG0004)	südöstlich Havelberg
Jederitzer Holz (NSG0005)	südlich Havelberg
Schollener See (NSG0006)	westlich Schollene
Fenn (NSG0008)	9 km südwestlich von Stendal innerhalb der Ortslage Wittenmoor
Arneburger Hang (NSG0009)	Steilhang bei Storkau und Billberge
Schelldorfer See (NSG0010)	westlich Schelldorf
Colbitzer Lindenwald (NSG0014)	Wald nordwestlich Colbitz
Rogätzter Hang - Ohremündung (NSG0015)	Ohremündungsbereich südlich Rogätz
Weinberg bei Hohenwarthe ( NSG0017)	Steilhang an der Elbe südlich Hohenwarthe
Bucher Brack-Bölsdorfer Haken (NSG0043)	westlich Jerichow
Mahlpfuhler Fenn (NSG0044)	Hangmoor westlich Tangerhütte
Alte Elbe zwischen Kannenberg und Berge NSG0045	südwestlich von Havelberg
Elbaue Beuster-Wahrenberg (NSG0053)	Überflutungsau der Elbe bei Wittenberge
Ringelsdorf (NSG0145)	Feuchtgebiet nördlich der A 2 ca. 12 km westlich von Ziesar
Bürgerholz bei Burg (NSG0156)	Waldgebiet nördöstlich Burg
Fiener Bruch (NSG0169)	Niederungslandschaft bei Genthin
Taufwiesenberge ( NSG0189)	20 km nordöstlich von Magdeburg; Mosaik Wald, Wasser, Heide
Harper Moor (NSG0273)	Moor südwestlich Gollensdorf
Elsholzwiesen (NSG0193)	Wiesen zwischen Bölsdorf und Buch
Aland-Elbe- Niederung (NSG0388)	Niederungsbereiche von Aland und Elbe zwischen Aulosen und Sandau

Source:  
[http://www.umwelt.niedersachsen.de/live/live.php?navigation\\_id=2543&article\\_id=9065&psmand=10](http://www.umwelt.niedersachsen.de/live/live.php?navigation_id=2543&article_id=9065&psmand=10), Stand: 05.05.2010; ROK- Daten Sachsen – Anhalt; <http://www.lvwa-natur.sachsen-anhalt.de>, Landesamt für Umwelt, Landesumweltamt Brandenburg; Natur und Geologie Mecklenburg-Vorpommern

**Table 33: Drinking water protected areas in the study area**

Drinking water protected area	Location/course in the study area
<b>Prignitz, Ludwigslust:</b>	
Lenzen	nordwestlich von Lenzen, Amt Lenzen-Elbtalaue
Ferbiz	nördlich von Ferbitz, Amt Lenzen-Elbtalaue
Wittenberge	nördlich von Wittenberge
Wittenberge	nordöstliche Erweiterung des Schutzgebietes
Bälow	südlich von Bälow, Amt Bad Wilsnack/Weisen
Bad Wilsnack	östlich von Bad Wilsnack
Glöwen	nördlich von Glöwen, Gemeinde Plattenburg
Bendelin	östlich von Bendelin, Gemeinde Plattenburg
Barenthin	südlich von Barenthin, an der Landkreisgrenze
Görike	südlich von Görike, Gemeinde Plattenburg
Döllen	südwestlich von Döllen
Vettin	östlich von Lindenberg
Krampfer	nordwestlich von Krampfer, Stadt Perleberg
Wüsten-Buchholz	nördlich von Perleberg
Gulow	westlich von Gulow, Stadt Perleberg
Karstädt	zentrale Lage um Karstädt
Dallmin	nördlich von Dallmin, Gemeinde Karstädt
Seetz	nördlich von Seetz, Gemeinde Karstädt
Groß Warnow	östlich von Groß Warnow, Gemeinde Karstädt
Zapel	zentrale Lage um Zapel, Gemeinde Karstädt
Gößlow	nordöstlich von Lübtheen
Boizenburg	nördlich der Stadt Boizenburg
Lübesse/Ortkrug	südwestlich von Banzkow
Ludwigslust	im Umfeld der Kreisstadt Ludwigslust
Wanzlitz	östlich von Eldena
Prislich	östlich von Grabow
Brunow	am östlichen Ortsrand von Brunow
<b>Lüneburg, Lüchow-Dannenberg:</b>	
Lüdershausen	in den Gem. Brietlingen und Scharnebeck (SG Scharnebeck, LK Lüneburg)
Schutschur	Gemeinde Neu-Darchau (SG Elbtalaue, LK Lüchow-Dannenberg)
Kähmen	in den Gemeinden Hitzacker, Göhrde und Karwitz (SG Elbtalaue, LK Lüchow-Dannenberg)
Wibbese	in den Gemeinden Karwitz, Zernien, Jameln (SG Elbtalaue, LK Lüchow-Dannenberg)
Höhbeck	Gemeinde Höhbeck (SG Gartow, LK Lüneburg-Dannenberg)
<b>Stendal, Jerichower Land, Börde:</b>	
Colbitz-Letzlinger Heide	großes Gebiet südlich bis nordöstlich von Colbitz
Seehausen	südwestlich Seehausen
Osterburg	Krumker Holz nördlich Osterburg
Boock	westlich Ortslage Einwinkel (VG Seehausen)
Flessau	südwestlich Ortslage Flessau (EG Osterburg)
Altenzaun II	Westlich Ortslage Altenzaun (VG Arneburg-Goldbeck)

Drinking water protected area	Location/course in the study area
Klietz	Klietzer Heide (VG Elbe-Havel-Land)
Tangermünde	nördlich Tangermünde
Schernebeck	westlich Schernebeck (bei Tangerhütte)
Tangerhütte	westlich Tangerhütte
Grieben	westlich Grieben
Born	kleines Gebiet an Born angrenzend (bei Colbitz)
Haldensleben	nördlich Haldensleben
Havelberg	Ortslage Havelberg
Stendal-Süd	südlich von Stendal
Stendal-Nord	nordwestlich von Stendal
Parchau	südlich Parchau (bei Burg)
Tucheim	östlich Tucheim an OL grenzend
Genthin 2 Scharteucke	nordwestlich Genthin und südlich Redekin

Quelle: www.nlwkn.niedersachsen.de, Stand: 05.05.2010; ROK- Daten Sachsen – Anhalt; Landesamt für Umwelt, Gesundheit und Verbraucherschutz Brandenburg; Landesamt für Umwelt, Naturschutz und Geologie Mecklenburg-Vorpommern, Kartenportal Umwelt

**Table 34: Ports, marinas, canoe resting places in the study area (2010)**

County	Ports, marinas, canoe resting places	Berths
Prignitz	Cumlosen Bootsclub Alter Zollhafen, bei Lenzen,	20
	Sportboothafen Lenzen,	40
	Bootsanleger Hinzdorf bei Wittenberge,	18
	Nedwighafen Wittenberge,	40
	Bootsanleger Abbendorf, bei Rühstädt	12
Ludwigslust	Dömitzer Hafen,	16
	Marina Dömitz,	40
	Motoryachtclub Dömitz,	5
	Wasserwanderrastplatz Neu Kaliß,	6
	Camping und Bootshafen Eldena,	37
	Wasserwanderrastplatz Eldekrug bei Grabow,	17
	Wasserwanderrastplatz Hechtfortschleuse bei Grabow	35
Lüneburg	Sportboothafen Bleckede/ Wendewisch,	50
	Hafen Bleckede	8
	Bootsanleger Darchau/Neuhaus	1
Lüchow-Dannenberg	Sportboothafen Schnackenburg	24
	Sportboothafen Gorleben	k.A.
	Sportboothafen Hitzacker	100
	Sportboothafen Neu Darchau	k.A.
	Bootsanleger Hitzacker	k.A.
	Bootsanleger Neu Darchau	k.A.
Stendal	Wassersportrevier Elbe:	
	Rastplatz Wahrenberg, Kanuten	k. A.
	Rastplatz Schönberg	k. A.
	Rastplatz für Kanuten Räbel	k. A.
	Rastplatz Sandau	k. A.
	Rastplatz für Kanuten Schönfeld	k. A.
	Yachthafen Arneburg	35
	Rastplatz für Kanuten Storkau	k. A.
	Schutzhafen Tangermünde, Sportboote	46

County	Ports, marinas, canoe resting places	Berths
	<p>Tangermünder Wassersportverein e.V., Sportboote Tangermünder Ruderclub 1906 e.V., Ruderer Rastplatz Schelldorf für Kanuten Anlegesteg Kanuten Ferchland Rastplatz für Kanuten Bittkau Boots-Club Sandfurth</p> <p>Wassersportrevier Havel: Vor und nach Schleuse Gnevsdorf Liegemöglichkeiten für Sportboote Rastplatz im Hafen Werben Gaststätte „Dörpkrog an Diek“ Sportbootverein Nitzow Winterhafen Havelberg, Kanuten und Motorboote Havelberger Wassersportverein e.V. Yachthafen Havelberg (Wassertouristikzentrum) Rastplatz Kanuten Velgast Yachthafen Garz Gaststeg des 1. Motorboot- und Segelverein Strodehne Anlegemöglichkeit Molkenberg Rastplatz Schollene Rastplatz Kreuzberg Biwakplatz Gülpe</p>	<p>15 k. A. k. A. 4 k. A. k. A.</p> <p>k. A. k. A. 1 k. A. k. A. k. A. 100 k. A. 10 6 k. A. k. A. k. A. k. A.</p>
Jerichower Land	<p>Wassersportrevier Elbe: Rastplatz Kanuten Kehnert Rastplatz; Kanuten Blumenthal Anleger „Waldschänke“ Hohenwarthe Gaststeg Gemeinde Hohenwarthe, Motorboote Rastplatz; Kanuten und Motorsport Zerben</p> <p>Wassersportrevier Elbe-Havel-Kanal: Sportgemeinschaft Blau-Weiß Niegripp e.V. TuS EMPOR Burg e.V. Hafen der Wassersportfreunde Burg Yachthafen Burg Sportbootliegestelle Burg Sportbootliegestelle Güsen Güsener Handball-Club e.V. Gaststeganlage der Gemeinde Elbe-Parey Wassersportverein Parey / Elbe e.V. Yachthafen SV Chemie Genthin Anleger Roßdorf/ Dunkelforth</p>	<p>k. A. k. A. k. A. 9 k. A.</p> <p>2 5 7 15 k. A. k. A. 1 8 k. A. 10 k. A.</p>
Börde	<p>Wassersportrevier Elbe: Sportclub Kanu Rogätz e.V. Wassersportgemeinschaft Rogätz Elbe e.V. Rastplatz; Kanuten Heinrichsberg bds. Bootsanleger/ Sportboot Bertingen, Wassersportrevier Mittellandkanal: Sportboothafen Haldensleben Sportbootliegestelle Vahldorf Sportbootliegestelle Vorhafen zum Schiffshebewerk</p>	<p>k. A. 4 k. A. k. A.</p> <p>20 k. A. k. A.</p>

Source: Tourismusverband Prignitz e.V.; Tourismusverband Mecklenburg - Schwerin e.V.  
<http://www.sachsen-anhalt.de>- Wassertourismus in Sachsen-Anhalt, [www.blauesband.de](http://www.blauesband.de)



**Table 35: Overview transport infrastructure in the study area (2009)**

Transport	Location/course in the study area
<b>Prignitz</b>	
Autobahn	
---	Keine Autobahn im Untersuchungsgebiet vorhanden
Bundesstraße	
<i>B195, B189, B5; B107</i>	<p>Die B195 verläuft in Ost-West Richtung durch das Untersuchungsgebiet. Von der Landesgrenze zu Mecklenburg-Vorpommern verläuft sie entlang der Elbe bis Lenzen (Elbe) und von dort durch den Naturpark Elbetal, bis sie im Osten des Untersuchungsgebiets in die B189 mündet.</p> <p>Die B189 verläuft in Nordost-Südwest Richtung durch den östlichen Teil des Untersuchungsgebietes. Sie umgeht Perleberg und Wittenberge westlich. Bei Wittenberge trifft die B189 auf die B195 und verläuft weiter nach Süden über die Landesgrenze nach Sachsen-Anhalt.</p> <p>Die B5 verläuft in Nordwest-Südost Richtung durch das gesamte Untersuchungsgebiet über Karstädt und Perleberg. Die B107 verläuft in Nord-Süd Richtung an der östlichen Grenze des Untersuchungsgebietes.</p>
Landesstraße	
<i>L13, L131, L132, L133, L134, L135, L136, L137, L12, L122, L11, L10, L101</i>	<p>Die L137, L135 und L136 verlaufen im westlichen Teil des Untersuchungsgebiets im Amt Lenzen-Elbtalaue über die Landesgrenze nach Mecklenburg-Vorpommern (hier weiter als L7, L8).</p> <p>Die L13 verbindet Lenzen(Elbe) mit Karstädt und verläuft an der westlichen Grenze des Naturparks Elbetal. Die L134 zweigt in Mellen von der L13 ab und verläuft an der Landesgrenze zu Mecklenburg-Vorpommern entlang. Sie kreuzt die B5 in Groß Warnow und mündet in die L133, die von der B5 nach Dallmin führt.</p> <p>Die L132 zweigt westlich von Karstädt von der B5 ab und führt nach Postlin. Von Postlin aus stellt die B131 eine Nord-Süd Verbindung zwischen Karstädt und Dallmin dar.</p> <p>Die L12 verläuft in Ost-West Richtung zwischen der B195 bei Babekuhl und Perleberg.</p> <p>Die L11 verbindet Wittenberge mit Bad Wilsnack und mündet da in die L10.</p> <p>Die L10 verläuft in Nord-Süd Richtung über Perleberg und Bad Wilsnack durch das Untersuchungsgebiet und über die Landesgrenze nach Sachsen-Anhalt.</p> <p>Die L101 verbindet die L10 mit der B5 auf Höhe Groß Werzin.</p>
Kreis- und Gemeindestraßen	
<i>K7038, K7031, K7007 und Gemeindestraßen</i>	Die Kreisstraßen und Gemeindestraßen im Untersuchungsgebiet sind wichtige Verkehrsverbindungen zwischen den Gemeinden und innerhalb der Gemeinden.
Schiennetz	
<i>Normalspurige Strecken</i>	Schiennestrecken verlaufen einerseits in Nord-Süd Richtung über Karstädt, Wittenberge, Bad Wilsnack und andererseits in Ost-West Richtung über Perle-

Transport	Location/course in the study area
	berg nach Wittenberge. Von Wittenberge aus verläuft eine Schienenstrecke über die Landesgrenze nach Sachsen-Anhalt.
ÖPNV/Busverkehr	
<i>Bus- und Bahnverbindungen</i>	Verbindungen des ÖPNV werden durch die DB – Die Bahn und durch die VGP – Verkehrsgesellschaft Prignitz mbH realisiert. Es gibt überregionale Bahnverbindungen RE4 und RE6 und ein engmaschiges Netz von Buslinien (einschl. Schulbusbetrieb). Durch die Zugehörigkeit der verschiedenen Verkehrsunternehmen zum Verkehrsverbund Berlin-Brandenburg können Fahrgäste einheitliche Tarife im gesamten Untersuchungsraum nutzen.
Binnenschifffahrt und Häfen	
<i>Bundeswasserstraße der Klasse VIb (Elbe), Elbfähren, Industriehafen Wittenberge, Stadthafen Wittenberge</i>	Die Elbe begrenzt das Untersuchungsgebiet im Südwesten. Der einzige Binnenhafen im Untersuchungsgebiet befindet sich in Wittenberge. Der Stadthafen wird überwiegend touristisch genutzt. Ein neuer Binnenhafen wird im Industriegebiet Süd entwickelt. Dieser ist im von der Bundesregierung im Juni 2009 verabschiedeten Nationalen Hafenkonzept für die See- und Binnenhäfen Bestandteil des Nord- Ost Clusters und soll zukünftig eine bedeutende Rolle im schiff-fahrtsaffinen Seehafenhinterlandverkehr des größten Deutschen Seehafens, Hamburg, spielen. Güterumschlag 2009: 8.000 t landwirtschaftliche Erzeugnisse und Düngemittel (Amt für Statistik Berlin-Brandenburg)
Fähren	
<i>Elbfähre Elbfähre</i>	Lenzen-Pevesdorf Lütkenwisch-Schnackenburg
Flussquerungen (Brücken)	
<i>Elbe</i>	Straßenbrücke der B 189 westlich von Wittenberge (Geestgottberg-Wittenberge)
<i>Elbe</i>	Eisenbahnbrücke östlich von Wittenberge
Luftverkehr	
<i>Segelfluggplatz Perleberg</i>	Betreiber möchte Segelfluggplatz zum Verkehrslandeplatz ausbauen
<a href="#">Ludwigslust</a>	
Autobahn	
<i>A24 Hamburg-Berlin</i>	Die A24 kreuzt das Untersuchungsgebiet in Ost-West-Richtung im Norden des Amtes Ludwigslust-Land.
Bundesstraße	
<i>B195, B191, B5; B106</i>	Die B195 verläuft in Nord-Süd Richtung im äußersten Westen des Untersuchungsgebiets und weiter südöstlich durch Dömitz, wo sie die B191 kreuzt, die in Richtung Nordost-Südwest in den Amtsbereichen Ludwigslust, Ludwigslust-Land und Amt Dömitz-Malliß verläuft. Die B5 verläuft in Ost-West Richtung im Untersuchungsgebiet durch Boizenburg, Boizenburg-Land, Ludwigslust, Ludwigslust-Land, Grabow. Die B106 berührt den östlichen Teil des Untersuchungsgebiets in Ludwigslust, Ludwigslust-Land.

Transport	Location/course in the study area
Landesstraße	
<i>L52, L51, L5, L6, L61, L4, L7, L8</i>	<p>Die L52 zweigt zwischen den Ortschaften Vorderhagen und Hinterhagen im Naturpark Elbetal von der B195 ab und verläuft über die Landesgrenze nach Niedersachsen.</p> <p>Die L5 verläuft in Nord-Süd Richtung von der B5 ab Stoltenau durch den Naturpark Elbetal über die Landesgrenze nach Niedersachsen.</p> <p>Die L51 verläuft im Westen des Untersuchungsgebiets von Bennin über Bengerstorf bis nach Zahrendorf.</p> <p>Die L6 zweigt bei Pritzier von der B5 ab und verläuft in Nord-Süd Richtung durch den Naturpark Elbetal über Lübtheen und Vielank und mündet bei Woosmer in die L4.</p> <p>Die L61 zweigt bei Jessenitz von der L6 ab und führt über die Landesgrenze nach Niedersachsen.</p> <p>Die L4 zweigt bei Neu Krenzlin von der B5 ab und verläuft in Nord-Süd Richtung durch die Ämter Ludwigslust-Land und Dömitz-Malliß. Bei Dömitz mündet die L4 in die B191.</p> <p>Die L7 zweigt nördlich von Ludwigslust von der B106 ab und verläuft in Nord-Süd Richtung westlich um Ludwigslust herum. Bei Kummer kreuzt die L7 die B5 und führt über Eldena nach Brandenburg.</p> <p>Die L8 verläuft in Nord-Süd Richtung von Grabow aus bis zur südlichen Grenze des Untersuchungsgebietes.</p>
Kreis- und Gemeindestraßen	
<i>Kreisstraßen LWL1, 2, 3, 4, 5, 14, 15 16, 17, 18, 19, 20, 30, 32, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 64 und Gemeindestraßen</i>	Die Kreisstraßen und Gemeindestraßen im Untersuchungsgebiet verbinden Ortschaften mit dem Netz der Landes- und Bundesstraßen. Damit verfügt das Untersuchungsgebiet über ein engmaschiges Netz von Straßenverbindungen.
Schienennetz	
<i>Normalspurige Strecken ein- und mehrgleisig</i>	<p>Eine mehrgleisige Schienenstrecke verläuft im östlichen Teil des Untersuchungsgebietes in Nord-Süd Richtung durch Ludwigslust und Grabow. Die Schienenstrecke Ludwigslust- Boizenburg/Elbe ist Teil der Hauptstrecke Hamburg-Berlin. Diese verläuft in Ost-West Richtung. Ein Teil dieser Schienenstrecke verläuft außerhalb des Untersuchungsgebietes.</p> <p>Ein kurzes Teilstück der eingleisigen Schienenstrecke zwischen Parchim und Ludwigslust verläuft ebenfalls im Untersuchungsgebiet, östlich von Ludwigslust in Ost-West Richtung.</p> <p>Verschiedene Anbieter stellen Verbindungen des SPNV im Untersuchungsgebiet bereit: DB - Deutsche Bahn, ODEG - Ostdeutsche Eisenbahngesellschaft</p>
ÖPNV/Busverkehr	
<i>Busverbindungen verschiedener Anbieter</i>	<p>Verschiedene Anbieter stellen Verbindungen des ÖPNV im Untersuchungsgebiet bereit: VWM - Verkehrsgemeinschaft Westmecklenburg als Dachgemeinschaft: LVG - Ludwigsluster Verkehrsgesellschaft mbH, SGS - Bus &amp; Reisen GmbH, Bus Kröger Omnibusbetrieb &amp; Reisebüro Kröger GmbH, NVS - Nahverkehr Schwerin GmbH. Es gibt einen gemeinsamen Tarif (Westmecklenburgtarif), der die Nutzung von Verbin-</p>

Transport	Location/course in the study area
	dungen verschiedener Verkehrsunternehmen erleichtert und das Umsteigen ermöglicht.
Binnenschifffahrt und Häfen	
<i>Bundeswasserstraßen der Klassen I (Müritz-Elde-Wasserstraße) und VIb (Elbe), Binnenhäfen Boizenburg/Elbe und Dömitz</i>	Die Müritz-Elde-Wasserstraße (MEW) stellt eine Verbindung für die touristische Binnenschifffahrt zwischen Elbe und der Mecklenburgischen Seenplatte, über den westlich von Parchim abzweigenden Störkanal auch zum Schweriner See dar. Der Abschnitt zwischen Dömitz und Eldena wird auch als Elde-Seitenkanal bezeichnet. Die MEW verläuft im Untersuchungsgebiet in Richtung Nordost-Südwest zwischen Grabow und Dömitz. Die Elbe verläuft an der südlichen Grenze des Untersuchungsgebietes. Dabei befinden sich zwei kurze Teilstücke, eines bei Dömitz und eines bei Boizenburg im Bereich des Untersuchungsgebietes. Die beiden Binnenhäfen Boizenburg und Dömitz haben bereits seit den sechziger Jahren keine Bedeutung für den Güterverkehr mehr. Sie werden überwiegend für den Bootstourismus genutzt.
Fähren	
<i>Personenfähre</i>	Keine Personenfähre vorhanden.
Flußquerungen (Brücken)	
<i>Elbebrücke Dömitz</i>	Straßenbrücke, Bestandteil der Bundesstraße 191 von Uelzen nach Ludwigslust
Luftverkehr	
<i>Segelflugplatz Neu Gülze</i>	Bis auf einen Segelflugplatz in Neu-Gülze nahe Boizenburg gibt es keine Flughäfen im Untersuchungsgebiet. Die Anbindung an den Luftverkehr erfolgt über die Flughäfen Parchim (bisher nur Frachtverkehr), Hamburg, Lübeck, Rostock.
<b>Lüneburg/ Lüchow-Dannenberg</b>	
Autobahn	
---	Keine Autobahn im Untersuchungsgebiet vorhanden
Bundesstraßen	
<i>B 209 B 216 B 191 B 195 B 248</i>	Lüneburg – Brietlingen – Artlenburg Lüneburg – Dahlenburg – Dannenberg Uelzen – Zernien – Dannenberg – Dömitz Paralleler Verlauf zur Elbe in der Gem. Amt Neuhaus nach Dömitz Lüchow – Dannenberg
Landesstraßen	
<i>L 219 L 221 L 222 L 231 L 232 L 255 L 256</i>	Hohnstorf – Hittbergen – Bleckede Lüneburg – Neetze – Bleckede Dahlenburg – Bleckede Dannenberg – Hitzacker – Neu Darchau Bad Bevensen – Dahlenburg – Neu Darchau Metzingen – Hitzacker Dannenberg – Gartow
Kreis- und Gemeindestraßen	
<i>div. Kreisstraßen und kommunale Straßen zur Erschließung der gesamten Region</i>	---
Schiennetz	
<i>Bahnstrecke Lüneburg – Dannenberg (Elbe) (sonstige)</i>	Lüneburg – Wendisch Evern – Bavendorf – Dahlen-

Transport	Location/course in the study area
<i>ge Eisenbahnstrecke)</i>	burg – Neetendorf – Göhrde – Leitstade – Hitzacker (Elbe) – Dannenberg (Elbe)
<i>Bahnstrecke Lüneburg – Lauenburg (Elbe)</i>	Lüneburg – Echem – Lauenburg (Elbe)
ÖPNV/Busverkehr	
diverse Buslinien	Im Landkreis Lüneburg sind sie sämtlich Teil des Hamburger Verkehrsverbundes (HVV), die gesamte Region ist Mitglied der Verkehrsgemeinschaft Nordost-Niedersachsen (VNN)
Binnenschifffahrt und Häfen	
<i>Hafen Alt Garge</i>	Alt Garge (Stadt Bleckede, LK Lüneburg)
Fähren	
<i>Autofähre</i> <i>Autofähre</i> <i>Personenfähre</i>	Autofähre zwischen Darchau und Katemin Autofähre zwischen Bleckede und Neu Bleckede Personenfähre „Deutschland“ Hitzacker-Herrenhof
Luftverkehr	
---	---
<b>Stendal</b>	
<i>Autobahn</i>	
---	keine Autobahn innerhalb des Landkreises
Bundesstraße	
<i>B 188</i> <i>B 107</i> <i>B 189</i>	Rathenow- Stendal- Wolfsburg Jerichow bis Havelberg- parallel zur Elbe Magdeburg- Stendal- Wittenberge
Landesstraße	
<i>L1</i> <i>L2</i> <i>L3</i> <i>L4</i> <i>L9</i> <i>L15</i> <i>L16</i> <i>L18</i> <i>L30</i> <i>L31</i> <i>L32</i> <i>L53</i>	Schnackenburg- Arendsee Warnau-Havelberg-Schnackenburg Havelberg-Nitzow Kümmernitz – Havelberg Sandau- Osterburg- Heiligenfelde Stendal- Kläden Stendal-Werben Rathenow-Wulkau Tangermünde-Kläden Tangerhütte-Tangermünde Grobleben - Stendal Tangerhütte- B 189
Kreis- und Gemeindestraßen	
<i>zahlreiche Kreis- und kommunale Straßen</i>	bedarfsgerechte Erschließung der gesamten Region
Fähren	
<i>Räbel; Kombinierte Wagen-Motor-Gierfähre</i> <i>Sandau; Kombinierte Wagen-Motor-Gierfähre</i> <i>Arneburg; Wagen-Gierseilfähre</i>	L 2 Seehausen- Werben- Havelberg L 9 Osterburg- Sandau Ortsverbindung Arneburg- Hohenberg-Krusemark
Flussquerungen (Brücken)	
<i>Elbe</i>  <i>Havel</i>	B 189 Wittenberge B 188 Tangermünde Eisenbahnbrücke Stendal B 107 Havelberg
ÖPNV/Busverkehr	
<i>zahlreiche regelmäßige Buslinien und Anrufbussystem</i> <i>Schnellbahnstrecke über Stendal mit individuellem Halt</i>	Im gesamten Landkreis wird der Busbetrieb durch die Altmark Bus GmbH sichergestellt. ICE 12 (Berlin-Basel) ICE 10 (Berlin-Bonn)

Transport	Location/course in the study area
<i>RE 7</i> <i>RB 30</i>	ICE 77 (Berlin-Amsterdam) sowie weitere einzelne ICE Züge in Richtung Wittenberge und Salzwedel Magdeburg- Stendal – Wittenberge Magdeburg- Wittenberge
Binnenschifffahrt und Häfen	
<i>Elbe Bundeswasserstraße</i> <i>Havel Bundeswasserstraße</i> <i>Hafen Havelberg</i>	gesamter Untersuchungsraum von Süd nach Nord nordwestliches Kreisgebiet Schollene- Quitzöbel Havelberg- Schleusenkanal Havel
Schienennetz	
<i>Normalspurige Strecken ein- und mehrgleisig</i>	Ost-Westverbindung über Stendal Nord-Südverbindung Wittenberge/Salzwedel- Stendal-Magdeburg
Luftverkehr	
<i>Verkehrslandeplatz Stendal-Borstel</i> <i>Sonderlandeplatz Kietze/Scharlippe (Rundflüge, Sportflieger)</i>	nördlich von Stendal östlich Stendal
<b>Jerichower Land</b>	
Autobahn	
A2	Magdeburg in Richtung Osten (Anschlussstellen Burg- Zentrum, Burg- Ost, LOSTAU / Hohenwarthe )
Bundesstraße	
<i>B 246 A</i> <i>B 1</i> <i>B 107</i>	Möckern –Burg Burg-Genthin Genthin-Jerichow
Landesstraße	
L 33 L 34 L 52 L 54	B 107 Jerichow- Briest Genthin-Premnitz (Land Brandenburg) Burg- Zielitz Dretzel- Jerichow
Kreis- und Gemeindestraßen	
<i>zahlreiche Kreis- und kommunale Straßen</i>	bedarfsgerechte Erschließung der gesamten Region
Flussquerungen (Brücken)	
<i>Elbe</i> <i>Elbe-Havel-Kanal</i>	A 2 LOSTAU Burg - Parchau Burg - Schartau Hohenwarthe – Niegripp Niegripp- Burg Zerben-Parey B 1, B 107 Genthin
Fähren	
<i>Ferchland- Grieben Wagen-Motorfähre (Elbe)</i>	K 1196 Tangerhütte -Ferchland-Genthin
Schienennetz	
<i>Normalspurige Strecken ein- und mehrgleisig</i>	nordöstlich von Brandenburg über Genthin nach Magdeburg östlich aus Loburg in Richtung Magdeburg südöstlich von Dessau über Gommern nach Mag- deburg
ÖPNV/Busverkehr	
<i>Zahlreiche regelmäßige Buslinien und Anrufbussystem</i>	Im gesamten Landkreis wird der Busbetrieb durch die Nahverkehrsgesellschaft Jerichower Land si- chergestellt.



Transport	Location/course in the study area
RB 31 RB 35 RB /RE	Magdeburg -Genthin Magdeburg- Loburg Magdeburg- Gommern
Binnenschifffahrt und Häfen	
<i>Elbe-Havel- Kanal Bundeswasserstraße</i>	Genthin- Hohenwarthe
Luftverkehr	
<i>Sonderlandeplatz Burg</i>	südlich von Burg
<b>Börde</b>	
Autobahn	
A 2/A14	Kreuz Magdeburg (Barleben)
Bundesstraße	
B71 B1 B189	Magdeburg – Salzwedel – Uelzen Magdeburg- Helmstedt Magdeburg- Stendal
Landesstraße	
L 24 L 44 L 47 L 48	Haldensleben-Richtung A 2- Bornstedt Rogätz- Wolmirstedt- Bornstedt B 189 – Hohenwarsleben Barleben-Ebendorf
Kreis- und Gemeindestraßen	
<i>zahlreiche Kreis- und kommunale Straßen</i>	bedarfsgerechte Erschließung der gesamten Region
Flussquerungen	
<i>Mittellandkanal</i>	Groß Amensleben; Vahldorf; Wedringen; Haldensleben; Uthmöden
Fähren	
<i>Rogätz; Wagen-Motorfähre</i>	Rogätz- Burg L 29 / K 1209
ÖPNV/Busverkehr	Im ehemaligen Kreisbereich des Altkreises Börde obliegt die Zuständigkeit des Busverkehrs bei der Kraftverkehrsgesellschaft mbH Börde – Bus. Im ehemaligen Bereich des Ohrekreises wird der Busverkehr durch die OhreBus Verkehrsgesellschaft mbH sichergestellt. Zusätzlich gibt es die Möglichkeit außerhalb des Linienverkehrs den Ohre Anrufbus zu nutzen. Für Pendler und Vielfahrer, die in Magdeburg und Umland zwischen der S-Bahn und kommunalen Verkehrsmitteln umsteigen möchten, existiert unabhängig vom S-Bahn-Tarif der übergeordnete MUM-Tarif (Magdeburg-Umland-Tarif), welcher auch die Magdeburger Verkehrsbetriebe einschließt
Regionalbahnen	Linie Magdeburg – Haldensleben
Binnenschifffahrt und Häfen	
<i>Mittellandkanal Bundeswasserstraße Hafen Haldensleben</i>	Haldensleben- Wasserstraßenkreuz Magdeburg Lage am Mittellandkanal in Haldensleben
Luftverkehr	
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Quelle: Google Maps; Landkreis Prignitz; Amt für Statistik Berlin-Brandenburg;  
[http://geoportal.geodaten.niedersachsen.de/navigator/basicviewer\\_print.jsp](http://geoportal.geodaten.niedersachsen.de/navigator/basicviewer_print.jsp), Stand: 13.05.2010  
Landkreis Lüneburg, Fortschreibung Regionales Raumordnungsprogramm 2003 (Umweltbericht), Entwurf Fortschreibung 2009, zeichnerischer Teil; Landkreis-Lüchow-Dannenberg, Regionales Raumordnungsprogramm 2004, zeichnerischer Teil; Straßenkarte des Landes Sachsen-Anhalt; Internetseiten der Landkreise Börde, Stendal, Jerichower Land; ÖPNV-Plan des Landes Sachsen-Anhalt 2009

## B 6 Maps index

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## B 9 Abbreviations

A	Autobahn
AEP	Agrarstrukturelle Entwicklungsplanung
AG	Arbeitsgemeinschaft
B	Bundesstraße
BATZ	Verein der sich mit der Förderung des Tourismus im Landkreis Ludwigslust befasst
BBSR	Bundesinstitut für Bau-, Stadt- und Raumforschung
BIP	Bruttoinlandsprodukt
BK	Bördekreis
BMBF	Bundesministerium für Bildung und Forschung
BMELV	Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz
BMVEL	Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft
BUND	BUND für Umwelt und Naturschutz Deutschland
CEMAT-Leitlinien	Leitlinien für eine nachhaltige räumliche Entwicklung auf dem europäischen Kontinent
CLH	Colbitz-Letzlinger Heide
CZ	Tschechische Republik
D	Deutschland
DAN	Danneberg
DB	Deutsche Bahn
DSL	Digital Subscriber Line / dt. Digitaler Teilnehmeranschluss
DTV	Deutscher Tourismusverband
e.V.	Eingetragener Verein
EFB	Elbe und Fiener Bruch
EAGFL	Europäischer Ausrichtungs- und Garantiefonds für Landwirtschaft
EH	Elbe und Havel
ES	Elbe-Saale
EU	Europäische Union
EUREK	Europäisches Raumentwicklungskonzept
EW	Einwohner
FFH	Flora-Fauna-Habitat
FH	Fachhochschule
GAK	Gemeinschaftsaufgabe „Verbesserung der Agrarstruktur und des Küstenschutzes“
GbR	Gesellschaft bürgerlichen Rechts
GIS	Geographic information systems
GLES	Gebietsbezogene Lokale Entwicklungsstrategie
GmbH	Gesellschaft mit beschränkter Haftung
GRW	Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur"
GTZ	Auftrag der Gesellschaft für Technische Zusammenarbeit
HVV	Hamburger Verkehrsverbundes
IBA	Internationale Bauausstellung
ICE	Intercity-Express
IFF	Fraunhofer Institut für Fabrikbetrieb und -automatisierung
ILE	Förderung der integrierten ländlichen Entwicklung
ILEK	Integrierte Ländliches Entwicklungskonzept

INTERREG	Europäische Territoriale Zusammenarbeit im Rahmen der neuen Ziel 3 Förderung der Europäischen Union im Zeitraum 2007 bis 2013
INWATER	Teilprojekt des Förderprogramms „Baltic Sea Region - Interreg IIIB“
IÖW	Institut für ökologische Wirtschaftsforschung Berlin
IREK	Integriertes Regionskonzept
JL	Jerichow Land
K	Kreisstraße
KAG	Kommunale Arbeitsgemeinschaft
KAG	Kommunale Arbeitsgemeinschaft
KITA	Kindertagesstätte
km	Kilometer
L	Landesstraße
LAG	Lokalen Aktionsgruppen
LEADER	Liaison entre actions de développement de l'économie rurale / dt. Verbindung zwischen Aktionen zur Entwicklung der ländlichen Wirtschaft
LEP B-B	Landesentwicklungsplan Berlin-Brandenburg
LG	Lauenburg
LG	Landesplanung Grundsatz
LGMV	Landgesellschaft Mecklenburg-Vorpommern
LGSA	Landgesellschaft Sachsen-Anhalt
LK	Landkreis
LKW	Lastkraftwagen
LROP	Landes-Raumordnungsprogramm
LSA	Land Sachsen-Anhalt
LSG	Landschaftsschutzgebiete
LTV	Landestourismusverband Brandenburg
LVG	Ludwigsluster Verkehrsgesellschaft
LWL	Ludwigslust
LZ	Landesplanung Ziel
MA	Mittlere Altmark
MEW	Müritz-Elde-Wasserstraße
MIV	motorisierter Individualverkehr
MLUR	Ministerium für Landwirtschaft, Umweltschutz und Raumordnung des Landes Brandenburg
MLV	Ministerium für Landesentwicklung und Verkehr Sachsen-Anhalt
MORO	Modellvorhaben der Raumordnung
M-V	Mecklenburg-Vorpommern
NABU	Naturschutzbund Deutschland
NATURA 2000	offizielle Bezeichnung für ein kohärentes Netz von besonderen Schutzgebieten innerhalb der Europäischen Union
NEIbtBRG	Gesetz über das Biosphärenreservat "Niedersächsische Elbtalaue"
NIW	Niedersächsischen Instituts für Wirtschaftsforschung
NLG	Niedersächsische Landgesellschaft
NSG	Naturschutzgebiete
NVS	Nahverkehr Schwerin
ODEG	Ostdeutsche Eisenbahn
ÖPNV	Öffentlichen Personennahverkehr
OSZ	Oberstufenzentrum
PCH	Parchim

PR	Prignitz
RB	Regionalbahn
RE	Regional-Express
REK	Regionales Entwicklungskonzept
RG	Regionalplanung Grundsatz
RIG	Regionale Interessengemeinschaft
ROB	Raumordnungsbericht
ROG	Raumordnungsgesetz
ROK	Raumordnungskatster
RROP	Regionales Raumordnungsprogramm
RZ	Regionalplanung Ziel
SALEG	Sachsen-Anhaltinische Landesentwicklungsgesellschaft
SDL	Stendal
SG	Schutzgebiet
SGS	Bus & Reisen Schwerin
SPA	Europäische Vogelschutzrichtlinie
SWOT	Stärken-Schwächen - Analyse
TMV	Tourismusverbandes Mecklenburg-Vorpommern
TU	Technische Universität
UG	Untersuchungsgebiet
UNESCO	United Nations Educational, Scientific and Cultural Organization / dt. Organisation der Vereinten Nationen für Erziehung, Wissenschaft und Kultur
UR	Untersuchungsraum
UTE	Uchte-Tanger-Elbe
VNN	Verkehrsgemeinschaft Nordost-Niedersachsen
VWM	Verkehrsgemeinschaft Westmecklenburg
WETLANDS 2	Integriertes Management von Feuchtgebieten

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