A SUSTAINABLE DEVELOPMENT PROJECT FOR LUXEMBOURG

The major aspects of the national spatial planning programme



MINISTÈRE DE L'INTÉRIEUR ET DE L'AMÉNAGEMENT DU TERRITOIRE

Direction de l'Aménagement du Territoire (Ministry of the Interior and Spatial Planning) Spatial Planning Department

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EDITORIAL

WHAT IS THE REASON FOR THIS BROCHURE?

Over the last two decades the Grand Duchy of Luxembourg has experienced a very dynamic development with a direct impact on the spatial organisation of the country.

In order to pave the way for sustainable spatial development, the Government adopted the national spatial planning programme on 27 March 2003.

The Government and the local authorities gave themselves a reference framework which aims to provide guidelines for the processes and decisions to be taken in many areas affecting spatial planning, and which ultimately concern all citizens.

In order to give everyone the opportunity to discover what 'spatial planning' actually means and grasp its implications for daily life, the purpose of this brochure is to summarise the national spatial planning programme, outline the objectives adopted at national level, and explain how they respond to the challenges currently posed by Luxembourg's development over the next decade.

The planning programme is not being published as an end in itself. As a platform for exchanges, the programme seeks to raise the awareness and mobilise not only the state and the local authorities, but every other stakeholder in Luxembourg society. The Government of Luxembourg invites all citizens to play an active role in carrying out this programme so that Luxembourg reflects a shared vision of its future in the next ten years.

Jean Marie Halsdorf Ministry of the Interior and Spatial planning



1. WHAT IS THE NATIONAL SPATIAL PLANNING PROGRAMME?

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IT IS A POLICY PAPER FOR SUSTAINABLE DEVELOPMENT

By application of the Law of 21 May 1999, the planning programme is the key instrument of national spatial planning. This Law states that it 'determines the Government's general guidelines and priority objectives for the sustainable development of the living environment, the exploitation of human and natural resources and the development of activities, and the principal measures to be taken with a view to achieving them' (Article 4(2)).

The programme is therefore a policy framework with a specific purpose that coordinates sectoral programmes to achieve spatial planning objectives. It also proposes to subdivide the country into six planning regions and indicates their respective centres of development and attraction.

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IT IS A TOOL FOR SPATIAL COHERENCE

The aim of the programme is to ensure a harmonious development with respect to the particularities of each region and its specific resources. Its ambition is to guarantee the best living conditions for everyone, with a dual concern to respect individual choices, but also to preserve the public interest by taking its constraints into account. It therefore suggests a rational and coherent organisation of the country while ensuring equal access to housing, employment, education, supplies, facilities, transport, natural areas, etc. in both urban and rural environments.

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IT IS THE APPLICATION OF THE MAJOR PRINCIPLES OF SPATIAL PLANNING

Spatial planning is by definition a discipline that encompasses all human activities that have an impact on

the use of space, which is to say most of them: from agriculture to culture, housing to business, school to research, etc. This interdisciplinary nature dictates the major principles of its functioning: coordination, co-operation and participation.

Coordination is essential to ensure a link between sectoral policies, formulated by ministerial departments, and policies implemented at other levels of intervention, whether regional, municipal or local. It is therefore a guarantee of coherence.



Co-operation among all those concerned with the use of space is essential to guarantee open-mindedness towards needs and the awareness of their constant evolution.

Finally, participation as a permanent process ensures that spatial planning genuinely reflects what society wants.

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IT IS THE OUTCOME OF A PROCESS OF REFLECTION AND CONSULTATION ...

In applying the above principles, the programme is the outcome of a long process of reflection and informal dialogue that actively involved ministries, local authorities and the driving forces of the nation, and ultimately led to the presentation of a draft spatial planning programme.

In accordance with legal provisions, the draft was put through several stages of consultation with the local authorities and the highest state authorities, including the Conseil Supérieur à l'Aménagement du Territoire (CSAT), the Conseil Interministériel à l'Aménagement du Territoire (CIAT) and Parliament, before being approved by the Conseil de Gouvernement on 27 March 2003.

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... AND THE BEGINNING OF A COMPLEX IMPLEMENTATION PROCESS

In formal terms, the sectoral and regional plans will precise and carry out the spatial planning programme.

The programme should not be implemented, however, within arbitrary theoretical guidelines. The implementation should be dynamic and participatory in order to create an evolving planning instrument that reflects the aspirations of a changing society.



WHAT ARE THE CHALLENGES FOR SPATIAL PLANNING?

Luxembourg is appreciated for its quality of life. Many people have satisfied their legitimate aspirations to live in a high-quality living environment with a stable social climate and excellent individual conditions for mobility. This small country of 2,586 km², however, cannot continue to develop this model of living infinitely, since too much emphasis on 'moving the city to the countryside' would ultimately irreparably destroy the unspoilt natural areas which are recognised as one of its assets. The function of spatial planning is to accommodate these multiple aspirations and respond to the challenges they pose, with a concern for the common good and respecting future generations.

4 A SMALL DYNAMIC COUNTRY ...

Luxembourg, whose population grew from 384,400 in 1991 to 439,400 in 2001, is the EU country with the highest demographic growth in this period (+ 14.2%, compared to + 5.3% for the preceding decade).

This demographic dynamism is due in very large measure to active and constant immigration over several decades: the proportion of foreign nationals in the total population increased from 18.4% in 1970 to 37% in 2001.

This increase in the resident population is an indicator of the sound health of the Luxembourg economy. Immigration and the influx of cross-border workers mirror national economic cycles, which are nevertheless increasingly subject to the changes in the world economic situation.



During the last decade Luxembourg was characterised by sustained economic dynamism in a Saar-Lor-Lux Region that did not as a whole enjoy the same prosperity. Domestic employment, which rose from 142,100 in 1985 to 277,000 in 2001, attracts a continuously growing cross-border labour force that now exceeds 100,000 workers, compared to only 16,100 in 1985.

This substantial increase in the number of cross-border workers, the lengthening of distances travelled and the constant enlargement of source areas induce an increase of internal mobility requirements, added to the movements of the resident population generated by the current spatial organisation.

Should conditions favourable to the Luxembourg economy persist, forecasts for demographic growth point to a threshold of 550,000 inhabitants in 2020.

... FACING AN UNBALANCED TERRITORIAL ORGANISATION ...

The primary concerns of spatial planning, however, do not at present derive as much from the hypothetical number of inhabitants living in Luxembourg in the medium-term as from their regional distribution.

For over 10 years, no Luxembourg municipality has experienced a decrease in its population, and it is paradoxically the rural municipalities that have had the highest growth rates, while the traditional urban centres have developed more slowly than the national average. The rural municipalities are being revitalised by the urban exodus of a national population which is abandoning the towns and cities in increasing numbers, to be replaced more and more by newly arrived foreign nationals. What is more, the spontaneous nature of the current distribution of the population highlights and reinforces regional and local imbalances in land use, and the capacity of existing public amenities to respond to expanding and ever-more widely spread needs.

In economic terms, conversely, the City of Luxembourg is reaffirmed as the dominant centralising pole in the country. It is both, a national and a european capital and an undisputed economic centre, that has benefited from the tertiarisation of the national economic system and the reinforcement of certain business sectors (banking, services) that have compensated for the decline in the iron and steel industry and the loss of appeal of the south of the country. The consequent increased economic concentration focused in one part of the country reinforces regional disparities.



The fact that around 60% of national jobs are based in the agglomeration of the City of Luxembourg is the reason for 50% of the internal journeys in the country. The strong growth in the number of cross-border workers, the lengthening of distances travelled and the constant expansion of source areas provoke an increase of internal mobility requirements. The resulting saturation of the road network has become a daily blight that ultimately hinders individual mobility itself, as well as affecting the living environment, particularly in agglomerations, and damaging the environment.

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... THAT REFLECTS CHANGES IN SOCIETY AND INDIVIDUAL DEMANDS ...

Out of taste and tradition, most of the Luxembourg population would like to live in their own recently-built house in a semi-urban or rural area. The development of the real estate market in terms of availability and the price of land increasingly distances it from the traditional urban centres. New residential areas, ribbons of construction along routes and housing estates are developing all over the country. This phenomenon, dubbed 'rurbanisation' in a rural environment, leads to growing urban sprawl in the natural landscapes and amplifies the densification of the road and motorway network.

The extent of these trends does not only reflect the direct effects of recent demographic growth. It also illustrates far-reaching recent changes in society, such as the reduction of the size of households (from 3.3 people per household in 1979 to 2.6 in 2001), and a consecutive increase in their number.

This change in lifestyles is accompanied by a demand for larger dwellings: the average habitable area of a dwelling is now 126 m², compared to only 99 m² in 1970. This is a result of the domination of the individual dwelling, a great consumer of space: 68% of households live in houses while 32% live in blocks of flats, and only 2.4% of the latter incorporate more than 20 dwellings. The national average of dwellings per hectare (gross area) is estimated at 13 units, a very low figure for a country which highlights this dispersal of housing throughout the territory.

In addition to being responsible for the spatial explosion of villages and for urban sprawl in rural areas, this ideal of an individual dwelling helps to fuel the identity crisis experienced by urban areas. The latter, increasingly deprived of their residential function, are losing their identity, vitality and appeal. The effect of this change in housing is to foster social segregation, the more specialised rented accommodation and low-cost markets traditionally being more important in agglomerations than in rural areas.



... WHICH IS CHARACTERISED, AMONG OTHER THINGS, BY INCREASING INDIVIDUAL MOBILITY ...

The rise and lengthening of journeys directly reflect a widespread lifestyle where people live in the countryside, work in the city, shop in out-of-town shopping centres, and seek relaxation in protected natural areas and cultural stimulation in urban centres.



This leads to a very high proportion of journeys made by private car, which reflects the sound economic health of the country, illustrated by a 230% increase in car ownership over the last 30 years, making it one of the highest levels in the world, with 628 vehicles per 1,000 inhabitants.



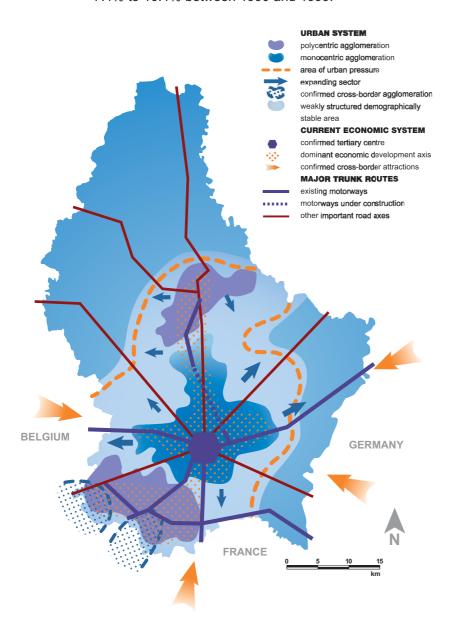
In conjunction with this, the increasing urban sprawl has encouraged the development of the road network, and this form of territorial organisation is less and less favourable to the competitive development of public transport. The latter is now responsible for a mere 12% of motorised journeys, 50% of which meet the needs of adolescents who have yet to obtain a driving licence.

This situation and its practical effects have created demands for performance, speed and comfort, particularly on short regular journeys: 60% of journeys of less than 2 km are made by car. Improved public transport provision can only be attractive if such habits change.

Another very environmentally-unfriendly consequence is that the transport sector's energy needs have soared since 1970, making it the principal energy consumer.

... AND AN OFTEN NEGATIVE IMPACT ON THE REMAINING NATURAL AREAS

This profound transformation in the lifestyle of Luxembourg society, with its basic needs and legitimate albeit sometimes rashly demanding aspirations, has led to an unprecedented consumption of space over the last quarter of a century. This urban sprawl is as much a result of the dispersed lifeforms, already referred to, as it is of the development of new areas of activity, not to mention the densification of the road network. The percentage of the country occupied by the built environment and communication routes thus rose from 7.4% to 10.4% between 1990 and 1999.



The primary consequence of this wave of urbanisation is a continuous and irreversible reduction in natural areas and a decline in the rural environment per se. This also leads imperceptibly to a loss of regional identity and a nation-wide 'standardisation of the territory' that arises out of less and less differentiated treatment of urban and natural landscapes. The far-reaching transformation in agriculture has also helped to blur regional particularities and accelerate this trend even more.

Urban sprawl also leads to a constant weakening of areas of recognised biological interest at national and European level, with large natural features such as woodland becoming fragmented. This development threatens the wealth of flora and fauna in these environments, which, because they have been reduced and split up, are increasingly less viable as habitats for the species they shelter.

The map opposite summarises spatial development trends in Luxembourg.

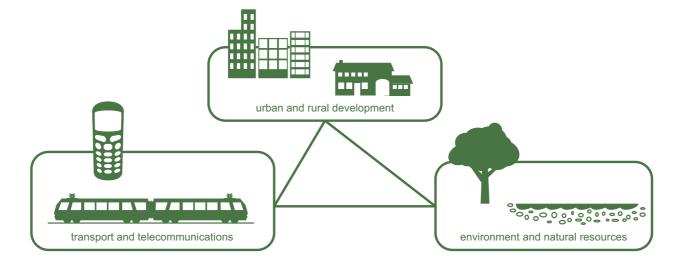


3. HOW DOES THE FRAMEWORK PROGRAMME RESPOND?

The spatial planning programme applies a concept that responds to these problems by means of an integrated territorial action programme. This is underpinned by the structure of the current urban system, its hierarchies, complementary features and capacities being used to propose a more balanced, more egalitarian and more environmentally-friendly spatial organisation.

4 A PROGRAMME IN THREE POLICY AREAS

The interaction between the areas affected by spatial planning makes it essential to provide an integrated response to the various problems mentioned and to avoid dealing with each policy area on a sectoral basis. In line with the European approach, spatial planning objectives thus fall into three interdependent 'policy areas' covering the following fields:



Urban and rural development

The system of objectives and measures of this policy area seeks to frame the effects of urban and rural development with their distorting aspects (e.g. the excessive concentration of development in the City of Luxembourg), and destabilising aspects (urban sprawl, for example). The vision advocated involves seeking a new balance between the urban structure and the rural environment based on 'polycentrism'. This polycentric model is underpinned by the development of vital regional centres, strategically located throughout the country, whose function is to foster the creation of new relationships between town and countryside. This approach involves dividing Luxembourg into six new planning regions.



POLICY OBJECTIVE I

TO CREATE AND MAINTAIN DYNAMIC, ATTRACTIVE AND COMPETITIVE TOWNS, AGGLOMERATIONS AND URBAN REGIONS

The trend towards a global economy reinforces the demands addressed to towns in terms of their appeal and capacity necessary to compete in a situation of increasing competition.

Spatial planning in Luxembourg currently faces a dual challenge which, from an international point of view, involves maintaining if not developing a dynamic and attractive capital, and from a national point of view, the need to avoid accentuating the polarising effects of such development on the agglomeration in the south of Luxembourg and on the 'Nordstad'.

It is proposed to reduce this single-pole pressure by developing attractive and competitive regional centres in each planning region, and using them to help to ensure a balanced distribution of housing, employment and services. In line with their location and capacities, the existing urban areas must be revitalised and

confirmed as residential centres, but the potentialities of each town must also be enhanced to support economic diversification and regional development, based on exploiting local potential and resources. By enhancing the quality of urban areas, regional planning can contribute significantly towards stimulating new economic environments with the power to attract innovative, forward-looking activities.

This process for restoring a balance will also be realised in different complementary actions according to the types of area:



restructuring the agglomeration of the City of Luxembourg and regenerating the former mining area, focusing on urban renewal to upgrade brownfield sites, and developing the economic potential of the 'Nordstad' as a major urban centre in the rural environment.



POLICY OBJECTIVE II

TO DIVERSIFY ECONOMIC ACTIVITIES IN THE RURAL REGIONS ACCORDING TO A SUSTAINABLE DEVELOPMENT APPROACH

The identity of rural areas is seriously affected by the socio-economic changes that affect the country and undermine future prospects. Spatial planning for the rural world seeks to reconcile local economic interests with social and ecological

demands, respecting the sensitivity of each region in order to mitigate the current trend towards standardisation.

In these circumstances the multifunctional character of agriculture must be reinforced by helping diversifying its activities and actively promoting high-quality produce. The development of environmentally-friendly



rural tourism that enhances the natural and cultural potential of the rural world and seeks synergies with other traditional rural activities should also be encouraged. With a concern for diversification, this reinforcement of the regional economy must be completed by attracting small and medium scale environmentally-friendly businesses working in innovative dynamic sectors. These will be located by priority in easily accessible regional centres.

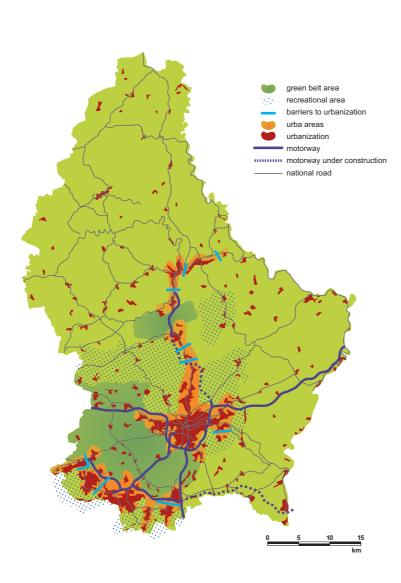
Finally and in addition, regional, national but also cross-border co-operation strategies will be put into practice to favour the development of synergies beneficial to regional expansion and the promotion of a new identity for the rural world. The natural park is an instrument predestined to achieve this 'integrated rural development' strategy.



POLICY OBJECTIVE III

TO DEVELOP URBAN AND RURAL STRUCTURES COMPATIBLE WITH ENVIRONMENTAL DEMANDS ACCORDING TO THE PRINCIPLE OF SUSTAINABLE SPATIAL PLANNING

In order to reduce the negative effects of current forms of unplanned urban and rural development – spatial expansion, urban sprawl, specialisation of functions – the development of towns and villages will be based on three fundamental principles: diversity of functions, land use density and short journeys.



This involves urban development and renewal that must be geared towards existing innercity areas by giving priority to mobilising and upgrading land that allows containing and delimiting existing settlements. In conjunction with this, new denser forms of more energy-efficient construction adapted to regional characteristics will have to be promoted. In addition, bringing functions together within high-quality urbanisation will encourage non-motorised travel and facilitate the use of public transport, the supply of which must be coordinated reciprocally with spatial development from the first planning stage of an urbanisation project.

This model thus forms part of a policy that favours the creation of green spaces in urban environments, green belt areas, and recreational areas among the agglomerations in order to improve the living environment.

Putting all these objectives into practice presupposes that regional and national land use will be optimised by a coordinated management of development zones.



POLICY OBJECTIVE IV

TO CREATE TOWNS AND VILLAGES RESPONDING TO SOCIAL REQUIREMENTS,
OFFERING HIGH QUALITY OF LIFE AND UNDERPINNING SOCIAL INTEGRATION POLICY

The principle of sustainable development involves equal access for everyone to the use of resources, employment, health and prosperity. It therefore involves an inclusive approach to social problems as a guarantee of social cohesion. The

department for spatial planning must be involved in this process by contributing appropriate urbanisation and planning models.

Each town and village must therefore be conceived as a high-quality location promoting social cohesion and therefore interaction and integration, and encouraging all citizens to identify with their neighbourhood or town and respect each social group's needs and rights, particularly those of the most underprivileged social classes. To do this, new forms of housing associated to multifunctional concepts of planning public and semi-public spaces that respond to the many different types of lifestyle and diversity of nationalities must be promoted. Such models that bring together a mixture of densities, different urban forms and respect the scale of the neighbourhood also tend to counter social segregation in agglomerations. This



concept will also help to maintain and enhance the social and cultural appeal of rural areas.

Finally, in order to allow Luxembourg society to actively reinforce social cohesion, appropriate methods will have to be adopted to encourage different social groups and civil society as a whole to participate in the debate on local and regional development.



POLICY OBJECTIVE V

TO PROMOTE POLYCENTRISM AND CONCENTRATED DECONCENTRATION

The negative effects of current spatial development can no longer be effectively resolved by acting only at the local level, but must be addressed by applying a spatial planning model acknowledged as a national framework.

The integrated vision underlying this model must be capable of resolving the major problems outlined, i.e. hyper-centralisation, semi-urbanisation and expanding conurbation, traffic intensity, pressure on natural environments etc. This new model of organisation is underpinned by establishing an urban framework

most important CDA average CDA regional centre local authority border consisting of several hierarchically organised development poles called 'centres of development and attraction' (or CDA). Their function is to provide a structure for the country by acting as a framework for spatial planning and allowing a more appropriate distribution of human activities. The aim is to avoid disorganised urban development and provide more equitable and economically viable services, and to organise an effective transport system.

This therefore means advocating a 'polycentric' urban structure whose different centres will make it possible to 'deconcentrate' the agglomeration of the City of Luxembourg in particular by relieving it of various services and functions that could be decentralised. This network of CDA will also have to act as a framework for distributing demographic growth according to the capacities of these centres, but also as a framework for decisions with a territorial impact to be taken in the context of central policies concerning amenities, for example.



POLICY OBJECTIVE VI

TO DEVELOP AN URBAN RURAL PARTNERSHIP IN THE SPIRIT OF SUSTAINABLE DEVELOPMENT

Urban centres and their outlying municipalities are mutually dependent, a similar interdependence existing at national level between urban and rural regions.

The urban-rural partnership is currently intensifying. The bases of this interdependence are destabilised by a confusion of identities of these different environments, their capacity to evolve and their respective prospects.

The new model of territorial organisation seeks to reinforce the complementarity between functions par-

ticular to each type of area. According to this principle, within the same urban system, functions are distributed between central and peripheral local authorities in line with their particular capacities, so that the functioning of the agglomeration as a whole is optimised. Coordination mechanisms must be developed at the level of the urban system concerned, implying that this specific financial mechanisms must be harmonised accordingly.



At national level the establishment of a genuine partnership between urban and rural regions will favour regionally-differentiated development while offering rural areas prospects for development that satisfy the aspirations of their population, while preserving and enhancing the special qualities of their landscapes and architectural heritage.



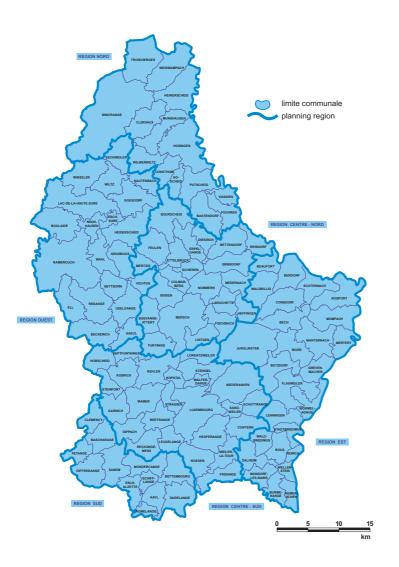
POLICY OBJECTIVE VII

TO PROMOTE CO-OPERATION BETWEEN LOCAL AUTHORITIES AT LOCAL, REGIONAL AND CROSS-BORDER LEVEL WITH A VIEW TO FOSTERING INTER-COMPLEMENTARITY BETWEEN LOCAL AUTHORITIES

The establishment of a common vision of territorial organisation based on a polycentric urban structure and greater complementarity between town and region

means that co-operation between local authorities must be reinforced, particularly at regional level. This is a long and continuous process, the success of which will depend on the willingness of those involved

to co-operate, and the climate of trust and the dynamics of the partnerships to be created.



The legal tools of spatial planning work in favour of regional co-operation and guarantee equal legal rights for the different parties involved in the context of voluntary commitment and a democratic approach. The law defines the regional approach as the fundamental supra-municipal planning strategy, the platform for coordination between sectoral policies, and the means of implementing a sustainable development policy. These spatial planning processes developed in six planning regions - North, West, East, Centre-North, Centre-South and South - receive Government support in terms of initiation, consultation, monitoring, coordination and financial resources.

In addition, Luxembourg's size and position is an invitation to develop cross-border co-operation projects in the potential areas of co-operation that cross-border agglomerations and natural parks may represent.

Transport and telecommunications

This second policy area is closely linked to urban and rural development policy. Spatial planning must play an important role in the organisation of a sustainable mobility by acting on the demand for mobility, the global volume of traffic and its distribution in time, as well as on the choice between modes of transport. The basic orientation of priority objectives seek to adapt transport infrastructure and organisation to the urban system that the spatial planning framework programme means to develop so as to guarantee that the different regions of the country enjoy equal access, while reducing transport-related pollution.



POLICY OBJECTIVE I

TO CUT POLLUTION BY REDUCING TRAFFIC

In view of the continuous growth in the volume of traffic, only making technical improvements to means of transport will be insufficient to reduce their negative impact on the human and natural environment. A reduction in traffic, particularly of the journey distances, must become a long-term objective.

To achieve this ambitious objective, it is essential to create urban and rural structures that foster a mix of functions and lead to a more balanced distribution of centres of economic development and public infrastructure (secondary schools for example). Due to the significant traffic flows between Luxembourg and the neighbouring regions, however, this concept of sustainable mobility should be applied to projects with a cross-border dimension.

The planning of the road network will accordingly be orientated towards the optimum use of existing infrastructure in order to curb any additional consumption of land connected to the construction of new communication routes. In parallel, innovative urban development concepts should make it possible to reduce the effects of traffic movements in agglomerations.

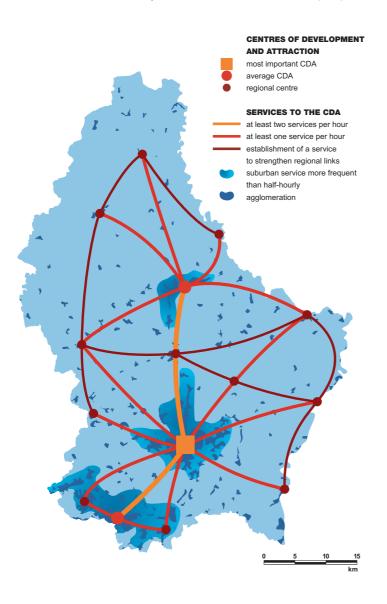
Finally, the use of the facilities offered by the new information and communication technologies must be developed as an alternative to journeys and as a contribution to better organised transport flows.

POLICY OBJECTIVE II

declared objective is to transfer 25% of people's travel to public transport in the medium term.

TO TRANSFER TRAFFIC TO TRANSPORT METHODS THAT RESPECT THE HUMAN AND NATURAL ENVIRONMENT

The objective of traffic reduction cannot ignore the fact that some journeys made at present cannot be shortened. The key is to adopt a proactive public transport policy which, by introducing rapid and competitive communication resources, offers satisfactory travel conditions in terms of frequency, speed, comfort and timetables to as many users as possible. The



While it is essential to increase the appeal of public transport, the respective methods must also be reorganised and diversified, particularly by introducing the train-tram system, and also by improving the interchanges between private and public transport at appropriate connection points. The new opportunities arising out of such an approach will be geared towards the implementation of an integrated transport and spatial planning policy by organising the public transport network in accordance with the development of the CDA.

Finally and in addition, it is important to favour public transport in any sectoral policy that has a bearing on traffic by means of innovative mobility projects, such as company mobility plans.

For transport of goods, rail and inland waterways will be favoured for long distances, while roads will be reserved for local and regional distribution due to their great flexibility.



TO GUARANTEE AND IMPROVE ACCESSIBILITY THROUGHOUT THE COUNTRY

The organisational aspects of mobility, a central concern of the above objectives, must be completed by taking account of the social dimension of accessibility.

Choosing to develop the multimodal approach as a basic transport policy concept involves the country-wide implementation of a system for serving the CDA with high-quality, equitably distributed and balanced public transport services. This means that the supply of public transport in rural areas must be adjusted. It also calls for a policy to be developed that ensures that public amenities are located where they can be accessed by public transport.





Meanwhile, the position of Luxembourg at the heart of Europe and its economic role in the Saar-Lor-Lux Region requires a significant improvement in cross-border and European rail links, particularly for the short and medium-length distances that separate the country from its principal neighbouring regional centres.

Finally, this improvement in accessibility that spatial planning seeks to ensure also involves a supply of modern means of communication and the opportunity to access information networks and postal services equally throughout the country.

Environment and natural resources

The natural environment is the territorial framework for many human activities, and is heavily influenced by changes in society. It is an area of conflict where the pressure of human demands is always greater than the limited capacity and potential of ecosystems to resist them.

Spatial planning helps to safeguard and develop the ecological functions of natural areas throughout the country by advocating strategies intended to moderate conflicts of use and encourage synergies between the different types of competing land use. This moderating role seeks to guarantee the production capacity of natural areas, their potential to regenerate, and their intrinsic balance and ecological functionality for future generations.

OBJECTIF POLITIQUE I

TO CONSERVE, RESTORE AND DEVELOP THE CAPACITY OF NATURAL AREAS TO FULFIL BOTH THEIR ECOLOGICAL AND THEIR SOCIAL AND ECONOMIC FUNCTIONS THROUGHOUT THE COUNTRY IN THE LONG TERM

Natural areas now play a multifunctional role and must respond to various and sometimes contradictory expectations. This new economic and social pressure leads to a deterioration in their ecological functions. Spatial planning must therefore help to ensure the long-term capacities and functions of the principal elements composing the country's natural areas, i.e. water, land, air and biodiversity.

Spatial planning must be ensured at various levels. It is therefore important to protect drinking water resources against pollution and overexploitation, but also to restore the watershed to its natural state as far as possible. Various tools must also be developed to ensure the protection of high-quality soils, such as marking out priority protection areas and introducing ad hoc legislative instruments. Similar protection must be ensured for areas that provide fresh air, and circulation corridors that allow it to be renewed in urban areas. In addition, specific conservation, management and financial measures must be developed and implemented to ensure the biological and genetic diversity of natural areas.

Finally, coordination between the ecological, social and economic functions of landscapes must be boosted by harmonising and enhancing spatial planning tools.



POLICY OBJECTIVE II

TO ENSURE SUSTAINABLE MANAGEMENT OF LAND AND NATURAL RESOURCES THROUGHOUT THE COUNTRY

Besides safeguarding natural resources by means of specific protection measures, ways of using land extensively must be introduced, particularly in agriculture and forestry, which encompass most of the country.

This involves encouraging methods of exploitation that seek to protect and sustain natural resources rather than those that seek economic viability, and favouring marketing systems specific to agricultural and forestry products produced according to sustainable development criteria.

These ecological services, however, delivered in the common interest, should not be in the responsability of the people who provide them. The award of financial compensation must be tied to the environmental objectives that such integrated management seeks to achieve. Information, consultation and awareness-raising must provide the framework for this process, which is underpinned by the participation of many parties and different interests.

The other dimension of this objective relates to reducing pollution linked to natural risks and to the causes of contamination. In this context, spatial planning will ensure that all human intervention likely to change the natural balances and engender risks such as floods, landslips or earth falls is avoided. It will help to adapt territorial development to at-risk areas by giving them a spatial dimension.









POLICY OBJECTIVE III

TO SAFEGUARD AND DEVELOP SECTORS OF SIGNIFICANT ECOLOGICAL IMPORTANCE AND INTEGRATE THEM INTO A FUNCTIONAL ECOLOGICAL NETWORK

Finally, the impact of human activities on species and biotype diversity must be reduced by curbing the continued fragmentation of natural habitats. If ecosystems are to be protected, functional links between them must be established,

land use must be adapted accordingly, particularly in agricultural areas, and elements for safeguarding sensitive areas to protect natural resources (water, soil, air) must be incorporated into setting these links up.

core space for protecting nature and landscapes important link area important link along water courses nydrological network

This first involves preserving and guaranteeing the viability of ecosystems responsible for the survival of species by completely protecting areas that have not yet been seriously fragmented and turning them into preservation areas.

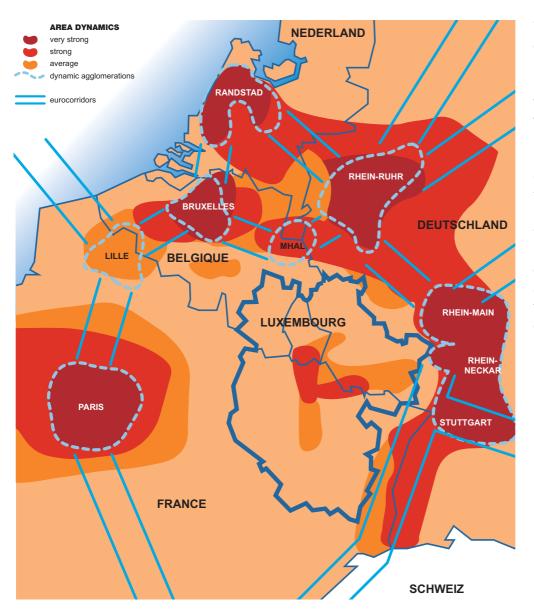
On this basis, sectors of significant ecological importance as a whole will be integrated into a national ecological network consisting both of 'habitat' and 'bird' areas and nature reserves. These sites must be interlinked by corridors corresponding to water courses, woodlands and other natural features that can ensure such a connection. This national network will fit into a pan-European mould and will be relayed to the interior of the country by interlinking locally or regionally important biotypes.

Spatial planning is designed to incorporate this network spatially into planning projects and to ensure coordination between this integrated policy of managing natural resources and areas and the various other documents governing land use.

INTEGRATION INTO EUROPEAN PERSPECTIVES

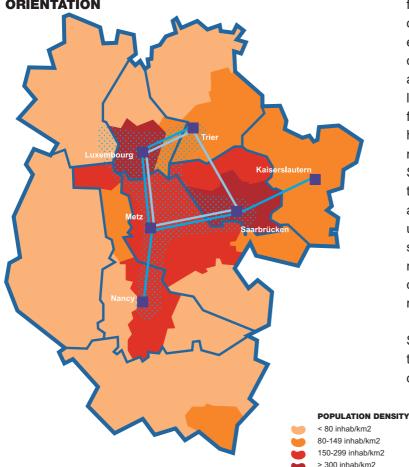
Because Luxembourg is a small country that occupies a strategic position at the heart of Europe, at the crossroads of three states with intense trading links, planning and development must be integrated into the European framework.

Luxembourg belongs to the Saar-Lor-Lux+ Region [SLL+], advocated at European level as a congestion relieving area between the principal metropolitan districts of North-West Europe.



This concept was developed in the context of the European Spatial Development Perspective (ESDP), which proposes a Europewide reference framework. It is based on the development of an urban system composed of several centres (polycentrism), and on reinforcing complementarity between town and region. This vision of development is also adopted and applied within the framework of the SLL+ development perspective.





Due to its central geographic position and its function as a pivotal centre of economic development for the Sar-Lor-Lux Region, Luxembourg enjoys a key location in the network of towns consisting of Luxembourg, Trèves, Sarrebruck and Metz, and extended to Nancy and Kaiserslautern. The function of this network is to reinforce and exploit economic, social, cultural, health, higher education and other complimentary features to improve the competitiveness of the Sar-Lor-Lux Region in a European and international context. This concept of clusters of towns and cities is completed by the network of medium-sized and small towns located in the region's sphere of influence. The functionality of such a network is also guaranteed by coordinating policies for planning and managing natural resources and transport.

Since mobility is a core concern of spatial planning, transport is a unifying theme of cross-border cooperation. The aim is to guarantee that the prin-

> cipal centres in the Sar-Lor-Lux Region have high-quality links to the Trans-European Networks (TEN), and to ensure that the secondary networks and their interconnections are reinforced by developing effective regional public transport systems. This project to

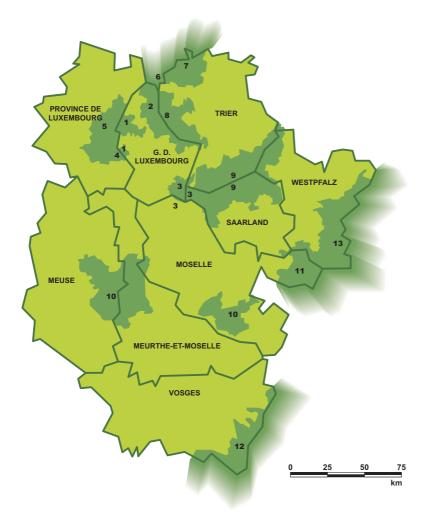
improve connections in the Saar-Lor-Lux Region lays particular emphasis on rail links, trains being given a central role in transporting cross-border workers so as to relieve the pressure on saturated major trunk routes.

Saar-Lor-Lux densification area

network of towns

This concept also encompasses the prudent management of nature and cultural heritage. It proposes to intensify co-operation between the national and the regional natural parks, particularly between those located on either side of a border, as favoured rural development tools.

NATURAL PARKS IN THE SLL+ REGION



It is also based on developing the European ecological networks that incorporate the various national or regional networks.

It should also be noted that for more than a decade Luxembourg has taken part in the various generations of European Interreg programmes, whose primary objective is to reinforce cross-border co-operation by developing cross-border centres of economic and social developments based on common sustainable territorial development strategies.

- 1. Haute-Sûre Natural Park
- 2. Our Natural Park (in preparation)
- 3. Pays des Trois Frontières Natural Park (planned)
- Vallée de l'Attert Natural Park
- 5. Forêt d'Anlier Vallée de l'Haute-Sûre Natural Park (planned)
- Hautes Fagnes-Eifel Natural Park
- Nordeifel Natural Park
- Südeifel Natural Park
- 9. Saar-Hunsrück Natural Park
- 10. Lorraine Regional Natural Park
- 11. Vosges du Nord Regional Natural Park
- Ballons des Vosges Regional Natural Park
 Pfältzerwald Natural Park

CROSS-BORDER NATURAL PARKS

Pays des Trois Frontières Natural Park: 3 German-Luxembourg Natural Park: 2 + 8 German-Belgian Natural Park: 6 + 7

Pfältzerwald - Vosges du Nord Biosphere Reserve



5. WHAT ARE THE MAJOR AREAS OF INTERVENTION?

Spatial planning must be particularly involved and active in five major areas of intervention:

4

1. REINFORCMENT OF INTERMINISTERIAL COORDINATION

Spatial planning seeks to focus on the most crucial aspects of spatial development, i.e. urban and rural development, transport and the environment. Interministerial coordination was put into practice in the innovative development process of the integrated concept of transport and spatial development (IVL in German).

The action is also designed to support the formulation of sectoral plans on the priority themes of transport, housing, the major woodland and landscape areas, etc., all of which are directly involved in the three policy areas of the framework programme.

4

2. IMPLEMENTATION OF REGIONAL PLANNING

An active and participatory spatial planning policy must be applied in particular when regional plans are being drawn up and implemented.

The state wishes to give concrete expression to its support for the stages of initiating, monitoring, discussing and coordinating the process, but also to the provision of financial aid. Spatial planning must act as a platform for partnership, allowing the municipalities to reinforce their action in the framework of new forms of co-operation (such as regional associations of local authorities), and also to bring on board all the original parties that can take an active part in the regional development process.

4

3. REORGANISATION OF THE TERRITORIAL STRUCTURE

The major principle spatial planning seeks to apply in order to ensure a more harmonious spatial development is 'concentrated deconcentration', which is based on the centres of development and attraction (CDA) defined above. This concept of reorganisation thus identifies preferential urban development areas so as to take account of sustainable development requirements. Brownfield sites will be regenerated to support the establishment of the desired territorial structure.

4. URBAN DEVELOPMENT AT THE LOCAL LEVEL

The state wishes to ensure that greater account is taken of the changing nature of urban needs, and to support greater coordination between urban development at the local level and spatial planning at national level. One of the purposes of the new law concerning planning at the local level and urban development is to equip the local authorities with new resources allowing them to implement a sustainable development policy at the level of their territory. The introduction of instruments such as the 'development area' or 'area to be restructured' are examples of this.

5. ENHANCEMENT OF LOCAL AUTHORITY AND CROSS-BORDER INITIATIVES

The Interreg strategies developed in Luxembourg by three generations of programmes have made it possible to develop a cross-border approach essential to the country's size. This added value is reflected in particular in terms of the transfer of know-how and knowledge, and in networking. This legacy will continue to be exploited in future actions.

Against this background, the Sar-Lor-Lux Region presents many opportunities to put the SLL+ framework programme into practice, particularly in the priority areas of economic and urban co-operation, transport, and also the environment and training.

The ESPON project (European Spatial Planning Observation Network), the coordination unit of which is located in Esch-sur-Alzette, also offers interesting opportunities for synergy with the University of Luxembourg.







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Spatial planning sites on the Internet:

www.mi.etat.lu/MAT

www.ivl.public.lu

www.gismosel.lu

www.naturpark-sure.lu

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www.prosud.lu

www.granderegion.net

www.interreg-wll.org

www.interreg3a-delux.org

www.nweurope.org

www.interreg3c.net

www.interact-online.net

www.espon.lu

The full version of the national spatial planning programme can be accessed on the Internet site of the Ministère de l'Intérieur et de l'Aménagement du Territoire [Ministry for The Interior and Spatial planning]

(www.mi.etat.lu/MAT).



