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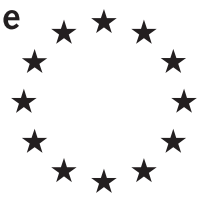

The challenges facing European society with the approach of the year 2000

Strategies for the sustainable development of northern states in Europe

European regional planning, No. 61

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CONTENTS

THEME 1

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGIONS

CHAIRED BY:Mrs Sirkka Hautojärvi
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Baltic Sea region
Ministry of the Environment
Riga .....

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGIONS

Borderless regionalisation and local governance – a spatial planning perspective for sustainability in northern Europe

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> "Certainly, there is agreement that the word region refers to space, but the notion of space itself can take various meanings; territorial space; political space and space of social relationships; economic space; functional space."
>
> (Michael Keating, 1996)

1. In the northern European states today, regional and local partners operating politically and economically in national and international arenas play a stronger role. The role includes working for sustainable growth and economic and social cohesion. Guided by functional interests they untie themselves from the state-dominated political and administrative hierarchy, and seek political control and influence based on regional governance; i.e. strategic planning and degradation of territorial aspects in favour of cross-border networking endeavours. It means that the regions of northern Europe have been forced to adopt a much more competitive posture (Hooghe (ed) 1996). Managerialism, so characteristic of regional governments in the 1960s and 1970s, is supplemented by entrepreneurialism as the main motive for regional action. In an international perspective it has been argued (Harvey, 1994) that the competition can best be broken down into four different forms; "*a* competition for position in the international division of labour; *b* competition for position as centres of consumption; *c* competition for control and command functions (financial and administrative powers in particular); and *d* competition for governmental redistribution". To which should be added the efforts to promote sustainability in order to take advantage of the ecological status obtained. An example of that could be the decision of the city of Lillehammer in Norway, to make sustainability an overall goal for the 1994 winter Olympic games. This statement has had a worldwide impact on future Olympic games and on the Olympic movement as a whole.

2. This shift in functions and power base "downwards" that is observed in the northern European states is nonetheless linked with the reorganisation of the regional hierarchy as new forms of regional partnership emerge to guide and promote the development of local resources. Indeed it has a European parallel. Therefore, in a European context Bop Jessop (1994) writes "in this sense we can talk of a shift from local government to local governance". Thus municipalities, regional public agencies, local unions, local chambers of commerce, regional universities, regional research centres, local enterprises enter into arrangements to regenerate the regional economy and to strengthen the position of the region as a whole.

The strategy is regional partnership, alliances and networking co-operation; the political consequence and results are regional governance arrangements and a will to secure the local environment. The slogan is think globally, act locally.

3. Growing links among regions are also closely linked to development of local and regional governance. Through the 1980s and 1990s, gradually more and more pronounced, one of the most interesting political developments in the northern Europe area, has been the erratic shift of regional authorities from identification of their role in purely national terms towards a new interest in transnational relationships (Cappellin and Batey (ed) 1993, Treuner and Foucher (ed) 1995, Veggeland 1994 and 1996). The transnational co-operation of the Barents region, the Baltic Sea region, the North Sea region have become familiar regionalisation concepts in the northern Europe.

Environmental issues are central matters in this co-operation. Ecological preservation is considered as an important sphere of cross-border co-operation.

4. Regional co-operation is a pan-European arena of action. It involves both vertical links with European Union (EU) institutions, especially the European Commission, and direct horizontal links among regional authorities and agencies in European Union member states and neighbouring external states. Transborder regionalisation is about to become an important part of the European integration process in general, and conservation and safeguarding of natural and cultural heritage in particular.

In short, regional co-operation, alliances and partnerships may come to answer the call for sustainable development, regional co-operation and public interventions made by a globalised economy. Furthermore, the role of the regional governance in the integration process will put them in a stronger position to control capital movements in accordance with the principles of subsidiarity and to preserve the European natural and cultural heritage. What is lacking in a Nordic context is a more precise spatial perspective on the importance to define the transborder regions in accordance with the extension of the ecosystems, whether they are territorially limited or not; to make them so-called ECO regions.

5. Many urgent problems can be solved through international co-operation and measures at national level. Nevertheless, there is a political acknowledgement that regional level is another basis for future planning and co-operation (Veggeland N, 1992). It is strategically accepted that mobilising regions may compensate for the lack of environmental cohesion at the nation-state level. Examples include such recent European transnational regionalisation endeavours, as the development of new Euro-region formations along the border zone between the European Union and the new democracies in central and eastern Europe. The northern states are involved in the transnational Baltic Sea regional co-operation, the North Sea regional co-operation, and in the Euro-Arctic Barents regional co-operation involving Russia; the latter covers ecologically extremely vulnerable areas.

6. Environmental planning is difficult and cross-border actions are of urgent necessity. In order to illustrate this fact, the model of an economic cycle would be useful. An economic cycle always starts by going back to natural resources and energy found in nature. We gather raw materials and harness energy. The next step involves processing and refining these raw materials using this energy. They can be worked or processed at their place of origin or else transported across shorter or longer distances to production centres. The production or manufacturing processes requires either human labour or mechanical power. Apart from by-products, the energy used, such as heat, returns to nature, often producing pollution and other waste products. The third stage of the process is known as the consumption of the products that may have been either hardly altered during production or else highly refined. Consumption can occur at the place of production, or else the products have to be transported to the consumers. Energy will be required during the transportation of the goods. Pollution will be an

important by-product of the transportation. Waste products will return to nature where they will be broken down or else accumulate as pollution. The quantity and quality of the waste products are of significant importance for sustainable development. The processes of the economic cycle are crossing borders, and can occur on scales ranging from the entirely local, regional to global. Consequently planning for sustainability should be borderless, seen from an ecological point of view. In the framework of regionalisation, the ecosystems should constitute the territorial basis. We should talk of ECO regions. Yet ECO regions have not been pointed out in the Nordic area. Nevertheless, an ecological approach was partly decisive when the Barents region, the North Sea region and the Baltic Sea region concepts were worked out in the 1990s.

7. Therefore, a likely scenario for the evolution of the northern Europe state development is that regions will continue to be built along a special ecological mode, and play a greater role within the political, economic and cultural arena. But the concept of regions has to be redefined. Since the 1980s a two-dimensional regional concept has gained strength in the European discussion. It is accepted that there exists a Europe of regions and a Europe with regions. The former concept refers to a horizontal structure of regional co-operation and local governance in the framework of federalism, and the latter to a vertical structure where the regions play a role in the national hierarchy framework. This twofold concept expresses a regionalisation process characterised by a multitude of factors, and where the two-dimensional regional concept is complementary and as such is fulfilling different functions. The functions are:

– the increasing integration or internationalisation of regional and national productive systems as a consequence of the territorial expansion of the economic cycles, flexible production and networking economic units;

– the development of the transborder regions;

– the demand for autonomy and governance by regional public and private partners, and increasing consensus on the principle of subsidiarity;

– the development of non-hierarchical relationships based on partnership between national and regional institutions in joint programmes;

– the discovery and development of transnational historical, social and cultural links;

– the overcoming of environmental problems and the preservation of ecosystems across state and regional borders.

8. The development and restructuring of the European regions is as much a reflection of growing internationalisation as it is of declining political and economic powers of the national authorities. During the national state era in the Nordic countries, local authorities operated as extensions of central top/down political power. Regional policy was primarily oriented to allocation planning, building public services and (re) location of industry in the interest of spreading full employment throughout the economy. The central power implemented top/down laws and rules on environmental protection (Veggeland, N, 1992). Thus regional and local authorities provided local infrastructure to support Fordist mass production, promoted social welfare policies, and engaged in competitive subsidies to attract new jobs or prevent the loss of established jobs. These are all tasks of great importance that should be continued. They give legitimacy to the development of local government based on regions; a Europe with regions.

However, today we are observing a reorientation of regional economic and environmental activities. Increasing emphasis is placed on development planning, economic regeneration, entrepreneurship and the strategies of achieving to make the greater regional competitiveness in the world economy. Environment is also considered as a competitive factor. This is more than technical planning and requires regional authorities to engage in other fields of policies, ranging from basic infrastructural provision to cultural policy and implementing environmental regulations, as well as mobilisation planning to activise both regional and local market partners and environmental entrepreneurs (Friedmann, 1987). In a regional and spatial perspective we see the development of borderless regions based on regional governance; a Europe and northern Europe of regions.

9. Four general driving forces behind the emergence of regional governance and transborder regionalisation in northern Europe and elsewhere can be identified. These four forces are:

a. the development of new technologies; i.e. information technology;

b. internationalisation and globalisation of the world economy;

c. flexible specialisation according to post-Fordist economic production;

d. global ecological problems.

Each in turn has major consequences for the continued viability of regional structures and spatial development in Europe. The four forces reduce the political extension and capacity of the traditional administrative regions, but strengthen the position of the functional regions based on networking strategies and cross-border development perspectives.

10. An important precondition for the on-going processes is the fact that in a global perspective we see the formation of a new society with ecological consciousness. We see the dawn of the information society based on post-Fordist production (Amin (ed) 1994). The formation of a new society is determined by the fundamental societal setting of information technology and its framework for political and institutional solutions. Geographically, the information society is said to be more or less “borderless” in its basic construction, and the new technology is a driving force behind structural integration endeavours that involve both national states and regions. Processing information, information distribution, and the use of new communication systems, are activities not to be limited by any geographical borders (Hepworth, 1989). The information technology gives the regional and spatial development planning a new dimension we should appreciate and take the advantage of. It fits very well into the worldwide need for monitoring the ecological development, and for cross-border problem solutions in the framework of sustainability.

11. An important part of the borderless integration in the information society is the fact that the world economies are becoming more and more globalised, i.e. structurally integrated and cross-border organised. Globalisation of the world economy means that the regional economy can only be seen as a node within a global economic network with no meaningful existence outside this context. The local and regional ecological problems represent a parallel phenomenon to the globalised economy; they have no meaningful existence outside a global ecological context. What actually happens is that sustainable industrial development has become fundamentally dependant on borderless information and knowledge “roads”, more than on traditional point by point actions with their limitation in time and space. It means that the information society development and planning strategies are based more on the establishment of information and knowledge structures producing software than on growth pole location in Fordist

manner with polluting manufacturing production of hardware. Hence the development of regional structures and regional transborder strategies. It can be seen as a response to the reality of the information society in order to handle politically the regions' role as nodes in borderless network systems of different kinds.

12. The consequences of a “borderless” character of the information society is that organisational structures in general are operating more across administrative borders and also national state borders, than within such borders. It means that the information society tends to base its existence on borderless activities, and the national state extends political power and control to international arenas. In that way the political power of the national state will extend functionally, but the traditional territorial power will be impoverished as political influence is given away to supernational institutions: the European Union. Consequently, and in accordance with the principle of subsidiarity, there is a great need for an active European Union environmental-based policy. The European Union initiative for a cross-border European Spatial Development Perspective (ESDP), put forward at the Leipzig meeting in 1994 is promising. At the European level the ESDP outlines European planning principles consisting of three integrated components:

– a polycentric urban system, as balanced as possible, discouraging concentration around some large centres and the marginalisation of peripheral areas;

– a network of environmentally acceptable and efficient infrastructure, strengthening the cohesion of the Community territory;

– a European network of open spaces for the protection of natural resources, with protection areas classified according to their different functions.

The northern European states are all active partners in the work to establish a pan-European perspective on spatial planning and make ESDP an umbrella for national and regional planning in Europe. Among other European transborder regions the Baltic Sea region and the North Sea region are both pointed out as ESDP action areas.

13. The consequence of the ESDP cross-border planning principles will be that the territorial power and planning competence exercised by the traditional regional governments will diminish accordingly. This happens because the administrative units at subnational level as part of the state hierarchies will have their decision-making competence defined by the national state. Reduced territorial power to the national state consequently means reduced power and territorial control to the regional governments. But the reduced political influence of the local governments is compensated. The regional response to the structural change concerning local government's political posture tends to be local governance with its power base connected to networking strategies and cross-border regionalisation. Our elaboration shows that the power base of local and regional governance arrangements is functional more than territorial.

The structural changes concerning regionalisation challenge all European national governments. It also challenges the Nordic states well-founded state hierarchies. It should be recognised by all states that regionalisation based on local and regional governance gives politics a new dimension to be tested in the years to come. Of special interest is the question to what extent this new dimension can contribute to work out new measures and action fields for a better environment.

14. Anyway, the regional Europe concept is in a process of change concerning new technologies, internationalisation and environmental planning and politics in general. The globalisation of the world economy and the emergence of international political arenas shift the national state away from full territorial sovereignty to extended borderless functional political power and influence. The regionalisation process is altered accordingly. In the information society, we must expect that the existence of regional governance, acting both locally and internationally, will become legalised and obtain a constitutional status. Borderless functional regions will keep on being created, and gradually come to complement the old government based administrative regions. The information society perspective and the call for sustainable development indicate that we must accept that it is precisely those functional regions that will constitute the new European regional and environmental future.

15. Because the information society sets a new framework for the economic and political position of the regions, and for regional and spatial planning, the radical perspective (Veggeland, 1996) is that one should look to multinational enterprises for ideas concerning borderless development planning, more than to proceed with traditional regional and spatial planning theory. Planning in the public domain has something to learn from the strategic and institutional thinking of the multinationals. Not because the multinationals' mode of production is ecologically clean, but because the multinationals are experienced to operate in a globalised world economy, and to exercise borderless, networking planning strategies. In principle it defines the new role of the regions. It mirrors what the regions have to do in the altered framework of regional development and strategic planning for a better environment. The traditional planning theory limits itself by only elaborating measures and strategies for governmental procedures in the framework of national state hierarchies. Planning development in such a limited framework is deemed to become unsuccessful because of the new “rules of the game” set by on-going cross-border regionalisation, and borderless environmental problems that seek their solution.

16. The statement can be made that there are close structural links between increased regional integration, sustainable development and local governance. Planning in a European spatial development perspective (ESDP) should help to reduce the lack of political harmony and initiatives that continue to paralyse the European Union member states in the post-Maastricht era. Therefore, the new paradigm on which to base borderless region-building and local governance in Europe should be advocated in order to promote sustainable development. Researchers in ecology, law, economics and politics should be concerned with developing further knowledge on the basis of such a paradigm. Sustainable development will not be achieved unless planners and politicians provide visions even now as to how to change current trends, including means of accomplishing the objectives.

17. An objective for the northern Europe is that the Baltic Sea region, the North Sea region and the Barents region should be pointed out as ECO regions. The building of those cross-border ECO regions shall as its overall objective, contribute to economic and social cohesion in the areas, and to achieving environmentally sustainable development. Cross-border regional governance structures such as the Baltic Council, the North Sea Commission and the Barents Regional Council exist, but the power-base should be extended. In some areas, the regions face economic problems of peripherality, a lack of urban functions, poor accessibility, etc. Some areas possess a greater economic potential than others and the environment is particularly important in some other areas.

The “core” area of the Baltic Sea region is the Baltic Sea, and together with its surrounding hinterland it represents in many respects a natural ecosystem. The “core” area of the North Sea region is the North Sea, and together with its neighbouring land and islands it also constitutes a natural ecosystem. Actually, the Barents region has no “core” area. But the Barents Sea represents the access to huge Euro-Arctic areas, and the Russian Kola peninsula is an essential part of it together with other north-western Russian, northern Norwegian, Finnish and Swedish areas. Indeed, it can easily be defined as a connected natural ecological system.

In line with the overall objectives the territories of the three regions have a defined need to develop towards a greater balance in an economic and social sense, and the environmental quality needs to be improved in urban and rural areas as well as in the Baltic Sea, the North Sea and the Barents Sea themselves. This strategy recognises the main European regional and spatial principles as drawn up in several European Union documents and recommendations from the Council of Europe.

18. The European Union is paying growing attention to the Baltic Sea region and the North Sea region in its endeavour to outline a pan-European regional and spatial development perspective. Less attention is paid to the Euro-Arctic Barents region. It should not be so. As already stressed in this paper the Barents region is an exceptionally sensitive area. As a border region between Russia and the Nordic countries it is a sensitive area both from a political and from an economic point of view. But even more sensitive it is in the light of its ecological distinctiveness. The ecological balance is threatened and in disorder. On the Russian side highly polluting industries are causing disastrous damage to the environment. But even more disastrous is the fact that huge amounts of nuclear waste have been stored on land and in the Barents Sea during the Soviet period. There is an urgent need for international action in the region in order to clean up and remove/secure the nuclear waste, and to restructure the heavily polluting industries. If nothing is done a likely scenario is that the nuclear waste stored might in time cause ecological catastrophes of global dimensions. In a European spatial development perspective on sustainability, the Barents region should be politically upgraded and in an ecological respect given special attention.

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGIONS

Which European common policy for the polar regions?

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Within the theme of this Colloquy "Strategies for sustainable development of the northern states in Europe" many existing organised co-operation forms and many geographical areas of co-operation can be identified. The picture is very diversified and it should be studied more carefully. The reason for diversification is the variety of cultures, living conditions, sources of livelihood and vast geographical areas.

The European Union membership of Finland and Sweden gave a new northern dimension to European Union. At regional level impact on development work has been great. This concerns both the content and the organisational issues.

The concept of polar regions is somewhat difficult to define. In my presentation, I consider regions located upon or crossed by the Arctic Circle as polar regions. They include counties of Lapland in Finland, Norrbotten in Sweden, Nordland, Troms and Finnmark in Norway, Murmansk, Arkhangelsk and northern parts of the Karelian Republic in Russia. More broadly one can also take into account more southern counties of north Ostrobotnia, Kainuu and northern Karelian in Finland and Västerbotten in Sweden. These areas have resources and knowhow that strengthen practical development work to be done in the extreme north of Europe.

Northern dimension and existing co-operation in polar regions

On 18 March 1997 the European Commission organised in Rovaniemi the first meeting under the theme of the northern dimension. The goal of the Rovaniemi meeting was to describe existing development work and co-operation over borders in the north and gather material and ideas for on-going planning to renew EU's structural fund policies after the year 1999.

The northern dimension included regions around the Baltic Sea, Barents Euro-arctic region, neighbouring regions of Russia to Finland and also Scotland. This is more a political framework than an operational one. At the operational level the co-operative regions must be smaller in order to co-operate on a project basis. The implementation of the European Union Objective 6 programme in northern sparsely populated regions is also very important.

In regional policy terms the most traditional co-operation in polar regions has been North Calotte committees' work under the auspices of the Nordic Council of Ministers. It was established in the late

1960s. Sectors of co-operation included business, research and education, tourism, environment and culture. The existence of North Calotte Interreg II A is now strongly vitalising co-operation within the North Calotte area. It seems that we are now getting the grass-roots level and municipalities at last fully involved in the co-operation. Especially good progress has been achieved in the Tornio River valley between Lapland and Norrbotten. Complete opening of the border has increased co-operation between small villages on both sides of the Tornio River.

Towns of Tornio in Finland and Haparanda in Sweden represent a very good example of close co-operation in municipal services. These towns have common school, sporting facilities, co-operation in rescue and sewage services.

Bilateral co-operation between Lapland and Murmansk region has started as a larger scale in the year 1988. The same happened with Norrbotten in Sweden and northern Norway. Direct regional bilateral co-operation within Finnish-Russian border received official status through the agreement of Finland and the Russian Federation on the co-operation between border regions in the year 1992.

In January 1993 multilateral co-operation has been established within the Barents Euro-arctic region (BEAR). BEAR includes the North Calotte region in Nordic countries and regions of Murmansk, Arkhangelsk and the Karelian Republic in Russia. In fact the Barents co-operation has the character of an aid programme to Russian regions. There are plans to enlarge BEAR geographically by including the counties of North Ostrobotnia, Kainuu in Finland and Västerbotten in Sweden into the co-operation. This will change the original character of co-operation focused on problems and development challenges of the extreme north. As a result, there will be less emphasis on questions of indigenous people, environmental and infrastructure issues. At the same time more importance will be attributed to economic, educational and research issues.

From the Lapland perspective, concrete results from co-operation at regional level have been rather limited. This is partly due to lack of regional financial resources and decision-making power (with the exception of northern Norway).

Another serious problem is an unsatisfactory organisation of work at regional level. Ten working groups have been created at regional level, dividing the work to too great an extent. Regional co-operation has also suffered from a lack of political commitment from the regions.

This has occurred due to low or non-existent representation of regional political organisations – at least, that was the case in Finland. That is why the Barents regional council should be reorganised.

The large geographical area of operations, as well as further enlargement will add a strategic and political dimension to the role played by the Barents regional council.

Two very important additions to northern co-operation have been the European Union North Calotte Interreg and Barents Interreg II A programmes within North Calotte region and together with Murmansk and Arkhangelsk regions. Karelian Interreg II A is under implementation between the Karelian Republic and the Finnish bordering counties of North Ostrobotnia, Kainuu and North Karelia. These programmes directed to the east give good possibilities for partners and participants in European Union regions to improve co-operation with Russian regions.

North Calotte Interreg has a budget of 40.5 million ecus. Priorities of this programme are business development, human resources and regional development.

The North Calotte Interreg programme includes specific sub-programme for Sami people. Organisations of Sami people are administering this programme and they have full decision power for the use of European Union funding on a project basis.

Barents Interreg II A programme has a budget of 36.5 million ecus. The programme covers the North Calotte area, Murmansk area, as well as a part of Arkhangelsk region. The regional council of Lapland, being in the centre of the programme area, has been authorised by the European Commission to administer this programme. The set priorities for the programme include business development, human resources, and issues concerning infrastructure, culture and health care.

During the last years the European Union Tacis programme has gained more importance. In 1995, an action plan for north-west Russia was approved and a budget of 27.5 million ecus was allocated for its implementation.

Tacis CBC programme represents an important addition to existing Tacis regulations, providing a possibility for small-scale investments. The annual budget allocation under this programme amounts to 30 million ecus.

Today the priorities of the CBC programme are particularly relevant. Development of border crossings is important for areas where long distances prevail and the infrastructure is insufficient. For the whole of the Barents region the most important new border crossing is in Salla in Lapland. It creates possibilities for the southern part of the Kola Peninsula to co-operate more closely with Lapland and Norrbotten. In the long run, the rebuilding of a missing railway connection (seventy-five km) through Salla border crossing is an important target.

Environmental issues are of a vital importance to the northern co-operation. In our case it means an improvement of nuclear safety and lowering of industrial emissions, co-operation in nature reserve activities, exchange of information and technologies of better environmental solutions, drinking water projects, ecological tourism, etc.

Different kinds of co-operation between administrations for educational purposes and in order to exchange experiences of best practice solutions are being planned and implemented. It is also important to build co-operation at local level, people to people. For these purposes, different kinds of cultural, administrative, business and research co-operation activities are planned and carried out over borders.

Development of northern sparsely populated regions

As mentioned above the European Union Objective 6 programme is one good example where the European Union has accepted the principle of the northern dimension and responded to special problems experienced by the northern parts of Scandinavia. The membership agreement details the criteria laid down for approval of the objective, the most important of which is the sparse population of the area (less than eight inhabitants per square kilometre).

The total funding for Objective 6 in Finland is FIM 7.6 thousand million, of which the European Union contribution is FIM 2.6 thousand million, equivalent to 21 per cent of the total allocated to Finland from the European Union structural funds. In the sector administered by the Ministry of Trade and Industry of Finland the implementation of the programme started at the end of 1995. However, in the Ministry of Agriculture and Forestry of Finland the programme only started in autumn 1996. So, depending on the sector, the programme has been running from six to eighteen months.

The regional councils and the respective co-operation groups led by them, as well as the central government's regional administration occupy a prominent position in the implementation of the Objective 6 programme. The programme has now been in progress for over a year and the regions concerned have acquired a variety of experiences in the course of its preparation and execution, which may be summarised as follows:

– the programme was prepared and approved in record time. The regions themselves played a decisive role in this. Although the points of emphasis laid down in the regional programmes may not be evident from the national SPD for Objective 6 area, they have in practice had a considerable influence on the allocation of resources within the regions;

– implementation of the programme in the regions commenced rapidly. Regional co-operation has become closer and has functioned well. This is illustrated by the fact that as much as 35-45 per cent of the finance reserved for the regional programmes has already been committed and decisions have been made regarding another 25-30 per cent;

– the main bottleneck in the programme implementation has been bureaucracy. The resulting inflexibility manifests itself in inconsistencies in budgeting for national funding, excessive restrictions built into the national regulations and a failure to transfer adequate decision-making responsibility to the regional level;

– the Objective 6 programme is an extensive one, as it also covers funding for projects of types included under Objectives 3, 4 and 5a. This means that LFA support, for example, constitutes as much as 24 per cent of the total European Union contribution to the Objective 6 programme. Therefore, there have been fewer opportunities for financing other development activities. Thus the level of the support allocated to Objective 2 and 5b areas, for example, is not essentially lower;

– the financing of the Objective 6 programme for the current period is insufficient relative to the development problems of the area or the level of support provided for the corresponding Objective 1 areas. There is in fact very little in the form of a national regional policy, due to the budgetary cuts made by the central government, which means in practice that the additionality principle embodied in European Union structural policy has not been implemented in the anticipated manner;

– it is still too early to evaluate the effects of the programme on development in the Objective 6 area, because the projects are either in progress or have just been launched. There are a number of projects that have proved highly beneficial to regional development from the outset, but others involve a long-term process and it will only be possible to assess their real effects after some years. The point is that the programme has enabled the regions to implement their own plans for the future based on their own strategies in a way which makes efficient use of local resources and actively supports the networking of functions.

The special problems of northern Scandinavia i.e. Objective 6 area, are its sparse population, the small size of the population centres, its peripheral location, the long distances and the cold climate. All these are permanent factors which hamper entrepreneurship, business and regional development. Consequently, development in this area calls for special measures to be implemented over a long period of time.

The following factors in Finland outlining the preconditions for development in the area will continue to underline its development needs in the future:

– GNP figures indicate that the area today still has a weak economic base. Some improvement has been achieved lately due to the progress of heavy industry in the region;

– the population has continued to decline, the trend being particularly marked in 1996, when the net population loss was as much as 3 600 persons in the entire region of the Objective 6 area (total population 835 000);

– the alarming rate of unemployment has not abated, as the figures for the whole region remain the highest in the country, varying from 23.3 per cent in southern Savo to 28.1 per cent in Lapland (1996/1997). The figure for the entire Objective 6 area is 25.6 per cent;

– the area is currently suffering from two simultaneous structural changes, one affecting rural areas and another affecting the public administration. Indicators of occupational structure show that the proportion of persons employed in agriculture and forestry is higher in the Objective 6 area than in the country as a whole (15.1 per cent/7.4 per cent), whereas the proportion employed in the manufacturing industries is lower than average (22.3 per cent/26.5 per cent). In addition, the contribution of the public sector to employment is higher. The magnitude of state subsidies to municipalities will decline more in this area than in the other parts of the country during the period 1995-2002, which will further prevent the maintaining of equal standards of municipal services and number of local administration jobs relative to other parts of the country. One also has to bear in mind the fact that in Finland municipalities are strong entities and they have had an important engine role in local economic development by providing feasible conditions for business. This is the case both in manufacturing activities and tourism centres.

It is stipulated in the treaties of the European Union (cohesion articles 130 a-d) that the community shall endeavour in particular to reduce differences in development between individual regions and backwardness in those areas which are in a less favourable position, including rural areas. It is important that this principle should be preserved when planning the next structural fund period.

Future guidelines for development of polar regions

Nordic countries, Russia and the European Union should understand the importance of polar regions in the future. Polar regions have their special problems of development, but they also have great potential for the development of their countries and of Europe a a whole. Northern regions are important in a political sense and for security matters, due to their natural resources they are rich areas, although environmentally vulnerable.

Northern regions have a lot to offer to other regions of Europe now and on a longer term. When thinking about the future policies within the European Union structural policy it is essential that Objective 6 should continue in the next structural fund period 2000-2006 and that the financial resources available for it be reinforced.

The European Union has to have a strong northern dimension in the future development policy. It should be equivalent to the Mediterranean development activities and MEDA type financing. Northern Dimension could consist of Baltic Sea co-operation and reorganised Barents Euro-arctic co-operation, co-operation in the extreme north in the North Calotte area and with the neighbouring regions of Russia and Finland. Also the linkage of Nordic countries to Scotland should be taken into account. Under this

greater political umbrella in the extreme north operational Interreg programmes should exist covering smaller co-operation areas like the North Calotte; North Calotte region together with Murmansk and Arkhangelsk; the Karelian Republic with Finnish bordering counties. These Interreg programmes should be implemented in close connection with the Russian Tacis CBC programme so that they form, in a sense, one unit. Today, across the borders of Finland and Russia, there is a big difference in the living standards. Common development activities over the border would stabilise the situation in many ways. Even if regional co-operation increases, it is also important to place emphasis on the traditional co-operation between Nordic countries.

In polar regions the role of agriculture should be protected. Agriculture and special production relating to it form the basis of rural settlements. Second priority should be given to the development of small and medium-size enterprises in the fields of tourism, cold climate technologies and light industries with good design products where transportation costs do not play a very big role. The effective use of information technology, distance education technologies are two of the sectors which continue to be limited now, when through Objective 6 programmes these activities have had a good start. The precondition is that SME receive, during the starting and developing phases, strong financial support.

In spatial planning terms Interreg IIC programmes should continue to connect the north areas from the Russian Barents region through the North Calotte to the Baltic Sea. One of those smaller regions to be developed in spatial planning terms is the Botnian Arch. This geographical area should be the logistical centre for future transport between the Baltic Sea and the Barents Sea.

Co-operation in the north should be based more on horizontal connections. Of great importance will be the strong traffic corridors like the Barents Corridor through Lapland from Nordland via Norrbotten to Murmansk region, the Arkhangelsk corridor through the Karelian Republic and the future north-west passage through the Barents Sea to Berings Strait. The development of these corridors requires strong spatial planning activities and co-operation between the polar regions.

To summarise, more attention should be directed towards northern polar regions in Europe. The role of northern regions is globally increasing very rapidly and we, Europeans, should take full advantage of this situation. On behalf of the Regional Council of Lapland and the northernmost county of the European Union, I would request everyone to take part in this important development work.

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGIONS

Spatial planning policy between the northern states of Europe: an example for a pan-European spatial planning policy

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1. Why does the European continent need a pan-European spatial development strategy?

The general political conditions for the development of cities and regions in Europe have changed radically. Europe is undergoing structural change with far-reaching consequences. The globalisation extending beyond the continent, the development of innovative areas and new technologies have a direct impact on regional economic structures and labour markets in the member states of the Council of Europe. Since the iron curtain was dismantled the national economies of all the countries of Europe have been growing together to form a pan-European market. The association agreements concluded in the course of the last few years with the countries of central and eastern Europe and the partnership agreements with the Russian Federation and Ukraine are an important step towards integrating these countries into the Single European Market.

With the opening up of politically sealed off economies the economic situation of many cities and regions in Europe has now become more difficult. Cities and regions must compete for investment in a uniform economic area. Their locational advantages and disadvantages are a significant factor determining the future prospects of their inhabitants.

The first report on economic and social cohesion in the European Union shows that the spatial and social disparities are not necessarily removed as national economies grow closer together in spite of the injection of substantial amounts of structural funding. This report on cohesion demonstrates that no significant reduction in disparities in the European Union between the individual regions took place between 1983 and 1993. The regional differences within the European Union, measured in terms of per capita income, are more than twice what they are in the United States.

The European Commission draws the conclusion from this report that the problems facing the cities and regions of Europe are ultimately due to the continuing imbalance in the use of space throughout Europe. This is seen in grossly overcrowded metropolitan areas, in the lack of trans-European communication and energy supply networks, in the unsustainable use of resources and in the decline in population in rural areas. This situation is due in part to the historical legacy of separate development but also to the differences in development planning in the fifteen member states. This has resulted in contradictions and imbalances in spatial development policy. Thus, in a common market, regionally significant

development measures and/or the blocking of investments have at times far-reaching consequences for the development of cities or regions in other European countries. This results for the European Commission in a need for measures in the field of spatial planning at European level. Help is provided here by the new Community Initiative Interreg "Spatial Development" (IIC), in which the spatial planning authorities of various member states and third countries co-operate on joint development planning.

The members of the European Union are at present working on the preparation of a European Spatial Development Perspective (ESDP), which is intended to provide a guiding framework to make it easier to achieve the objectives of economic and social cohesion, because, in the Commission's view, other sectoral policies in addition to structural policy must also be drawn on in order to achieve the so-called cohesion objective. The European Spatial Development Perspective should represent a comprehensive spatial development strategy for the European Union. But similar close co-operation among spatial planning authorities is already taking place outside the European Union as well.

The countries around the Baltic Sea have adopted a framework perspective on spatial development in the Baltic region. This region is intended to become a model of sustainable and environmentally sound development. In contrast with the European Union, the participating members of the European Union and the reforming states in the Baltic region, including Belarus, have co-operated from the outset with the preparation of the document "Vision and Strategies around the Baltic Sea region 2010/VASAB 2010". In other European subregions such as the Black Sea area or the Danube area there are, however, as yet no supranational development perspectives for cities and regions that could be integrated into a pan-European spatial development strategy.

The examples of the European Union and the Baltic region show that in parallel with national economies growing closer together to form a pan-European market it is necessary to support this process by pursuing a pan-European spatial development strategy. Germany will host the 12th European Conference of Ministers responsible for Regional Planning in the year 2000 in Hanover during the World Exhibition (EXPO 2000). The focus of this conference should, in our view, be on the examination of a document on a pan-European spatial development strategy. The main aim of this strategy must be to strengthen spatial cohesion within the framework of the sustainable development of European cities and regions in an expanding Europe. The 12th European Conference of Ministers responsible for Regional Planning can fit into the EXPO under the topic "Environment and development". This strategy may also provide the framework for intercontinental dialogue with other economic areas such as NAFTA, MERCOSUR or ASEAN, which the World Exhibition 2000 is intended to initiate. A pan-European spatial development strategy can act as a model worth considering not only in Europe but also beyond in order to harmonise economic unions forming large markets and sustainable spatial development.

2. What might the possible objectives and fields of action of such a strategy be?

The national spatial planning authorities in two subregions of Europe have submitted strategies for spatial development. In 1994, during the German presidency of the Council, the then twelve member states of the European Union and the four countries wishing to join, Sweden, Finland, Austria and Norway, reached agreement on the principles for a European spatial development policy at an informal meeting of the Council of Ministers in Leipzig. The ministers responsible for spatial planning in the countries bordering the Baltic Sea including Belarus adopted a framework for spatial development in the Baltic region the same year. These two documents involve important building blocks for a pan-European spatial development strategy which already covers twenty-two of the forty members of the Council of Europe.

What these spatial development perspectives have in common, covering most of Europe, is that they declare the principle of sustainable development to be their main objective: sustainable Europe. Under this approach, as stated in the basic document adopted in Leipzig, the economy and ecology are "the two sides of the same coin" and hence of a well-targeted regional development control. True, there may at present be conflicts between them but, in the long term, the quality of the environment will increasingly become the pre-condition for economic development. It is also already an important locational factor for investments. A sustainable spatial structure could therefore promote competitiveness and stimulate employment.

Economic and environmental development in the European Union must be based on a more balanced spatial structure. Spatial planning policies must combine the following objectives:

– the development objective: to restructure and strengthen the structurally weaker areas of Europe which are of particular importance for the territorial cohesion of the European Union;

– the balancing objective: to bring into line the living and working conditions of the population beyond national boundaries between areas of different levels of development;

– the protection objective: to preserve, re-establish and connect within a balanced and transnational network a coherent system of open spaces, with their respective functions.

In order to achieve these operational objectives of spatial development, the paper adopted in Leipzig recommends that the European Spatial Development Perspective, which the European Union member states will discuss at an informal meeting of the Council of Ministers in Noordwijk (Netherlands) next month, should promote the following spatial planning policy actions at European level:

– a polycentric and well-balanced system of city regions which seeks to avoid excessive concentration in a small number of large centres and the marginalisation of peripheral areas;

– a network of environmentally sound and efficient infrastructures which reinforces the territorial cohesion of the Community area;

– a European system of open spaces improving the protection of natural resources with graduated protection areas for its various functions.

The perspective for the Baltic region 2010 is also based on the goal of achieving sustainable development. In addition, the following points are addressed as separate basic values:

– freedom: this means here the possibility of having comprehensive democratically legitimised participation in the regional and local planning and development process. The guarantee of subsidiarity is an important instrument for facilitating participation. The principle of subsidiarity contributes to improving and increasing the quality and the political acceptance of decisions:

– solidarity: characteristic of a welfare society which shares the advantages of development for the benefit of the entire territory.

Spatial planning policy in the Baltic region as a whole should promote these three basic values. The spatial planning policy concept VASAB 2010 describes the major spatial planning policy fields of action in a similar manner to the basic document adopted in Leipzig:

– strengthening the urban system of European, national and regional significance (the “pearls”);

– linking these urban regions in an effective and sustainable manner with the aid of transport and energy networks (the “strings”);

– assisting areas with special problems and development potentialities such as islands, coastal regions, natural landscapes, border areas (the “patches”).

Comparing these two spatial planning development strategies it becomes clear how much they have in common as far as objectives and spatial planning policy fields of action are concerned. Yet there is one marked difference: spatial planning policy in the European Union aims to a large extent at achieving spatial convergence by basing Community policies more on spatial planning perspectives, whereas spatial planning policy in the Baltic regions wishes to promote a democratically legitimised and decentrally organised spatial development process.

3. Why is co-operation in the Baltic region a model for pan-European co-operation?

The four European Union member states and the reforming states Poland, Lithuania, Latvia, Estonia, Belarus and the Russian Baltic regions of Kaliningrad, the Karelian Republic and the city of St Petersburg are working together in the Baltic region. The dominant feature of the spatial planning policy co-operation is the effort being made to overcome the former boundary between the systems – the iron curtain – and to re-establish the traditional and successful co-operation in this area.

Assistance in developing national planning and administrative structures is in particular demand given the fact that with the introduction of the market economy the reforming states need a legal framework for planning and an administrative and decision-making process that can channel private investment into the right areas and provide long-term planning reliability.

Let us not forget: the collapse of the centrally planned economies suddenly hampered the future development prospects of these territories. Many cities and regions in the former communist sphere of influence depended on one or a small number of public enterprises that were not based on economic principles but were rather established for overriding political reasons. With the introduction of market structures traditional markets disintegrated and the economic locational advantages and disadvantages of the individual regions and cities are now making themselves clearly felt again. Foreign investments constitute an important source of progress today, as is incidentally also the case in the European Union. After the opening up of the new markets they are concentrated primarily in the capital cities and in a small number of attractive regions, situated for the most part close to the external borders of the European Union.

The disintegration of the economic and social development of the countries of central and eastern Europe into a small number of favoured regions on the one hand and the rest of the state territory on the other, which is only inadequately covered by the transformation process, holds the danger in the medium term of domestic policy tension arising and, given the growing regional disparities, makes the European

Union membership they seek more difficult. The reforming states therefore expect landmark concepts for spatial development ensuring that a maximum number of regions and cities benefit from the positive effects of the new economic and social system. A pan-European spatial development perspective must provide the necessary technical and political support here.

It is not possible to apply the very far-reaching aims and objectives for the spatial development of the fifteen member states of the European Union to the whole of Europe. Funds are lacking for a spatial development policy of this kind and there are no pan-European policy areas within the framework of the Council of Europe with corresponding decision-making powers to influence spatial structures. The main aim of a pan-European spatial development strategy must be to clarify in the countries of central and eastern Europe the role of spatial development policy for the economic and social development of a territory. The exchange of information and the transfer of modern knowhow in the field of spatial planning policy must also be promoted.

The Baltic region can serve as a good model for co-operation among the countries of Europe in spite of the (former) iron curtain. The greatest progress in transnational co-operation between European Union and non-European Union countries has been achieved here. The special thing about this co-operation is that not only relatively abstract spatial development concepts are jointly considered but that efforts are now being made to translate the joint spatial development objectives and the commonly defined fields of action into concrete transnational projects.

4. How does co-operation among the national spatial planning authorities in the Baltic region work?

The national spatial planning authorities in the countries bordering the Baltic Sea work together within the Committee on Spatial Development/Baltic Sea region. The *Länder* Mecklenburg-western Pomerania and Schleswig-Holstein are involved as part of the German delegation. The delegation of the Russian Federation is made up exclusively of representatives from the regions of Kaliningrad, the Karelian Republic and the city of St Petersburg. This committee is served by a secretariat in Gdansk; as in the case of the Baltic Sea Council, it is chaired at present by Latvia.

Among the other things, the committee prepares the Conference of Ministers responsible for Spatial Planning, which have been held every one or two years since 1992. In contrast with the Committee on Spatial Development of the member states of the European Union papers are submitted not only by the secretariat or the country currently holding the chair; there is a division of labour among the participating countries. It is found that this alone provides an integrating force for co-operation on spatial planning policy that is, of course, underpinned politically by the meetings at ministerial level.

The report “From vision to action” was adopted at the last Conference of Ministers responsible for Spatial Planning held in autumn 1996, setting out the most important spatial development projects which it is intended to carry out in the course of the next few years with the aid of close co-operation among the national authorities. This involves six project areas of significance for spatial planning policy:

– pilot projects to foster urban co-operation;
– use of transport corridors to improve sustainable regional development;
– co-operation on marine transport;
– sustainable tourism (eco-tourism);
– transfrontier co-operation in the fields of spatial planning and urban development;
– exchange of information by holding seminars, preparation of joint handbooks, etc.

In carrying out these projects, close co-operation among the spatial planning authorities of the member

states of the European Union and the reforming states is taking place. The aim is to integrate the partners in the countries in transition into the process of European co-operation on spatial development. To illustrate this, I would like to mention two projects Germany is involved in.

Co-operation on spatial planning policy in the German-Polish border area resulted in its first stage in joint "spatial planning perspectives for the area along the German-Polish border". These have been enshrined in government resolutions in both countries. A first implementation project – more precisely a project in the field of tourism development in the German-Polish Baltic Sea region – was successfully carried out in 1996. The project provides Poland and Germany (in particular Mecklenburg-western Pomerania in this instance) with a valuable basis for decision-making and planning principles for the development, expansion and appropriate integration from a locational point of view of a network of marinas. This is now to be extended to other coastal areas in order to promote an environmentally sound form of tourism based on sailing.

Another priority of spatial planning co-operation is the use of transport corridors to improve sustainable regional development. The second pan-European Conference of Ministers responsible for Transport, held from 14 to 16 March 1994 in Crete, established nine priority corridors in the countries of central and eastern Europe and the Commonwealth of Independent States (CIS). These corridors constitute the further development of the large transport axes of the western European transport network in and to central and eastern Europe. Five of these corridors affect the Baltic region. It is easy to predict that this will be a major centre of infrastructure investment activity in the coming decades.

These measures should not be judged in transport policy terms alone; rather they provide an opportunity for generating regional development. Thus, a regional development concept is being prepared for the section of the trans-European corridor II (Berlin-Warsaw-Minsk-Moscow), situated on the territory of the Republic of Belarus, which is intended to promote decentralised economic development along the corridor. The general conditions for investment are therefore being improved in this way in a difficult economic environment outside the region of the capital Minsk as well.

There is a growing demand in the Baltic Sea area for this spatial planning policy methodology to be applied to other parts of the Baltic region. (This is supported by the results of the last Conference of Ministers responsible for Spatial Planning). Since a regional impact assessment and/or the optimisation of investments in transport corridors require the co-operation and active participation of all the administrative levels and various private and public corporations, it is a useful instrument for making market-oriented spatial planning policy more accessible to the countries in transition.

This type of project-oriented co-operation based on the principle "learning by doing" has proved to be extremely promising in the Baltic region and influences the implementation of the spatial development strategy for this area. Within the framework of the Community Initiative Interreg IIC, the four European Union member states bordering on the Baltic have applied to the European Commission to provide financial assistance amounting to 46.2 million ecus for this transnational co-operation in the field of spatial planning. They have made clear in doing this that this assistance must not be restricted to spatial planning projects undertaken by the European Union member states. The reforming states bordering on the Baltic Sea must be included in this process as equal partners. This will also succeed if the European Commission creates the conditions permitting funding provided under Interreg IIC and the support programmes for the countries of central and eastern Europe Phare and Tacis to be used jointly for a transnational project. The area covered by spatial planning policy co-operation around the Baltic is shown on the following map.

5. What conclusions can we draw from this experience for the preparation of a pan-European spatial planning strategy?

It is necessary not only to bring the European Spatial Planning Charter prepared in 1983 up to date but also to develop it further in a pan-European spatial planning strategy. The document "Principles for a spatial development policy" adapted in Leipzig and the VASAB 2010 document should provide the basis for this. It must be examined what statement contained in these two documents and in the European Spatial Development Perspective (ESDP), which is in the process of being drawn up, can be accepted in particular by the new members of the Council of Europe.

From the work submitted so far it may be seen that a pan-European spatial development strategy must take the principle of sustainable development into account. In doing this, it will be important to make clear that "sustainability" is not a form of "de luxe planning" undertaken by the rich member states of the European Union but serves the purpose of significantly enhancing the development prospects of the cities and regions of Europe with regard to global competition.

The pan-European spatial development strategy will by no means make national spatial planning policies superfluous; on the contrary, it must contribute to reinforcing democratically legitimised regional and national spatial development policies. It cannot be the task of the Council of Europe to draw up a comprehensive overall concept in the form of a planning atlas. Rather it must be a question of reachiving agreement on the joint areas for action in the field of spatial planning policy and to make concrete recommendations for action for regional and national spatial planning policy and for international co-operation.

Based on the precious results of co-operation among twenty-two of the member states of the Council of Europe the priorities of the European spatial development strategy will probably be concentrated on three areas:

– on the European city regions as the engine of a regionally balanced development of our continent;

– on the communications axes to link them which have the function of development corridors;

– on the remaining for the most part predominantly rural European subregions with their great diversity of functions.

The European urban system reflects the history and the great cultural diversity of the countries and regions of Europe and should be strengthened and modernised by the pan-European spatial development strategy. This requires a highly-developed interlocking system:

– between the city regions of Europe, taking account at the same time of the intercontinental links to city regions on other continents;

– within the city region by means of closer co-operation between the communes and regions;

– between the city regions and the regional centres and rural areas within their wider sphere of influence.

The extension of the trans-European networks to central and eastern Europe is the responsibility of the pan-European Conference of Ministers responsible for Transport. The ideas discussed at the conference in Crete will be received and supplemented at a third conference to be held the next month in Helsinki. The pan-European spatial development strategy must serve the purpose of co-ordinating the activities in both fields more closely with each other, that is to say in the fields of transport and spatial planning. In doing this, spatial planning assesses in particular the impact of infrastructure on the economic and social development of the surrounding (sub-) regions and on the natural environment of the adjoining area. Its proposals serve the purpose of optimising sectoral investments for regional development.

The areas outside the city regions are generally described as rural areas. However, it must be pointed out in this context that neither the document adopted in Leipzig "Principles for a European spatial development policy" nor the VASAB 2010 perspective deal with rural areas. "Rural areas" – equated with structurally weak and poor – do not exist in Europe. The countryside is extremely diverse and vibrant. What the various predominantly rural areas have in common is simply the low density of population compared with city regions. There are differences depending on the closeness or distance from cities as well as on the existence of regional centres. There are also marked difference in economic structure, in infrastructure provision, in suitability for use for agricultural and tourism purposes and with regard to their ecological significance.

A pan-European spatial development strategy will, however, have to consider the situation of the more sparsely populated regions of central and eastern Europe. These subregions outside the city regions of Europe appear at present – with few exceptions – to be the losers in the transformation process. The ministers for spatial planning in the countries around the Baltic have submitted initial landmark documents in this connection suggesting how the very different potentialities of these rural regions could be better harnessed in a European context.

The majority of the countries in the Council of Europe that have not yet been included in the close transnational spatial planning co-operation are situated in central and south-eastern Europe. It is therefore advantageous for the preparation of the pan-European spatial development strategy that Italy, Greece, Austria and Germany have established an Interreg IIC co-operation area. As in the case of the Baltic region they have offered the third countries concerned their co-operation and have applied to the European Commission for funding amounting to almost 20 million ecus. The following map shows this co-operation area.

Interreg IIC and the discussion on a pan-European spatial development strategy may in the course of the next few years be the decisive driving forces on the road towards a more regionally balanced development of the regions in a Europe that is growing together. This is an important pre-condition for sustainable development. In accordance with their respective legal and political possibilities, the European Union and the Council of Europe will complement each other perfectly in doing this.

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGION

Co-operation around the Barents Sea

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1. The Barents co-operation

In 1989 the cold war structures crumbled, and in the subsequent years a number of diplomatic moves were made to establish new types of relations across the East-West border. The Barents initiative was part of this process.

In March 1992, Mr Thorvald Stoltenberg, then Foreign Minister of Norway, had an informal discussion with the Russian Foreign Minister, Andrey Kozyrev. Mr Stoltenberg suggested a regional co-operation covering two Russian oblasts (counties) in the north and a number of adjacent Nordic counties. Kozyrev accepted the idea, and they agreed to meet in the border city of Kirkenes, Norway, together with Foreign Ministers from other interested countries, to sign a declaration on the Barents Euro-Arctic co-operation or the Barents co-operation for short.

In January 1993 the Foreign Ministers of Russia and the five Nordic countries and a representative of European Commission, met at Kirkenes, together with observers from thirteen other countries, and signed the Declaration on the Barents region.

The Barents co-operation centres on the following fields: industry, trade, science and technology, tourism, environment, infrastructure, health, educational and cultural exchanges and improvement of the situation of the indigenous peoples of the north.

This paper describes the Barents project. First the Barents region, then the Barents co-operation is subject to a presentation, followed by some personal observations on the political reflections which are intrinsically the underlying causes of the project.

2. The Barents region

Geographical overview

The Barents region is located in the Arctic and sub-Arctic parts of Europe. The region covers two Russian counties (Murmansk Oblast, Archangels Oblast), the Nenets Okrug and the Russian Republic of Karelia; three Norwegian counties (Nordland, Troms, and Finnmark); one Swedish county (Norrbotten) and one Finnish county (Lapland).

The climate of the region is normally cool, with rather low both summer and winter temperatures. In the west the Gulf Stream supplies the Norwegian part of the region with a warmer climate and more vegetation than other circumpolar regions. The average temperatures vary between 0 ^{o}C in the west and minus 15 ^{o}C on the coast of the Archangels Oblast to inland temperatures that can sometimes drop as low as minus 45 ^{o}C.

The region covers 1.2 millions sq. km, which is twice the size of France, but the population is merely 4.5 millions, including groups of indigenous peoples like the Sami (50 000) and the Nenets people (less than 10 000).

More than 70 per cent of the population live on the Russian side. All the major cities of the region are located here, such as Archangels and Murmansk (400 000 inhabitants each) and Petrozavodsk (300 000). In comparison the largest towns in the Nordic area include Swedish Lulea (45 000), Norwegian Tromso (50 000), Bodo (40 000), and Finnish Rovaniemi (35 000).

The area is extremely well endowed with natural resources in the form of oil, gas, fish, timber and minerals. This implies that it probably is the richest region of Europe in terms of natural resources, and the settlement pattern has been mainly determined by their extraction and processing. The north Norwegian settlements are based on the harvesting of some of Europe's richest fish stocks, the settlements in northern Sweden and northern Finland are due to a large extent to rich mineral deposits and forests. Mineral deposits, and to some extent fish, play a dominant role in settlement patterns on the Kola Peninsula, and forests represent a reason for settlements in the Archangels Oblast and the Republic of Karelia.

Numerous oil and gas deposits have already been discovered in the region, and new major discoveries are expected in the years to come. It is difficult to assess the gas potential. Russian experts have, however, estimated the total energy reserves on their side to be of a dimension equal to those of the Middle East. The region is likely to play a significant role as supplier of gas and oil to the European market in a couple of decades henceforth.

A few notes on the history of the region

The Barents region was inhabited as early as 7 000 years ago by a nomadic population. In the early Middle Ages, the local population established trading contacts with the Russian (Karelian) and Nordic peoples living further to the south. During this period, the Norwegians and the Karelians were competing for the right to tax the Sami people in the north, and there were regular contacts between the White Sea area and the northern parts of Norway and of Sweden (including most of present-day Finland).

Interests in the Barents Sea and its coastline increased in the sixteenth century, when European countries were exploring the sea routes to China. At the same time, the Swedes began making claims to the area, but both Russia and Denmark-Norway (being one kingdom) opposed these. This caused the Swedes to look more south-eastwards, and for centuries the Karelian territory remained an area of Russo-Swedish conflict.

Towards the end of the century the Dutch joined in the competition for sea routes, and the Barents Sea is named after the discoverer Willem Barentsz, who mapped much of the area before his death there exactly 400 years ago. Thus his name was chosen for the denomination of the new region in 1992.

The town and port of Archangelsk was founded in the late sixteenth century. The town subsequently became a major trading centre, being for many years Russia's only access to the sea in the west. These merchants, known as Pomors, established a number of trading ports on the coast of northern Norway, and a road was build from Archangelsk to the Baltic Sea at the beginning of the eighteenth century. This flourishing trade along the coast of northern Norway became known as the “Pomor trade”, and it has since been invoked by region builders in the 1990s, who wanted to foster a regional framework for identification in order to alleviate the disparities between the eastern and western parts of the Barents region.

The border remained open in the north until the 1920s, when a combination of nation building considerations and the Russian revolution, were conducive to border restrictions. The second world war had an extremely harsh impact on the Region, especially on the Murmansk Oblast and parts of Finland, where there was heavy fighting, and the county of Finmark, which was liberated by the Red Army in 1944 after the Germans had pursued the scorched earth policy. The Red Army's intervention, as well as its subsequent withdraw in 1945, were not to be forgotten by a grateful local population, not even during the cold war years when the border in the north was closed. The reopening, in 1989, reflected the amended political situation in Russia.

During the cold war few parts of the East-West border were more firmly closed than the border in the northern part of the Barents region. Here the USSR had a direct land border with a NATO country (Norway), and here large military forces assiduously watched each other during the last decades of the cold war. Crossborder contacts were more or less non-existent. The tensions in this area expressed the fact that the Barents Sea and the Arctic Ocean served as a deployment area for the sea-based nuclear deterrent forces of both superpowers.

Economic life of the region

The economic life of the Barents region centres on fishing, raw material extraction and processing. This feature is typical for the entire region, but the type of extraction and processing varies. Reindeer still play an important role in the economy of the indigenous peoples.

The economic life of Murmansk Oblast is linked to mining and fishing, and the armed forces have a significant impact on employment. In Archangelsk Oblast industry dominates the economy with forestry accounting for half of the industrial production. The oil and gas industry is rapidly developing into a major sector of the economy, especially in the northern part of the oblast. In the Republic of Karelia, the industrial base is forestry and the pulp and paper industry.

The economy of the northern parts of Norway, is emanating from fishing and in northern Sweden and Finland from mining and forestry. However, high technology enterprises, tourism and various service industries enjoy an ascending role. Manufacturing is rather insignificant, and the public and private service sector is the largest in terms of employment.

This is in contrast to the Russian territories where industry and the armed forces account for a substantial share of total employment. The Russian economy has suffered a considerable setback since the introduction of a stringent reform programme in 1992. The economy of the Nordic parts of the region is in a much better shape although unemployment persists. There are considerable differences in living standards between the Russians and their Nordic neighbours.

However, the economic differences between the western and the eastern part of the Barents region do not represent a merely negative factor in the co-operation. A key concept here is interregional

complementarity in terms of potential. Such complementarity applies to a number of fields. The Nordic side has technology, capital and administrative knowledge that is useful for the Russians, while the latter possesses natural resources and a well educated workforce with low remuneration costs. To exploit this complementarity, ways must be found of overcoming the differences in economic structure and culture. Such a development will be conducive to economic co-operation across the former East-West border.

Environmental challenges

There are major environmental problems in the Barents region. The main problem in the westernmost parts is the heavy overgrazing by reindeer. The eastern part, notably on the Kola Peninsula, is endangered by large amounts of hazardous nuclear objects, such as nuclear waste and nuclear reactors from decommissioned submarines, and a concentration of environmentally hazardous production. The severe environmental damage caused by pollution of water and air in the area will have consequences that go beyond the region itself. Irreversible degradation of the sensitive Arctic ecosystem may have a destructive effect on world climate and on the rich marine resources in the area.

A major environmental forthcoming challenge resides in the exploitation of natural resources, notably of gas and oil, without damaging the vulnerable Arctic environment.

3. The Barents co-operation

Institutional set-up

The structures of the Barents co-operation are closely linked to the duality between central government and regional authorities. Central government is represented in the Barents council, while the regional authorities participate in the regional council.

The Barents council consists of the ministers of foreign affairs of the five Nordic countries and Russia and a representative of the European Commission in Brussels. Other relevant ministers may also take decisions in the council subject to consensus, and the chairmanship rotates among the member countries in the region on an annual basis. A committee of senior officials (CSO) prepares the meetings.

According to the Barents declaration, the co-operation is open to all countries interested in playing an active role. At present Canada, France, Italy, Japan, the Netherlands, Poland, the United Kingdom, Germany and the USA send observers to the Barents council.

The regional council consists of the supreme political or administrative leaders of the constituting regional entities and a representative of the Sami population. The counties of Oulu and Västerbotten in Finland and Sweden have observer status.

The chairmanship alternates among the regional entities on a biannual basis. There are a number of working groups and several permanent secretariats. The main secretariat rotates with the chairmanship.

Interaction between regional and national levels

The interaction between regional and national interests through the Barents council and the regional council was originally regarded by the founding Minister Stoltenberg as a key element in the future co-operation. The regional focus is on economic growth, including the conversion of military production to civil production, while the national governments are more preoccupied with stability and confidence building i.e. issues pertaining to security in a changing East-West situation.

"Bottom-up" and "top down" regional co-operation

Political scientists often discern between "top down" and "bottom up" regional initiatives. The first usually stems from the capitals, the second from those living in the region. The first type of project is often considered as being imposed from above or from far away, whereas the latter is predominantly local initiative and more easily accepted by the people living in the region, and thus provides a better basis for the cultural and social consciousness.

Any regional scheme covering the East-West border must obligatorily obtain full political support of the capitals. The Barents co-operation therefore has to be founded in a "top down" manner. There was, however, a strong local inclination. But there was a strong "bottom up" from the early days. The regional council representing the regional authorities and the indigenous peoples of the region, has been a useful instrument for "bottom up" region building. It has encouraged the creation of extensive networks in the region, which involve a large number of groups ranging from artists and researchers to local officials and businessmen. It should be noted that such activities at the person-to-person level comprise a scheme where more than 1 000 Russians have studied in Norway for shorter or longer periods as a result of the co-operation. This is only one of many initiatives emanating from the regional setup.

Region building

The Barents region is an element in the comprehensive European process of cross-border regionalisation.

Region building is intrinsically linked to building the regional identity. Broader public support and popular identification with a regional concept are indispensable. Thus effort should be made to foster a regional cultural framework for identification.

Cultural projects have been implemented and cultural festivals arranged with focus on the long-standing cultural ties between the various parts of the region. A team of scholars from the eastern and the western parts of the area have written a new history of the region, emphasising common features and future potentials. The Pomor trade between northern Norway and Russia, and historic contact between the White Sea area and the Baltic Sea Area, have played an important role in these projects. They serve as an example of how the co-operation prolongs a century-old historic tradition.

4. Political thinking and interests behind the Barents co-operation

The number of countries and peoples involved in the Barents projects, makes it meaningless to limit the scope to one type of thinking. Below are some of the main political ideas underlying the original initiative and the stance of the current co-operation. These reflect personal impressions and do not represent the view of any institution.

From confrontation to co-operation

From the late 1940s to the early 1990s the region, of notably northernmost part of Norway and northwest Russia, was subject to cold war political logic. The line of demarcation between the two political systems, and between the two politico-military blocs, vehemently divided the region. Political activities on either side of this line expressed the endurance of the East-West conflict.

The heavy military build up on the two sides reflected the region's strategic importance. The cold war conflict, like almost all other historic conflicts in the region, totally detached from local issues, left no scope for local political concerns that might conflict with broader security considerations.

There was limited opportunity for alternative or more pluralistic thinking. New ideas could easily be interpreted as an unwelcome element of ambiguity and thus conflict with security considerations. Political dissidence or local political initiatives likely to have implications for cold war logic were followed closely in the capitals. This applied both in the Soviet Union and in Norway, belonging to military blocs, and in neutral Sweden and Finland.

Political limitations subsisted on cross-border regional co-operation between Finland, Sweden and Norway in the north, although the local co-operation could benefit from a Nordic passport union and a joint Nordic labour market from the 1950s.

The end of the cold war implied that the previous lines of demarcation could be ignored and the old way of thinking could be alleviated. Such a damage resulted in the Barents initiative. As early as 1986 a group of Norwegians decided to sail a small ship, the Karoline, from Tromso to Archangelsk. At this time Archangelsk was still closed to foreign visitors. The fact that the Karoline finally entered the harbour was the first step in a process that led up to Thorvald Stoltenberg's consultations with the Russian Foreign Minister. Andrey Kozyrev, in March 1992, and the subsequent Barents Declaration in January 1993.

Political considerations behind the Barents initiative

The Norwegian suggestions to establish a regional co-operation arrangement should be described as a mixture of vision and *Realpolitik*. The vision was one of peace-promoting, confidence-building co-operation in the north, to be achieved by linking the northern parts of the Nordic area with north-west Russia. The *Realpolitik* was the idea of enlarging this to a multilateral co-operation forum involving other Nordic and European countries.

The vision was straightforward: it reflected the desire to replace the previous confrontation in the north with an active co-operation scheme. This co-operation would in turn serve as a framework for implementing the practical aspects of the post-cold war realities in Arctic Europe.

The inspiration was European in line with the EEC co-operation, established in the 1950s in order to build confidence between the hereditary enemies Germany and France. First, Mr Stoltenberg wished to establish a set of positive contacts in the north that would make conflicts less likely and open the way for more normal neighbourly relations across the former East-West division. Secondly, regionalisation had become a growing trend in Europe. This process had resulted in series of cross-border regional arrangements on the continent, and had inspired the Baltic Sea co-operation. Now the concept of regionalisation was to be applied in the northernmost part of Europe.

In 1992, these were bold visions. At that time most of the western foreign policy establishments were still influenced by cold war thinking, with the assertion that the military disarmament under way on the continent was not being followed up on the Kola Peninsula.

These visions were more pronounced in a Russian perspective. To Russia, faced with potential disintegration, cross-border regional co-operation with neighbouring western countries was a completely new idea, and politically speaking, a daring one. Parts of the Russian foreign policy establishment, and essentially the military establishment, viewed these new visions with considerable suspicion. Russian

sea-based strategic forces in the north were situated along a NATO border, at a ten minutes jet flight, making the bases highly vulnerable.

In Norway, too, the idea of regionalisation, establishing cross-border contacts with such profound potential foreign policy implications, was new to the foreign policy establishment, and gave rise to scepticism in many quarters. However, the Norwegians, contrary to the Russians, did have some experience of cross-border co-operation with Sweden and Finland. The idea of interregional relations as a supplement to international relations was thus not completely new to the Nordic partners.

Nordic interests

The other Nordic countries' political interests with respect to the Barents initiative were not compatible with those of Norway. They were all aiming at normalising relations between Russia and the neighbours in the north, stabilising the region as an entity and counteracting military tension, environmental degradation and differences in standards of living. In this respect the Barents co-operation can be compared to other aspects of all-Nordic co-operation.

The Barents co-operation also represents an important factor for the Nordic countries in terms of regional policy. The economic development of the north, and the aspiration to maintain area population, were a challenge for capitals, that could make their regional policy more effective through the inclusion of countries and institutions (the European Commission) from outside their borders.

The northern counties of Norway, Sweden and Finland obviously share their capitals' concern pertaining to stability in the north. The Barents co-operation may represent to them an instrument apt to pursue their interests, both locally and in the relations to capitals.

Russian interests

From a Russian perspective the Barents co-operation is a valuable instrument of stabilisation. It is also a window to the west and notably to the European Union. This is obviously also the case for Russia in the Baltic Sea co-operation, but the larger number of participating countries limits the possibilities to focus on Russian concern.

The Barents co-operation is important for the regional development of Russia's northern territories. There is an outward and southward migration of people from these areas which, if left unchecked, may present obstacles to the development of the rich resources in the north. The Barents co-operation may also assist in providing civil employment alternatives to the personnel of armed forces and military production. It can be perceived as a channel of assistance from the central government to the people of the region.

The Russians consequently give priority to economic and trade co-operation and transfer of technology. This has often differed from the Nordic tendency to emphasise environmental issues. The growing local Russian concern about environmental problems has consequently made it easier to initiative projects in this field, often combined with economic co-operation. The Barents co-operation may thus encourage the alleviation of some of their major environmental problems.

European interests

The European Commission participated at the Kirkenes meeting in 1993 and is thus a founding member of the Barents council.

Sweden and Finland joined the European Union in 1994 and Norway is part of the internal market through the EEA Agreement. This makes the Barents region, as well as the Baltic Sea region, border areas between European Union and Russia, and offers a European window on Russia in a relatively conflict-free, resource-rich part of Europe.

Several of the Union's Interreg programmes cover parts of the Barents region. Sweden and Finland play an important role in these programmes and Norway participates as self-financing member. Two of the programmes cover Russia: Interreg-Barents covers the northern Nordic counties, and Murmansk Oblast, and Interreg Karelia covers Finland and the Republic of Karelia. The programmes have a budget of 11 million ecus for the period 1996-1999.

5. Achievements and perspectives

What has been achieved in the Barents co-operation?

The establishment of the Barents region, although politically daring at the time, was formally a simple matter that demanded little more than an agreement to co-operate and to set up institutions. The impact of East-West cross-border co-operation on the development of relations between societies is of course a different matter.

Only five years have elapsed since the founding of the Barents region. It may be too early to take stock of a co-operation that bridges one of the most impenetrable European borders during the cold war. The Barents co-operation is a long-term project and major results should not be expected in such a short time. But some achievements should be highlighted.

The principal result so far is the extensive network established between the Russian and Nordic sides of the border, despite cultural and linguistic gaps. A valuable foundation has thus been laid for future co-operation in the region where Russia meets both NATO and the European Union. This could be a contributing element in the future process of integrating Russia in the Atlantic and European co-operation.

The disparities in productivity and living standards and the cultural differences between the eastern and western part of the region, and the economic turbulence in Russia since the early 1990s, represent indeed major challenges to the interregional economic co-operation in the region. There has been, however, a considerable increase in intra-regional trade, and in a number of joint ventures that have been established during the last few years.

Practical results have also been achieved in a large number of other fields. This is notably true of environment where some major projects have been started, and business co-operation. Considerable progress has also been achieved in fields like public health, education, science, culture, transport, agriculture, and co-operation between the indigenous peoples.

In more general terms, the Barents project has resulted in a cross-border exchange of people, goods and ideas that few would have thought conceivable five years ago. This has gradually changed this formerly almost impregnable barrier between two politico-military blocs into a “softer” border of the type usually to be found between contiguous European neighbour states.

Foreign policy perspectives

The Barents project may thus play an important role in the current restructuring of foreign relations.

The main political task currently facing Europe is to join the different parts of the continent and avoid creating new lines of division. It is vital to prevent new dividing lines in Europe subsequent to an enlargement of NATO and European Union. It is subsequently important to link Russia with European and Atlantic structures. It is also important to assess the differences between the participating countries and those that are not included in these enlargements. In this respect the considerable foreign policy potential in the Barents co-operation should be observed. Regional arrangements cannot be a substitute for the fully integrated market of European Union or security guarantees of NATO membership, nor can they be expected to resolve the challenges of third countries involved in the enlargement of NATO and the European Union.

We can imagine a zone of environmental or ethnic tensions stretching from the Kola Peninsula via the Baltic towards the Black Sea in the south, and via the Balkans. A future dividing line between European haves and have-nots may go through this zone. Regional arrangements like the Barents co-operation, the Baltic Sea co-operation and the Black Sea co-operation, may support contacts, dialogue and building confidence between states, and contribute to stabilisation and help avoiding harmful dividing lines.

The Barents co-operation with its institutional involvement of regional authorities and its five years of practical experience may constitute a test-bed for future regional co-operation in other regions. From this perspective the Barents project may be considered a laboratory in which to test various co-operation measures, notably in the economic and environmental sphere, for subsequent use elsewhere in Europe.

The Barents co-operation, as well as the Baltic Sea regional co-operation and the Black Sea regional co-operation, have indeed the potential to contribute to a new European architecture.

STRATEGIES FOR SUPPORTING THE DEVELOPMENT AND THE CO-ORDINATION OF NATIONAL SPATIAL POLICIES OF THE NORTHERN STATES IN EUROPE IN THE BALTIC SEA AND BARENTS REGIONS

Visions and strategies around the Baltic Sea

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Historically, the Baltic Sea region (BSR) was characterised by a high degree of spatial cohesion. This cohesion needs to be supported after decades of political division. Social cohesion suffers from unprecedented discrepancies in living standards. But still, there is a feeling of belonging together which is reflected by remarkable number of co-operation initiatives emerging since the collapse of the iron curtain.

The Baltic Sea region must develop a strong identity. It competes globally with other regions. It needs to develop its own profile and strengths. On this basis, its contribution to a common Europe will gain in value and strength.

Investors and other actors need a reliable planning framework. Spatial policies can contribute to providing them with better information on future spatial development.

The BSR shall become a masterpiece for sustainable, environmentally sound development. The region has kept valuable natural areas that are now threatened by rapid development. Many cities exhibit environmental degradation due to growing (road) traffic volumes, air and water pollution, required rehabilitation of the housing stock, inappropriate land use, inadequate waste disposal, etc.

At the same time short-term problems must not prevent from creating a longer-term perspective. The temptation to do “first things first” is overwhelming. But sustainable development will not be achieved unless long-term planning perspective is provided.

Co-operation helps to maintain peaceful development. Co-operation in all possible fields – including spatial planning – helps to build a basis of mutual trust and reliability.

Now, I would like to have a look several years back when, on 21 August 1992 in Karlskrona, Sweden, representatives from national and regional ministries responsible for spatial planning of countries around the Baltic Sea agreed jointly to prepare a spatial development concept “Vision and strategies around the Baltic Sea 2010” (VASAB 2010). Despite the fact that the Baltic Sea region is not clearly distinguished by natural borders, the participating countries belong totally or partially to the Baltic Sea drainage area (Belarus, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland, Russia, Sweden).
The result of common work of a Group of Focal Points (GFP) representing ministries responsible for

spatial planning of the participating countries/regions was the report “Vision and Strategies around the Baltic Sea – 2010; towards a framework for spatial development in the Baltic Sea region”. It was presented and adopted by the 3rd Conference of Ministers responsible for Spatial Planning held in Tallin, December 7-8, 1994. The document gave a useful basis for further strengthening and harmonisation of the national and regional spatial planning policies and the overall strategy has three main issues:

– promote concrete actions in line with the vision;

– promote the marketing of the Baltic Sea region;

– continue to project of VASAB 2010 in co-operation with other institutions.

The common aspiration is for the Baltic Sea region 2010 be a region with:

– a diversity of mutual relations in trade, transport, culture and education;

– a strong identity enabling the BSR to play an important role within Europe and the world;

– a diversity of individual subregions developing on the basis of their respective strength and potentials;

– a frame for the reconciliation between development and respect of the environment;

– a planning philosophy based on the principles of transparency, reliability, participation and subsidiarity.

The purpose of the VASAB 2010 initiative was to take a first step in the formulation of an overall spatial structure and a framework for the wide spectrum of sectoral co-operation. Such a framework can help to avoid scattered action and waste of resources. It responds to the accelerated pace of international integration, the threat of widening interregional gaps in living standards, changes in patterns of migration, of the role of cities, of trade and capital flows, growing tourism and to the need to improve the environment.

Furthermore, the overall goal is to establish a common platform and a framework of reference for development measures having an impact on spatial structures of the BSR. This might help to strengthen the spatial dimension in sectoral programmes at national and international levels in order to promote spatial cohesion around the Baltic Sea. The report provides local authorities with a reference for their own development efforts, visions help to identify local development potentials and preferences from national and international points of view. Local authorities also have the opportunity to participate in the pilot projects proposed.

The BSR is unique due to its multiple and varied forms of co-operation, bodies and programmes. Many of these initiatives have only emerged recently when the political division of Europe was overcome. Now spatial cohesion must be a priority issue on the international agenda. The numerous initiatives may benefit from common principles and visions for spatial development. But equally, the materialisation of spatial visions depends on concerted actions among different institutions and actors.

The Tallinn Conference report “Visions and strategies for spatial development in the BSR” seeks a response to a number of challenges. They are:

International integration

Recently the Nordic countries (Sweden and Finland) were integrated into the European Union. This will promote their trade relations with western Europe, strengthening subregions which have a favourable location towards the west.

Nordic, western and transition countries have an interest in promoting mutual links. Though formal integration within the framework of the European Union will not be achieved for all countries within the next few years, functional integration in the fields can be intensified, improved transport links for goods, persons and information will be needed. The growing concern about the environment is no longer a national affair only. This is also true for the regions around the Baltic Sea.

Integration can be hampered by inadequate urban networks and infrastructure, border control, trade restrictions, etc. Spatial planning cannot avoid or remove all such barriers. But the challenge is:

– how can spatial planning improve investors', traders' and producers' security in an economic environment already full of uncertainties?

– where and how can cross-border integration improve peoples' accessibility to services and allow service provision at low cost by taking advantage of economies of scale?

Interregional discrepancies in living standards

The BSR is an area of significant differences in living standards and incomes. In the group of Nordic countries the differences in average income per inhabitant are small. But when crossing the German-Polish border, the income level falls sharply, and at the Polish-Belarus border there is a further drop. Between Finland and Russia, a similar discrepancy occurs when crossing only one borderline. Baltic states (Estonia, Latvia, and Lithuania) are better off than Belarus or Russia, but a huge difference as compared to Nordic and western countries exists. Such differences were unknown during western European integration. With open borders, they may induce significant migration of capital and people.

Main factors affecting location decisions of modern knowledge-based industries concentrate on aspects such as urban cultural and environmental values, recreational opportunities, rapid and frequent transport connections, high-standard telecommunication systems, but still also the cost and quality of labour.

– How can spatial policies contribute to the improvement of spatial qualities, to the reduction of interregional discrepancies and thus to a better social and economic cohesion?

Changing pattern of migration

Interregional discrepancies in incomes, coupled with a high degree of unemployment and insecurity in transition countries led to fears of uncontrollable migration from the east flows to the north and to the west. Only through accelerated economic development, improved economic and social security for people and investors will be possible to reduce spatial imbalances and to convince the most mobile strata of population to use their energy in their country:

– How can spatial planning contribute to the creation of better conditions for economic development and to improvement of living conditions?

– What is the role of spatial planning in the promotion of an improved interregional economic and social cohesion?

– How can future spatial policies maintain this asset with the integration in the European Union?

Changing role of cities

New economic structures favour medium-scale industries and services functions for consumers and for business. Growing sectors (finance, consultancy, trade and marketing, information services, etc.) tend to concentrate on major cities. In BSR transition countries, at present only biggest cities normally offer adequate communication facilities and transportation infrastructure.

– What could be the contribution of improved infrastructure for secondary urban centres and of decentralisation of public institutions in redirecting the geography of economic development?

– What are the possibilities of cities which are deprived of their natural hinterland (after renovated state borders) to maintain their former service function?

– How can spatial planning contribute to the materialisation of new potentials for the extension of urban hinterland across borders after the disappearance of the iron curtain?

– What are the conditions for the urban system of the BSR to be competitive?

Changing trade patterns

Better linkages among eastern, northern and western Europe need to be developed. Especially it concerns transport growth. The importance of different port cities undergoes rapid changes.

– How are spatial structures affected and how can they support the desired development paths?

Environmental degradation

The BSR comprises large areas of unique and unspoilt natural value due to long-standing environment protection or to backward agricultural practices. But it is also characterised by environmental damage through uncontrolled industrial pollution and careless disposal of urban and industrial wastes. A healthy environment, paired with a functioning system of urban centres, is important for economic development.

– How can spatial policies contribute to a balance between different demands, to the evaluation of land-use conflicts and the identification of least environment damaging land-use assignments?

Growing tourism

Tourism in the BSR offers the possibility for extensive forms of tourism which are less dependent on seasons. Particularly attractive are coastal zones, islands and archipelagos. Tourism can be a potential for sustainable local and regional income generation, if developed with care minimising negative impacts on natural and cultural values, while improving the supply of services.

– How can spatial planning support the use of tourism as a tool for cultural integration? What is the role of spatial policies to achieve a balance that satisfies tourist demands, secures the environment and allows the required variety of employment possibilities?

The Vision 2010 for the Baltic Sea region is based on four values and fourteen overall goals.

The four basic values, constituting the "heart" of the vision and aimed at the improvement of the quality of life are:

– development;
– environmental sustainability;
– freedom;
– solidarity.

Development

The notion of development goes beyond economic prosperity or growth. Development includes social, cultural and other aspects. But economic prosperity is a pre-condition for many other elements of the quality of life, and therefore plays a predominant role.

Environmental sustainability

Development must not deprive future generations of their chances. Sustainability in this sense has not been achieved anywhere. But policy shall make it possible to come even closer to this objective.

Freedom

Freedom implies the possibility to choose in accordance with individual/regional preferences – within the limitations defined by the respect for other people wishing the same. There is no freedom without participation. Subsidiarity is an important tool to allow participation. It also helps to improve the quality of decisions.

Solidarity

Solidarity is the characteristic of a caring society, sharing benefits from development. Linked to the principle of solidarity is that of self-reliance: before higher level spatial units get involved, lower level representatives are called to mobilise their own resources and capabilities.

The Vision 2010 comprises fourteen goals:

– for the "pearls", an urban system of international importance:

1. a competitive system of cities gains value by co-operating across the Baltic Sea and with Europe;

2. the system of cities ensures spatial cohesion (European, Baltic, national and regional cities);

3. links between urban areas and rural hinterland support regional economic and environmental balance;

4. cities offer an attractive urban environment for inhabitants and investment;

– for the “strings”, effective and sustainable links between cities:

5. the BSR mobility network facilitates environment friendly transport;

6. the mobility network provides conditions for effective integration within the BSR and with the world;

7. energy production relies increasingly on renewable and environment friendly sources of energy;

– for the “patches”, areas supporting dynamism and quality of life:

8. cross-border co-operation contributes significantly to spatial economic and social cohesion;

9. islands function as a tourist core in the BSR;

10. the coastal area is planned with careful balance between development and protection;

11. a Baltic network of nature areas is designated and protected;

– for the “system”, comprehensive spatial planning in function:

12. spatial planning contributes to harmonisation and spatial cohesion across borders;

13. spatial planning is based on the principles of subsidiarity, participation and transparency;

14. spatial planning contributes to the co-ordination of sectoral and regional planning.

The Tallinn Conference supported first twenty common actions for the BSR to start the implementation of visions:

Overall strategy

1. arrange regular meetings of ministers responsible for spatial planning to elaborate the Vision and Strategies and update the action programme;
2. make proposals for selected pilot projects;
3. make financial arrangements required for the action programme;
4. design a marketing effort for the BSR at the international level;
5. elaborate a research programme;
6. encourage the inter-networking of spatial research institutes;
7. establishing a VASAB secretariat.

<u>The “Pearls</u>”

1. organise a joint conference among the “European” and “Baltic cities” for common marketing and co-operation;
2. launch a research programme on weaknesses and potentials of the urban network in the BSR.

The "strings"

1. identify possible locations of multimodal transport centres (together with the Conference of Baltic Ministers of Transport);
2. identify further needs to improve port hinterland infrastructure (together with the Conference of Baltic Ministers of Transport);
3. promote a pilot project on potentials to strengthen spatial cohesion through new forms of telecommunication.

The "patches"

1. assess potentials for further cross-border co-operation;
2. encourage pilot projects for cross-border co-operation with spatial planning component;
3. elaborate guidelines for spatial planning in the coastal zone;
4. elaborate a harmonised concept for the development and protection of valuable natural and cultural landscapes in a BSR network.

The system

1. organise discussions with European Union on spatial development and planning policies;
2. prepare a synoptic review of spatial planning and implementation concepts in the BSR countries at national and regional levels;
3. encourage demonstration projects for the application of Environment impact assessment (EIA) at an early stage in the planning process;
4. enter into a concerted dialogue with countries involved to design appropriate training and technical assistance concepts.

The result of the joint work of the VASAB 2010 initiatives is a long-term spatial development perspective compatible with the efforts of the European Union, central European Initiative and the Barents Sea Council. The member states of European Union are urged by the ministers in the BSR to take the VASAB 2010 into consideration when preparing the European Spatial Development Perspective.

For the further co-ordination of the proposed common actions the ministers appointed a committee on spatial development in the Baltic Sea region (CSD/BSR) to monitor the continuing joint work with circulating chairmanship, following the chairmanship of the Council of the Baltic Sea states (CBSS). The CSD/BSR has the very important task to prepare proposals for the continuation of the VASAB 2010, with emphasis on future institutional arrangements and co-operation with other regional organisations and particularly the European Union, the Council of Europe and CBSS.

Very soon after the Tallinn conference priorities for VASAB 2010 activities were approved:

Common actions

- coastal zone planning and management guidelines;
- urban network "Ring of Baltic cities";
- compendium of planning legislation.

Pilot projects

- transport corridors;
- urban system;
- specific areas.

Exchange of knowledge

- overview of on-going bilateral/multilateral projects;
- national strategic spatial planning concepts/seminars;
- conference of spatial research institutes.

Promotion of VASAB 2010

- marketing of BSR and VASAB 2010;
- concertation with other institutions/organisations in the BSR and the European Union, ESDP.

Two years have passed since the Tallinn report was adopted. Are we any closer now to the goals we set? The Baltic Sea region is still experiencing significant economical changes. The planning process is a continuous one. In the report to the Tallinn Conference the future development of the region has been reflected as it was perceived in 1994. Has the development taken place in line with that strategic plan? Were there any problems for which it was difficult to find solutions two years ago? This particularly refers to transport corridors between the east and the west with multimodal transport centres. New important facts and statements have emerged in the very last years. In contemporary Europe where political and spatial development cannot be seen as an isolated process and where countries, regions and sectors of the economy are integrated into a common system we need a joint effort to make the development sustainable and balanced. The CSD/BSR is now facing the challenge of revising the strategy adopted at the ministerial conference in 1994.

The most significant political event of the year 1996 in the Baltic Sea region – the Visby Summit, and the meeting of foreign ministers in Kalmar paid attention to the spatial development of the region. The Baltic Prime Ministers have given clear indications that:

- they affirm their support for the process of co-operation in the BSR, with particular emphasis on promoting the region as an area where co-operation, democracy and market economy prevail;

- they are determined to secure for the BSR its proper place in the new Europe of co-operation and integration;

- they agree to facilitate contacts between individuals, organisations and governmental bodies at all levels within the BSR and consider subregional contacts and dialogue to be a particular characteristic of the region;

- the essential objective of the Baltic Sea co-operation is the constant improvement of the living and working conditions of BSR citizens within the framework of sustainable development.

The documents for both meetings include many essential themes from the report of the Tallinn conference. The action programmes for the Baltic Sea states co-operation, proposed by the Baltic Sea states summit, are designed to ensure stable political development and people-to-people contacts. There is a programme for economic integration and prosperity as well as a programme for sustainable

development. A great deal of attention has been paid to the Baltic Sea environment. Altogether there are some twenty main groups of programmes.

The action programmes concerning spatial planning states indicate that pilot projects will focus on the following issues:

– co-ordinated spatial planning for border regions of the Baltic Sea region and the European Union, and also of the central and east European countries;

– the spatial policy implications of major transport corridor projects in Europe, particularly those proposed by the European Union. This should include the integration of port and inland regions;

– the improvement of urban transport systems and networks, to enhance the international competitiveness of the Baltic Sea region as a whole;

– co-ordinated development programmes for coastal areas, reconciling the objective of social and economic development, the need to protect the coastal environment and the aim of developing a concept of integrated coastal zone management;

– the contribution of spatial planning to the protection of ecologically sensitive areas and of biotopes, in particular programmes that contribute to the establishment of a network of "Baltic Sea protection areas" and the Natura 2000.

To implement the tasks of the Visby Summit and Kalmar meeting, conferences of ministers responsible for environment and spatial planning were organised in Saltsjobaden, Sweden, from 20 to 22 October 1996. The Ministers of the Environment adopted the Declaration "Towards an Agenda 21 programme for the Baltic Sea" and the 4th Conference of Ministers responsible for Spatial Planning and Development adopted three basic documents: the report "From vision to action", common recommendations for spatial planning of the coastal zone in the Baltic Sea region and the Stockholm Declaration on sustainable spatial development policy in the Baltic Sea region.

After the conference the Senior Officials Group (SOG) was established to prepare Baltic Sea Agenda 21. On 20 March 1997, a joint meeting of SOG and CSD/BSR took place in Riga where possible fields of co-operation were discussed – participation of the CSD/BSR;

In the sectoral analysis:

– drafting of the sector – integrated scenarios;

– working out of the SOG Agenda 21 for the BSR final report to provide a spatial planning framework for the harmonisation of sectoral policies with the aim of ensuring their sustainability (spatial planning as a tool of ensuring sustainability in a cross-sectoral approach).

All these activities are aimed at a sustainable development of the region, are closely related to the declaration of the Visby Summit and the action programmes on co-operation in the Baltic Sea region. It is obvious that the Baltic Sea co-operation gains momentum at all levels, its subregions, the local government, various governmental institutions and NGOs, and the private sector are becoming more and more successful and constructive. This process is going on in most diverse spheres and sectors; in economy, environmental protection, development of infrastructure, in education, culture and other fields. The development planning of these sectors inevitably includes the territorial aspect since spatial planning is the factor that helps to successfully co-ordinate and integrate the interests of various sectors.

The Baltic Sea region has become more important for the European Union due to the accession of Sweden and Finland, European associations with the Baltic states and Poland, and European partnership agreements with the Russian Federation and Belarus. This has resulted in a more active attitude of the European Commission towards the BSR. Also the Interreg IIC programme, specially tailored to the needs of multinational co-operation networks active in field of spatial planning, has just been announced. The BSR is considered as a separate unit within the Initiative Interreg IIC. With this initiative the transnational dimension of planning is incorporated into the structural policy of the Community. The letter of intent from four European Union member states has been signed. They have drawn the attention of the Commission to the fact that the desired co-operation has to include the countries in transition in all cases. Therefore funds under the Phare and Tacis programmes should be available to co-operate with Interreg IIC. Countries in transition have expressed their wish to participate in the Initiative.

The report “From vision to action” shows that the spatial planning co-operation within the Baltic Sea region has entered a phase where practical pilot and demonstration projects under the VASAB 2010 umbrella have been carried out, like “Spatial development framework” for the Polish-German border area, Latvian-Lithuanian-Belarussian cross-border co-operation, development zone “Tampere-Helsinki, Tallinn-Riga”, Karelia-Atlantic project, TEM/TER and others. The BSR area has proved that it can develop in a short period of time.

Several significant pre-conditions are necessary to make the regional co-operation among the Baltic Sea states more successful. First of all, each country itself must encourage the recognition of spatial development and planning as a priority. It is equally important to improve co-operation with the institutions responsible for the allocation and utilisation of European funds and other financial resources. This would facilitate the implementation of spatial planning projects, aimed to integrate various sectors to ensure sustainable development.

THEME 2

TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

CHAIRED BY: Mr Yiannos Papadopoulos
Chairman of the Committee of Senior Officials
of the European Conference of Ministers responsible
for Regional Planning (CEMAT)

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TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

How to improve the link between road and rail networks of the countries of northern Europe with the other European networks?

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1. The scope of the report

The geographic extent of what is called "northern Europe" varies depending on the organisation/institution dealing with the area. This paper focuses on the part of northern Europe where problems of integration of land transport networks are most acute, namely in Finland, Estonia, Latvia, Lithuania, Poland, north-eastern territories of Russia and Belarus. In the postwar divided Europe, this region was highly disintegrated, except for the territories of the former Soviet Union. This has been particularly true with respect to transport networks.

In a new political situation, a process of multidirectional changes has started. On the one hand, a new trend of fast integration has occurred among the countries of the western and eastern shores of the Baltic Sea. On the other hand, as a result of partition of the former Soviet Union and regaining of independence by Estonia, Latvia and Lithuania, some new barriers have been created. According to some opinions,[1] "instead of pushing for integration, these three states concentrate on strengthening their own national structures" which, of course, is fully justified by the political factors.

In the last years, all governments of the region have demonstrated their understanding that the quality of transport and communications links between them and between the region and the rest of Europe is a crucial factor in the integration processes. This has been manifested, *inter alia*, by active participation in various initiatives, programmes and international bodies such as the United Nations Economic Commission for Europe (ECE), European Conference of Ministers of Transport (ECMT) and the Baltic Sea Conference of Ministers of Transport. Associated agreements between the European Community and Estonia, Latvia, Lithuania, Poland as well as the partnership and co-operation agreements between the EC and the Russian Federation and the Republic of Belarus have brought about a new dimension to this process. Finally, matters relating to northern Europe have found their place in decisions of the pan-European Transport Conference.

While this paper concentrates on land transport, it is obvious that this type of transport cannot be totally separated from maritime transport.

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1 Raagmaa G.; New conditions for regionalisation in the Baltic Sea space. In: *European Space, Baltic Space, Polish Space*. Part I. Arl, Hanover, Euroreg, Warsaw 1997.

2. General characteristics of roads and railways infrastructure in the region

In countries of central and eastern Europe (CEEC),[1] emphasis was on the quantitative development of railway transport. However, the quality of the railway was low. Large sections of track were in an unsatisfactory technical condition, the traffic control system was outdated, and the quality of rolling stock poor. Differentiation of track gauge was another factor reducing the operational efficiency of railways. All these factors, in combination with inadequate operational efficiency, led to a very low level in the quality of service and economic efficiency. Generally, railways were not competitive in terms of speed, cost and convenience. Political changes, first of all the division of the former Soviet Union, further reduced the efficiency of railway transport because of an increased number of border crossings. At the same time, closer links with neighbouring countries made differences in tracks, electricity voltage even more apparent. With a larger number of countries involved, national fragmentation of services creates additional operational problems.

Road networks also have several shortcomings:

– motorways and expressways practically do not exist, most roads, including international roads, do not have access control and are used by mixed traffic – long and short-distance motor traffic and slow traffic;

– the standard of many sections of main roads is low; this includes geometric design, the riding quality and bearing capacity of the pavement;[2]

– many sections of major roads go through built-up areas, and some through city and town centres;

– international traffic is additionally affected by the insufficient number and capacity of border crossing points;

– the road traffic safety situation is dramatic; the rate and severity of road traffic accidents are much higher than in OECD countries.

In the past, road maintenance was neglected because priority was given to the upgrading and development of networks. This has changed in recent years. However, pavements and bridges have been deteriorating in an accelerated way because of a limited budget allocated to the road sector in most countries.

Border crossings constitute a special problem, as they are considered as main bottlenecks in transport systems in CEEC. In recent years, partially due to Phare/Tacis assistance, considerable improvement has already been achieved in this respect, the number of border crossings has been increased and procedures improved, including customs clearance procedures. However, on some borders the situation is still critical. As long as too much time is wasted at borders, increasing speed of road and rail transport does not contribute much to the improvement of transport efficiency.

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1 In this paper term CEEC is used with regard to countries of the former Soviet Union and countries of central Europe belonging to the former COMECON.

2 Only a limited part of the network is prepared for 10 ton axle load.

3. Changing transport demand

The political and economic reforms in countries of central and eastern Europe have already caused great changes in volumes and directions of passenger and goods transport. There is a shift of demand from the need to transport products of heavy industries to lighter consumer goods, from demand for low quality services to demand for high quality services, and from international traffic among the former COMECON countries to traffic between CEEC and European Union countries. There is also shift in modal split from rail to road transport.

The growth rate varies from country to country. While an extremely rapid growth of national and, especially, international traffic was observed in Poland[1] and other countries of central Europe, the growth in the Baltic republics was much slower. For instance, Estonia experienced a significant drop in road traffic between 1990 and 1993, despite the rise in car ownership.[2] However, the situation is rapidly changing. In Lithuania, on the East-West corridor connecting Klaipeda with Belarus road traffic volume increased by 18 per cent in the last two years and it is expected that this trend will continue.

Probably the most dramatic changes are observed in categories of goods transported. While, in the past, 80-90 per cent of traffic in the Baltic ports concerned exported goods shipped in bulk, this is rapidly changing. The fastest growth is in container traffic.

Many forecasts of travel/transport demand have been prepared for each country and for the region. The scale of differences is striking. For example, various forecasts prepared for Poland in early 1990s assumed that the growth factors for international road traffic crossing borders for the period 1990-2020 would be between three (minimum scenario) and ten to twelve (maximum scenario). The most recent forecasts are not so differentiated and, generally, it is assumed that the international traffic in the region will be growing at the rate of 3 to 5 per cent per year and that most of this increase will be in road traffic.

This is due to the rapid growth of motorisation and the growing role of road transport. In spite of a relatively low income level, the number of private automobiles is rapidly increasing and rates of car ownership per unit of GDP per capita became much higher than in more developed countries. For the time being, average annual mileage is much lower than in the countries of the European Union. However, it is expected that it will change with growing income, and road traffic will be increasing even faster than the number of vehicles.

While these trends cannot be considered as desirable from the point of view of a sustainable development concept, reversing them will not be easy. The point of the matter is that, on the one hand, reducing differentials in mobility is a clear objective of growth and convergence, but, on the other hand, increased mobility means higher pressure on the underdeveloped transport infrastructure and the environment. Finding a sound balance between meeting development objectives and protection of the environment is a difficult task.

1 For instance, in Poland, in the period 1990-1996 the number of cars crossing the borders increased sixfold.

2 ECMT, Group on Trends in International Traffic and Infrastructure Needs, Monographs, 1997.

As regards international traffic, it has to be noticed that the spatial pattern of the region under consideration is quite different from western Europe and most of central Europe:

– average population density is much lower;

– large urban centres are very few and the distances between them are great (e.g. Moscow-St Petersburg – 700 km, Moscow-Minsk – 700 km, Minsk-Warsaw – 540 km) with a low concentration of population and activities along transport links connecting these centres (Figure 1);

– countries are much larger in size.

All these factors together mean that any comparison between traffic patterns in western and northern Europe have to be made with great care. This is particularly true with regard to international traffic/transport. Short-distance traffic between the Netherlands, Belgium and Luxembourg (including cross-border shopping) is classified as international, while a considerable proportion of long-distance movements in Russia or even Sweden and Poland belong to the national traffic category.

However, it is not only a matter of classification. Large distances between population and economic activity centres and hence high costs (and long travelling times) reduce the probability of exchange. Reducing travel time through costly transport investment may increase the probability of longer travel, however the small volume of medium- and short-distance traffic along the corridor rarely make this investment economically/financially viable.

Conclusions:

i. the needs of international traffic can easily be over-estimated, particularly in large countries (such as Russia and Sweden), and medium-sized countries (such as Poland and Finland); this is particularly true with regard to peripheral countries;

ii. the low density of population and economic activities and large distances between major centres make investment in a very costly transport infrastructure (such as high-speed railways and dual carriageway motorways) much less viable than in high density regions.

4. Programmes for improvement and integration of transport networks

Until late 1980s, a very small part of road/railway networks of the region was included into the European transport system. This is best illustrated by the extent of networks encompassed by the European Agreement on Main International Traffic, Arteries (AGR, Figure 2) and the European Agreement on Main International Railways Lines (AGC, Figure 3).

In recent years, the situation has changed. Among several initiatives, the initiative of the governments of Finland, Poland and Sweden which led to the First Baltic Sea Conference of Ministers of Transport States[1] is worth mentioning. One of the decisions of the conference was an establishment of the working group on ways and means to develop a common vision of the transport system and infrastructure in the Baltic Sea region. The report[2] prepared by this working group and presented to the 2nd conference[3] contained, among others:

– an evaluation of the state of transportation in the region;

– an identification of priority areas for facilitation of the international traffic through development of transport operations and of infrastructure;

– a formulation of the proposals for common action.

This and other studies[4] provided an input to the concept of supplementing the Trans-European Network (serving the European Union) with a so-called "layer two priority corridors" serving CEEC. The year 2010 was chosen as the time schedule for this programme. This concept was adopted by the 2nd Pan-European Transport Conference[5]. The countries concerned, in the framework of the G-24 Transport Working Group and with the assistance of the European Commission and the international financial institutions undertook joint efforts to implement the programme. For all corridors, interested countries signed official agreements.

Among the nine multimodal priority corridors (Figure 4), two are directly serving the area of northern Europe:

– corridor I: Helsinki-Tallin-Riga-Kaunas-Warsaw with a branch Riga-Kaliningrad Gdansk;

– corridor IX: Helsinki-St Petersburg-Moscow/Pskov-Kiev-Ljubasevka-Chisinau-Bucharest-Dimitrovgrad-Alexandroupoli with a branch Kiev-Minsk-Vilnius- Klaipeda/Kaliningrad.

Corridor I (via Baltica/Rail Baltica)

Three main components of the Corridor I comprise:

– road Via Baltica connecting (Helsinki)-Tallinn-Riga-Kaunas-Warsaw;

– rail Baltica parallel to Via Baltica;

– road/rail branch Riga-Kaliningrad-Gdansk.

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1 Szczecin – 1992.

2 *Transport System and Infrastructure in the Baltic Sea Region*. Doc. WGTIB/13/93. August 1993.

3 Kaliningrad – 1994.

4 For example north-eastern Europe Transportation Study prepared by Viatek Group and VTT in 1993 on behalf of the UN-ECE.

5 Crete – 1994.

For the Via Baltica road a five-year investment plan for the period 1996-2000 has been prepared and can be considered as approved by the governments involved.[1] The plan provides for a very quick improvement of the 445 km of existing roads, construction of seven urban by-passes, improvement of signing and markings, etc. The total cost of the programme implementation amounts to 172 million ecus, of which about 50 per cent are still yet to be found from sources such as the international finance institutions (IFIs).

Work on Rail Baltica is less advanced, with the exception of the Lithuanian section, where several studies have been completed (some of them financed by Phare). To alleviate problems caused by different gauge, the feasibility of a standard gauge from Sestokai (Polish border) to Kaunas has been studied. As a transitional solution, a cargo transhipment terminal in Moscova (near Sestoka) has been built.

In addition, as a part of the project to upgrade the east-west railway line (part of the corridor IX), the section Kaunas-Kaliningrad will be upgraded.

The operation of international transport in the corridor is seriously affected by excessive delays in border crossings. Some progress in solving this problem has already been made. However, there is still a need for the development of the boarder crossing infrastructure and improving procedures. With good prospects for a customs union between the three Baltic states envisaged for 1998, the Governments of Estonia and Latvia have decided to redirect the investment programmes from border crossings between the Baltic states to crossings with Russia and Belarus.

Corridor IX (Black Sea-Baltic Sea through Kiev/Moscow)

This north-south Corridor is of a special character, as it is primarily connecting countries of the former Soviet Union, Romania and Bulgaria. For the Finnish-Russian part of the corridor a complete action programme was prepared for the period 1996-1998.

On the Finnish side, the road part of the Corridor belongs to the TEN priority project Nordic Triangle. It is envisaged that by the year 2010 the whole section of E18 road Turku-Helsinki-Vaalimaa (Russian border) will be upgraded to a motorway level, with the exception of the thirty kilometre Hamina-Vaalimaa section which will have a highway standard. On the Russian side, the reconstruction of the whole route M10/E18 known as Rossija and Skandinavja (Moscow-St Petersburg-Finnish border) was given a national priority status. This reconstruction co-financed by a World Bank loan should be completed by the year 2000. In addition, the authorities of Finland and Russia are working on the programme for the improvement of other road connections between Vyborg and the Finnish border crossing points such as Nujamaa and Imatra.

Prospects for improvement of a more direct Pskov-Kiev road are not so good. As regards the Kiev-Minsk-Vilnius-Kaunas-Klaipeda branch, an effort is made by the Lithuanian Government with Phare assistance, the World Bank and EBRD/J-EXIM loans to upgrade the Lithuanian section of this road. The implementation of the comprehensive Road Rehabilitation Programme started this year.

As for railways, it is envisaged that by the year 2010 the section between Helsinki and Vainikkala (Russian border) will be upgraded to allow speeds up to 220 km/h. On the Russian side, the modernisation of the Moscow-St Petersburg-Finnish border line was given priority status.

1 All information on the status of corridor development programmes are based on: Draft Report on the Status of the nine Crete Corridors. European Commission DG VII, November 1996.

Comprehensive reconstruction of the Moscow-St Petersburg section is almost complete. After installation of modern signalling and communications system and renovation of the rolling stock, speed of passenger trains will be increased to 200 km/h. A more ambitious programme envisages that by the year 2005 travel between Helsinki and St Petersburg will take three hours instead of the current six and a half hours.

The Minsk-Vilnius-Kaunas-Klaipeda railway link is in a very poor condition. On the Lithuanian section only 20 per cent of the line is electrified and a large part is single-tracked. The Railway Rehabilitation Programme covers the period up to the year 2010. Track renewal projects are financed from the EBRD/J-EXIM loans.

Where bottlenecks at the border crossings are a critical factor in transport operations, great efforts are made to alleviate this problem. The Vaalimaa road border station and Vainikkala rail border crossings have already been improved at the Finnish-Russian border. Work on the Russian side of this border is progressing well. The Medininkai border crossing point at the Lithuanian-Belarussian border is being modernised with the support of Phare that is also co-financing the improvement of the ferry terminal in the Klaipeda port.

A lot can also be expected from a joint Finnish-Russian-German project for the development of transport telematics in the Baltic Sea region, TEDIM. It deals with the interlinking of different means of transport with the objective to increase the efficiency of transport system operations. The Finnish and Russian railways have already started an exchange of electronic freight documents and three Finnish companies have started rapid transport links with speedy administrative procedures from Finland to Russia.

Two other corridors serve the northern Europe in a more indirect way:

– corridor II: Berlin-Warsaw-Minsk-Moscow

– corridor VI: Gdansk-Silina

Corridor II: Berlin-Warsaw-Minsk-Moscow

This corridor is important for northern Europe because it can be seen as an extension of corridor I (Via Baltica/Rail Baltica) from Warsaw to Germany and other countries of western Europe.

A road traffic study financed by Phare for the Polish section of Berlin-Warsaw-Minsk-Moscow route was carried out in 1994-1995. As a result of an international tender, the Polish consortium Autostrada Wielkopolska SA has been awarded the concession to build and operate a 360 km long stretch of the A2 toll motorway from the Polish-German border at Swiecko to Lodz.

Rehabilitation of the E-20 railway line Kunowice (German/Polish border) to Warsaw is under way and it is expected to be completed by 1998-1999. The agreed technical standard is to allow speed 160 km/h and load 225 kN/axle.

Progress has been made in increasing the capacity of border crossings. At the Polish/German border a new freight terminal Swiecko II was opened and simplified procedures are being tested.

Corridor VI: (Trans-european north-south Motorway/Railway)

This north-south corridor VI has a long history, as the trans-european north-south motorway (TEM) project was initiated in mid-1970s. Together with the later established TER project (trans-european railway), it probably was the first case of closer trans-european co-operation in politically divided Europe. TEM/TER projects are of importance for the northern Europe, because they are conceived as serving traffic from Norway and Sweden directing it towards the south and south-eastern Europe. TEM is included in the Polish national motorway development programme, as a motorway A1. Preparations to construct the northern section of this motorway are well advanced. As other Polish motorways, this will be a toll road constructed according to a BOT system.

The idea of extending the TEM to Sweden and Norway was studied by the working group on ways and means to develop a common vision of the transport system and infrastructure in the Baltic Sea region established by the 1st Conference of Transport Ministers of the Baltic states. The proposed TEM-Scandinavia route (Figure 5) would start at Karlskrone (as a continuation of TEM which presently ends in Gdansk-Gdynia) and lead to Oslo. The governments concerned have not accepted the project promoted by regional authorities.

For the railway line Gdansk-Warsaw-Katowice possibilities of modernisation to allow traffic of tilting trains (*Pendolino*) with a speed of 160-250 km/h are being studied.

The success of the corridor concept encouraged the participating countries to submit sixty proposals to modify, but first of all, to expand the programme. Some of them concern the transport system in the Baltic Sea region. All proposals are to be considered in the process of the preparation for the 3rd Pan-European Transport Conference to be held in Helsinki in June 1997. However, taking into consideration very high costs of implementing already adopted programme (around 50 thousand million ecus) and limited resources, it is rather unlikely that the programme will be expanded.

5. Major issues in programming the development of transport systems

It is obvious that, at the international level, attention is focused on solving problems of long-distance international traffic. However, national and local transport policies have to take into account other conflicting objectives and problems. In this respect, the following questions should be answered:

– what is the right proportion between investing in upgrading/development of international transport corridors, and in improving national/regional/local networks and facilities?

– should investing in new infrastructure be at the cost of maintenance, renovation and upgrading of existing infrastructure?

– how to divide resources between transport means?

– what is the right balance between investing in short-term measures and the long-term programmes and projects?

Each of these questions can be a topic of long debate. A short summary of the author's views is presented herewith.

Competition for resources between transport means

First of all, there is competition between road and rail transport. While it cannot be doubted that rail transport is more environmentally friendly and, in many instances (but not always) more energy efficient, decisions on allocating resources for the upgrading and development of a railway infrastructure should be based on thorough economic analysis. Such analysis should take into consideration external costs. For the time being, there is little doubt that rail transport for freight can be competitive both within a combined transport system and for long-distance, bulk movement of low unitary value products. In the area of passenger transport, the role of the railway is primarily in serving high-density corridors and areas.

In any case, hopes that investment in railways could significantly curb the growth of road traffic (thus stopping investment in road construction) would not seem to be realistic.

Maintenance – rehabilitation/modernisation – development

In various diagnostic studies of transport systems in the countries of the region[1] it has been pointed out that inadequate maintenance cause a very serious deterioration of transport infrastructure. Compared to other options of resources allocation, maintenance has the best benefit/cost ratio. In addition, the efficiency of maintenance programmes can be considerably increased, if a modern approach is applied in programming and management of infrastructure maintenance.[2]

Rehabilitation and modernisation of existing infrastructure is probably the second most efficient strategy. This is particularly visible in case of railways where, for instance, through rehabilitation of tracks and modernisation of traffic control a radical improvement of operational effectiveness has been achieved.

Obviously, better maintenance and modernisation alone will not meet new criteria for the quantity and quality of transport networks. In heavy traffic corridors, motorways, expressways and major arterial roads are the first on the list of viable projects, especially taking into consideration the possibility of private financing of their construction.

Competition between international/national/local needs

Too often infrastructure modernisation/development programmes and projects are formulated with only one category of demand in view, namely international traffic. As it was pointed out under item 3, the spatial pattern of northern Europe in many cases gives rise to overestimation of the needs of international traffic/transport and, in particular, long-distance transit movements. The most viable projects are those which serve both short- and long-distance movements.

1 For example by the World Bank EBRD, Japan International Co-operation Agency, Danish road administration, Atkins, etc.

2 For example pavement management system, bridge management system.

Short-term and the long-term programmes/projects

There is also a need to find the right balance between short-term projects, often with a very high rate of return, and medium/long-term programmes. Generally, in the CEEC it is considered that each engineering project should be designed according to long-term demand forecasts regardless of the cost. While in some cases it may be considered to be justified, generally such an approach could be queried on the grounds of high opportunity cost of scarce capital.

For instance, considerable resources are allocated to the construction of new, high-capacity border crossing points with permanent buildings. If prospects of joining the European Union by some CEEC materialise, or even if a group of countries establishes a free trade agreement, some of the facilities will be useless well before their technical life ends.

Appropriate standards and technologies

Finally, there is a question of appropriate standards and technologies. It is generally assumed that CEEC should move progressively to adopt international (EU) quality, technical, safety and environmental standards and should use the best available technologies. However, the cost of full harmonisation in the short term is too onerous for practically all countries under consideration. This issue has to be analysed taking into account the real costs of adopting a particular standard confronted with social and economic benefits and taking into consideration the opportunity cost of the capital, which in CEEC is very high.[1]

The following factors must be considered in the choice of transport means and industrial technology:

– predicted transport volumes and movement distribution by travel distance;

– whether it is possible to separate passenger and freight transport;

– need to accommodate different technical standards (track gauge, power supply, system, etc.);

– environmental consequences.

If one tries to apply to northern Europe principles of applicability of different transport means and technologies in relation to the length of the trip which are valid for western Europe (Figure 6), projects of building high-speed railways designed for passenger traffic only for corridors such as Moscow-Minsk-Warsaw with distances between them equal to 740 and 540 km do not appear viable.

As regards roads, relatively low traffic volumes are predicted on large sections of major routes passing through low-density areas. For these sections, the concept of single carriageway expressway, not so much applicable in densely populated regions of western Europe, can be a viable alternative to a standard motorway.[2]

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1 More extensive discussion of these questions can be found in a paper presented by the author at the Council of Europe colloquy:The challenges facing European society with the approach of the year 2000: the transborder co-operation within sustainable regional/spatial planning in central Europe. Coll/Vienne (93) 3.

2 This was one of the major conclusions of the just completed "Study of a motorway and expressway system for Poland" which aimed at updating the national road development programme. The study was prepared for the National Road Planning Bureau by the Institute of Roads and Bridges of Warsaw University of Technology.

6. Concluding remarks

In a divided Europe, individual countries and groups of countries according to their regional and national needs and possibilities have developed transport infrastructure. International co-operation was limited to groups of countries, such as the European Communities, or COMECON. Efforts of UN-ECE produced results such as AGR, AGC and AGTC agreements, but these were far short of expectations and needs. Missing links, differentiated standards, bottlenecks and lack of inter-operability were reducing the capability of the transport system to serve international traffic. This was especially visible in the region of northern Europe.

Political transformation created a new situation. Closer political and economic links between countries which earlier belonged to different political configurations changed transport demand and created new possibilities for co-operation. Initiatives of the Baltic Sea countries coincided with efforts of the ECMT, UN-ECE and European Union to promote the creation of a coherent pan-European transport system. The European Union active involvement in promoting the development of a trans-European transport network has already brought about its first results, not only in the form of co-ordinated programmes but also tangible outputs such as new infrastructure at border crossings.

The concept of priority corridors was of a great value because it also created a common vision of transport system in northern Europe and led to focusing efforts on selected, most important projects. It is envisaged that the programme will be closely monitored and further developed by the recently established working group on Transport Infrastructure Needs Assessment (TINA), in particular, by the sub-group that is to deal with the northern part of Europe.

However, there are still many conceptual problems to be resolved. National budgets, even supported by the European Union and with increased involvement of international financial institutions, are still too limited to meet all competing objectives in the transport sector and national economy. In these circumstances, making choices as regards directions of investment and priority projects requires very thorough consideration. As regards less developed countries of northern Europe the following directions of investment should be considered:

– new infrastructure is not always the best solution, at least as long as existing infrastructure is not rehabilitated and fully used through better management; upgrading the existing systems requires investment in hardware[1] and software;[2]

– full harmonisation of standards in the short term will not be possible due to the economic situation in CEEC; consequently, a great effort has to be made to select appropriate standards at various stages of development;

– priority has to be given to overcoming bottlenecks and barriers, first of all at borders between countries which belonged to different political constellations;

1 For instance, rail, road and air traffic control systems, rehabilitation of tracks and power supply systems, etc.

2 Streamlining management and operation, development of human resources, etc.

– in countries with a low density of population and economic activities, solving problems of international and national long-distance traffic does not necessarily require very costly infrastructure such as motorways, high-speed rail along the whole length of transport routes, upgraded railways, serving both passenger and freight traffic, singlecarriageway expressways may be more viable options;

– complementarity of different level networks (local, regional, national, international, is of extreme importance.

Finally, it seems that there is still not enough understanding of the role of transport in the process of social and economic development and integration.[1] This is a gap that should be urgently filled through more in-depth studies of transport-economy interlinkages in the specific situation of the countries of northern Europe.

1 See, for example, R. Vickerman. *Restructuring of the transport network*. EUREG, No. 3/1996.

TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

The role of transport infrastructure in spatial planning

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VASAB 2010 and mobility networks

Collaboration of countries around the Baltic Sea on spatial planning began in the late summer of 1992. Now this work is known under the name Vision and strategies around the Baltic Sea 2010 (VASAB 2010). It is a common, interactive teamwork of representatives of all the eleven participating countries. Results of this work were adopted by the inisters responsible for spatial planning at the Tallinn Conference in December 1994 and at the Stockholm Conference in November 1996. According to the Tallinn report and the Stockholm declaration, VASAB 2010 work is concentrated on four basic subjects:

- balanced settlement structure and urban network;
- mobility networks;
- specific types of areas;
- planning system and exchange of knowledge.

It was decided by ministers to start pilot/theme projects to further elaborate the overall guidelines of Tallinn report. Some of those projects will cover the whole Baltic Sea region, but the majority of them are limited to some Baltic subregions. The majority of pilot projects concentrate on the problems of different transportation corridors.

Objectives for the THOR Development Zone Project

One of the pilot projects of VASAB 2010 is the Tampere-Helsinki-Tallinn-Riga (THOR) Development Zone. It was launched in co-operation between Finland, Latvia and Estonia at the end of 1995. The objectives of the project were set as following:

- environmentally sound economic development of the zone;
- spatially balanced development both on national and regional scales;
- development which respects cultural aspects of human life and local traditions;
- competitiveness of the zone as a location of economic and other type of activities;
- better understanding of the opportunities offered by railways and water transport as alternatives to road transport;
- better understanding of the role of the zone within the European context.

Apart from the above-mentioned development objectives the planning process itself aims at:

- increasing the interaction between the planning and governing levels (state, county, municipality), sectoral administration and states;
- increasing the understanding of strategic planning as a learning process;
- providing synergy through the planning process.

Representatives of the participating countries elaborated these objectives and aims after the initiation of a teamwork project. Our different experiences were all to be pooled into a joint venture. Thus a friendly and co-operative basis for the next phase of work was created.

The THTR Development Zone Project is the first stage in a broader approach to issues concerning the Tallinn-Warsaw transport corridor, i.e. Via and Rail Baltica. Within the VASAB 2010 framework a pilot and training project has been carried out, according to appropriate methodology.

Further work on Via and Rail Baltica within the VASAB 2010 framework is planned under the Riga-Shiauliai/Kaunas-Warsaw Development Zone Project. This project will promote better communication and interactive co-operation between VASAB 2010, Estonian Spatial Development Guidelines EESTI 2010, the county plans and municipal plans of the area.

Advantages of interactive planning process

A well-organised planning process creates a lot of synergy that considerably speeds up development in the planning field and promotes development also at other planning and administrative levels. This is not just a claim, it is an experience gained in Estonia from recent planning practice. In the course of the VASAB 2010 work and by the example of the most successful pilot county and municipal plans we have understood the advantages of well-built-up interdisciplinary teamwork. We have understood that in the case of interactive, synergy-producing planning work the planning process is even more important than the planning document produced as a result.

A well-established planning process:

- creates interactive relations between different sectoral fields and all participants in planning;
- creates new skills and knowledge, and synthesises them;
- provides an impulse for other planning and governing levels;
- creates readiness for investment;
- secures on-going continuity of development processes;
- helps to create a genuine team of the staff of the local government (county government);
- binds the participants in the planning process much more strongly to the responsibility of implementing the plan.

In short a well-established, interactive, synergy-producing planning process is first and foremost a learning process.

Experience of Pärnu county planning

Proceeding from the understanding that the THTR Development Zone Project must be first of all a learning process, we started to build up the planning process of THTR. The experience gained from the process of preparing the Pärnu county plan was very helpful here. In case of the Pärnu project, with the help of the Finnish consultant, we applied extensively for the first time in Estonia methods of strategic planning – SWOT (Strengths, weaknesses, opportunities and threats) problem analysis and the appropriate procedure management methods. The fact that from the very beginning the county government also managed to actively involve in the teamwork representatives of municipalities should be considered their biggest achievement. This triggered the interest of local governments in planning and in directing their own, socio-economic and territorial development. With the help of the county government and representatives of our ministry's team, work was organised on the spot to analyse the development potential of municipalities and to clarify the possible contribution to the general development of the county. As a result of this work several municipalities in Pärnumaa have initiated work on putting together their comprehensive plans. At this stage, remarks were made that Pärnumaa was contamined with a planning virus. I have called this planning synergy. As the projets in Pärnu have been truly successful, they have also aroused great interest in other local governments and counties in Estonia. At the same time, the people in Pärnu town and county have felt obliged to actively share the experience gained from the pilot project with others – which was one of the aims of such a project. This has gradually created an awareness in Estonia that putting together a plan can be an intriguing and fascinating experience, also rewarding for the local community and even more so when the community is involved in the process. There is hope that the rest of Estonia will not be immune to the virus. The first promising signs are already there.

Participants in the THTR Development Zone Project

The Tampere-Helsinki-Tallinn-Riga Development Zone Project is a development and training project, the objective of which is raising awareness of opportunities and threats in connection with Via and Rail Baltica through a work process involving as wide a circle of participants as possible and enabling the development advantages linked to Via and Rail Baltica to be extended. Everyone is aware of the fact that Via and Rail Baltica have been included in the nine most important, so-called Crete Corridors in Europe. In order to make the work with THTR Development Zone an as efficient as possible learning process, all the governing levels, sectoral authorities and other stakeholders had to be involved. The THTR zone comprises three counties in Estonia – Pärnu, Rapla and Harju, with sixty-three local governments including two major towns – Tallinn (460 000 inhabitants) and Pärnu (50 000 inhabitants). During the past years relatively strong unions of local governments have been established enabling communication at international level for the THTR project to mainly take place between the unions and the two major towns. At national level we have tried to involve as many local governments as possible. At national level in Estonia the relevant ministries have been involved – Ministry of Economy, Ministry of Internal Affairs (issues concerning local governments and regional policy), Ministry of Roads and Communication and other sectoral authorities. The leader of the project in Estonia is the Ministry of the Environment; the work here has been the subject of co-operation projects between Estonian and Finnish ministries in 1996 and 1997.

The Finnish party is represented in the project by Häme and Tampere Regional Councils, the Finnish Ministry of the Environment (which is also the general leader responsible for the VASAB 2010 pilot project) and appropriate sectoral authorities.

Riga and Limbazi Regional Councils, the City of Riga, the University of Latvia and appropriate sectoral authorities, represent the Latvian party. The leader of the project in Latvia is the Ministry of Environmental Protection and Regional Development.

Project management

Management of the THTR Development Zone Project is carried out at two levels – international and national.

The work at international level is managed by a six-member task force including representatives of the Ministries of the Environment of the three countries, the majority of whom are also members of the Committee on Spatial Development for the Baltic Sea region.

National level project management in each individual country is carried out with slight differences according to the local traditions and needs. In Estonia representatives of the Ministry of the Environment and the counties were involved.

Each country has also employed a company of consultants for the methodological and conceptual preparation of work, recording of the results of work and filing of project documentation. It has been agreed that the main consultant should be the Finnish company Maa ja Vesi OY.

Content-related work with the project

The work with the THTR development project has been envisaged initially in three phases:

Phase 1: Investigation of interests, possibilities and threats of the zone;

Phase 2: Working out alternative visions for the zone;

Phase 3: Formation of common development goals and strategies for the zone and its subregions.

The work is performed as national or international teamwork, the project's conception being as an interactive learning process. The involvement of local governments or/and their county-level unions in this international work has been very beneficial. The project:

- involves local governments in decision-making on a broader international level;
- teaches them methods of contemporary teamwork;
- enables them to view their own problems and potential in a broader international context;
- helps to make (international) contacts necessary for development;
- creates better options of (international) marketing for local governments.

The implementation of the interactive learning process substantially improves:

- co-operation between different governing levels of the state;
- co-operation between ministries and counties of different countries.

As Via and Rail Baltica have aroused great interest and development expectations in local and county governments of the region and the structure of the project up to now has stimulated participation, interest in further involvement has been active in all of the three countries. The first phase of the project was initiated in December 1995, the second in November 1996. As an outcome of the first phase, three interlinked project components were identified for further elaboration:

a. settlement structure and economic co-operation;
b. mobility and infrastructures;
c. environment and cultural heritage.

Utilising the examples provided by VASAB 2010 – and ESDP – processes, will programme the continuation of the THTR project. Before the preparation of alternative visions, which is the ultimate goal of the second phase, it is necessary to deepen the knowledge and analysis of the current trends in the three subject areas identified during the first phase of the project. Therefore, phase 2 of the project will be divided into two separate stages:

– Phase 2A: trend scenarios;

– Phase 2B: alternative visions.

In line with a modified ESDP structure three types of analysis will be produced within each component during phase 2A:

1. Trends indicating the likely development in the future provided that no corrective measures are taken by the authorities and other factors of spatial development.

2. Problems that may eventually arise or become more serious due to the spatial development trends identified above.

3. An analysis of the current potential or that to be identified for the development of the zone.

The results will be presented on maps together with explanatory statistics and text. The analysis could be focused but not restricted to the following topics, which are defined here largely on basis of the discussion at the Jurmala seminar.

Phase 2A has been planned for completion by summer 1997. In Estonia the main emphasis has been put on work at national level. Workshops in each participating county create a better awareness of local problems and potential. They are grouped in national and international workshops.

Financing of the THTR Development Zone Project

Latvia and Estonia are financing the work carried out in their respective countries and hiring the necessary consultants. Finland is financing its own work at national level, hiring a chief consultant and covering the expenses of the publication of summary reports for the project. Unfortunately, financial resources are scarce in Estonia and Latvia. Therefore, Phare cross-border funds seemed to be the answer to the problem. We were encouraged to apply funds since our project has been the most successful and advanced of those carried out wthin the VASAB 2010 mobility network. Also the interest of the European Union representatives in the project has been supportive with recommendations and encouragement to apply for the Phare cross-border and Interreg IIC resources.

It needs to be emphasised here that despite the fact that there is no common source financing the project

since each country is contributing according to the amount of work personally carried out, the project is a complete entity, dealing with one uniform, jointly functioning and systematically built up planning process comprising all three countries.

Specific nature of the planning assistance needed in Estonia

Earlier international co-operation has confirmed the viewpoint that there is certainly no need for well-paid international planning consultants in Estonia, to come and do some planning work. In this case we would automatically lose the advantage of the well-established local planning process. The ready-made design documentation would remain somewhere on a shelf to gather dust, our own planners who are far from being overworked would lose the limited opportunities available in this sector in Estonia. We are not short of competent experts but need these experts to receive specialist training. This is where we need foreign consultants – to train the experts and representatives of different governing levels through practical work. The basic problem is the lack of the necessary means to do the work and finance the foreign assistance required.

Our experience up to now has shown that even in international co-operation projects for Estonian local governments or regions, the basic work needs to be carried out by local people. The task of the foreign consultants is:

- helping with the methodological set-up of the planning process;
- testing the latest foreign planning practice and adapting it to local conditions;
- organising training related to the project;
- organising study tour(s) to acquaint the work team for the project with foreign experience in the matter;
- introducing and testing new technical skills;
- (sometimes) acquiring, as an aid, contemporary technical supplies missing locally but necessary for the project.

This way of setting up pilot projects has been particularly effective in co-operation with Finland. Their consultants have never tried to do the job for us or interfere with content-related decisions. In addition, the local or county government of the location of the pilot project has always been encouraged to share the knowledge acquired with other municipalities, counties and planners.

Estonia has two substantial advantages. First, with re-established independence, we had to start practically from scratch with planning for the future at all levels and in all fields. Additionally, parallel production of the development plans at different levels and in different fields creates better conditions for interactive co-operation, action and implementation, equally in spatial planning. The other advantage is the small size of Estonia. With these dimensions it is much easier and quicker to launch interactive, synergy-producing processes. We have gradually become aware of these advantages, and we are now making a serious effort to utilise these to the maximum in planning the spatial development of Estonia.

Using these advantages and the potential of a well-established planning process has turned international co-operation projects into a well-functioning interactive learning process as a driving force behind promotion of the planning field and encouraging development. This type of international (assistance)

project has required very limited financial input from foreign partners, yet produced excellent results. For types of work such as the THTR Development Corridor – an internationally approved co-operation project necessary for the region and Estonia itself, the basic problem for the country is insufficient resources for the implementation of the project. This is why Latvia and Estonia cannot act as equal partners to Finland in financing the project.

New Berlin wall on the Baltic Sea

To ensure sufficient financing for the THTR Development Corridor project, the participating countries agreed to apply for funding from European Union sources – Estonia and Latvia from Phare Cross-border and Finland from Interreg IIC respectively. The first backlash occurred at the application stage. It was explained to us that resources for the THTR Development Corridor as a single initiative were not available according to Phare and Interreg regulations. Nor could Estonia and Latvia as non-member states jointly apply for Phare resources, they had to submit individual applications. To comply with Phare regulations we had to break the existing single project into three parts. There was no guarantee at that all the three parts would receive European Union funding. There was no certainty that the project could be continued as a single initiative even if funding were to be approved for all three national parts. Neither was there any certainty that the same consultant would be able to work for all three parts rather than individual consultants for each part of the project. It also became clear that Phare offices in Latvia and Estonia had substantially different criteria for project selection. To our surprise the Phare office in Estonia urged us to shelve our co-operation project with Latvia and Finland to do something purely beneficial for Estonia. In this way the major impact of the cross-border aspect of the project would vanish, thus rendering it ineligible for Phare Cross-border financing.

It was clear that the European Union lacked the necessary finance and mechanisms to support multilateral spatial development projects between member and non-member states. Yet this type of multilateral learning process type co-operation project between countries and governing levels:

- promotes interactive co-operation between member and non-member states;
- enhances the combination process of technical infrastructures of member and non-member states;
- promotes the preparation of non-member states for integration into the European Union;
- enhances the integration process of new member states (Finland, Sweden) into European Union;
- guarantees better foundation and functionality of individual purchasing and investment projects;
- guarantees transfer of contemporary knowhow and its effective use in countries of transition;
- creates a better investment atmosphere in countries of transition;
- encourages the process of building a democratic society in countries of transition, help to implement democratic governing and planning methods.

In short – this type of project in particular – I think, should help to move towards the basic objectives of the European Union, to create a politically and economically democratic common European home and to build up together the necessary technical infrastructures.

Unfortunately, at present it is not possible to support multilateral spatial development projects in the Baltic Sea region with European Union resources and in accordance with European Union rules. With this, a new, rigid Berlin wall has been built in the Baltic Sea between member and non-member states. This is certainly of no benefit to anyone.

I hope the message is clear. I am not demanding the European Union to finance, for example, the Tampere-Helsinki-Tallinn-Riga Development Zone Project. Nevertheless I think that support for such projects would be as beneficial to the European Union as it is to the participating countries. Despite the limited resources the project is progressing well. We shall manage with these limited resources one way or another and the project shall be completed even without European Union support. Particularly since people here are still ready today to work enthusiastically with little or no money at all for the benefit of their country.

I am of the opinion that the role of interactive spatial development projects between member and non-member countries is becoming more and more important with the building of Europe. Work on the Tampere-Helsinki-Tallinn-Riga Development Corridor is a positive example of how such a project can promote relations between countries and regions and also the integration process in Europe. At the same time it illustrates a negative example of the inhibiting impact of existing European Union regulations on further progress of this process.

This is why I urge everyone concerned to create rules and regulations, means and mechanisms stimulating production and implementation of interactive spatial development projects between member and non-member states. I have played my part in drawing attention to the problem.

TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

Maritime transport in the Baltic Sea and improvement of its road transport links

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1. In the Baltic Sea region shipping and ports have at all times been of special significance; the Baltic sea does not only separate the coastal region geographically but at the same time presents itself as a connecting link of transport which has always allowed co-operation across the borders. Cogs, ro-ro and today's modern container ships have played a crucial role. With the concept of short sea shipping, the quick just-in-time connections on sea and road, we are starting a new era. In the past co-operation in the transport sector has above all been of importance to international trade. History shows that it was at its peak at the times of the Hanseatic League and made possible the close trade interdependences of this union of towns. Without this close international co-operation in the transport sector, trading would be impossible in this region.

In the manufacturing industry of today co-operation in the transport sector is moreover an essential condition for the attractiveness of a region as an economic location. This is substantially influenced by the quality of transport links that must guarantee a reliable, quick and cost-effective carriage of supplies and final products. For the future development of the Baltic region it is therefore of great importance for all coastal states to co-operate with the aim to extend the transport infrastructure, especially the shipping and port infrastructure, and to approve the productive capacity of the traffic carriers.

2. Because of the political development since 1989, co-operation in the Baltic region has been strengthened. Three trends have contributed towards further development in the Baltic region: the reunification of Germany, the political and economical changing process in central and eastern European countries at the end of the 1980s and finally Finland and Sweden joining the European Union. This development has given a fresh impetus to the whole Baltic region, thereby turning it into one of the most dynamic growth markets in the world. At the same time northern Europe gained more political importance in the European Union after the Scandinavian countries became European Union members. A further extension of the Union to the central and eastern European countries would surely further strengthen this development.

Against this background the Baltic coastal states have initiated a number of transportation improvements. For instance, two ministerial conferences on transport in 1993 and 1995 – in which however not all coastal states took part – dealt with the extension of fixed Baltic crossings, i.e. bridges and tunnels. A third conference took place in April 1996. In 1995 in Helsinki the Ministers of Transport

of all Baltic coastal states agreed upon closer co-operation concerning the reduction of trade barriers. And the heads of government at their meeting in Visby in May last year agreed upon closer political co-operation and joint initiatives for the Baltic region at European level.

3. The European Union has also contributed to the further development of Baltic transport facilities following their guidelines for the creation of a trans-European transport network. These guidelines were adopted on 23 July 1996 after two years of discussions among member states and a tenacious tug-of-war between the Council of Ministers, Commission and the European Parliament. With these guidelines Europe for the first time has at its disposal an international cross-border perspective concerning the development of a transport infrastructure until the year 2010. These guidelines were developed in accordance with the adoption of the Maastricht Treaty, in which the significance of the extension of the traffic infrastructure for the completion of the internal market, but also for the strengthening of economic and social bonds in Europe has been expressed.

It is the objective of the guidelines to guarantee for the whole Union a lasting and acceptable passenger – and freight traffic under socially and economically sound as well as safety-orientated conditions. And last but not least it seeks to integrate all traffic carriers by taking into consideration their comparative advantages.

The trans-European network described in the guidelines includes the transport infrastructure, highway – and railway systems, inland waterways, sea – and inland ports, air ports, and for combined traffic also transport management, positioning and navigation systems. In December 1994 in Essen the European Council selected fourteen projects, relevant to the above-mentioned spheres, for priority implementation.

4. The relevant Baltic projects of the different networks will be dealt with in a more detailed manner in the following section. For the seaports that have the highest transport volume in the Baltic region, a listing of projects has been refrained from. This was one of the controversial subjects when setting up the guidelines. Some parties feared that such a port system plan with projects of joint interest would lead to counterproductive effects on the competition of ports. Therefore, the guidelines are confined to listing the criteria for projects of joint interest. Moreover, the European Parliament has asked the Commission to submit in 1997 a report concerning seaports and if necessary a recommendation for their closer consideration.

From the point of view of the coastal state Schleswig-Holstein the initiative of the European Parliament is very welcome because shipping and ports have priority concerning the further development of Baltic transportation. Shipping is the most cost-effective and environmentally-friendly traffic carrier, especially for the transport of goods over long distances. Road and rail are being relieved and can dispose of free capacities. For these systems the Baltic Sea is a “wet highway” on which there are no bottlenecks and no traffic jams. All Baltic coastal states therefore give high priority to sea shipping. The numerous ports as interface in the Baltic region form the infrastructural and logistic base for the already existing highly developed transport network by connecting sea shipping and hinterland traffic. More than thirty ferry lines are connecting the ports of Schleswig-Holstein with other coastal states of the Baltic Sea and international ferry services are calling at more than eighty harbours in the whole region.

It has been estimated that the volume of freight transportation in the Baltic region has reached 500 million tons in 1995. With a predicted average annual growth of more than 3 per cent of goods handled, a further expansion of the Baltic transportation system may also be expected.

Besides, there is a remarkably high number of passengers travelling across the Baltic Sea. In the ports of Schleswig-Holstein approximately 20 million passengers are registered every year and in the harbours of Mecklenburg-Vorpommern there are approximately 3 million passengers.

Because of the expected growth rate, in the future there will also be good chances for sea transportation in the Baltic Sea region. This in particular applies to the long-term development of the central and eastern European countries. Due to its cost-effectiveness sea transportation offers the best conditions for getting a big share of the freight traffic.

To cope with this task, the following measures need to be taken in three sectors: the ports have to be further developed; the technique of turnover has to be optimised and the hinterland connections have to be improved. Schleswig-Holstein is especially promoting the development of its Baltic Sea ports Kiel and Lübeck. These two ports are for us something like a gateway to the Baltic region, especially also in strategic connection with the international port of Hamburg.

Weak points of the highly developed ferry and feeder services of the Baltic Sea are at the present time the ports of the Baltic states and Russia. It is necessary to redevelop, modernise and improve the productivity of these ports. The Commission is initiating suitable measures to deal with this. In October 1996 the Commission and the Baltic coastal states signed a Memorandum of understanding. This document states, that the co-operation of the participating states will focus on improving exchange of information on development, use and operation of the ports as well as on port management. Also the efficiency of the ports and the development of a well-balanced port – and transport network will be promoted. Schleswig-Holstein (SH) is supporting this initiative and will do everything within its power to carry out the tasks set by this memorandum.

Of importance also are the initiatives to facilitate and to speed up the handling of traffic in Baltic Sea ports by making common use of information and communication techniques. This is among other things the objective of a SH project promoted by the Commission with 10 million DM and called “Baltic Open Port Communication”.

In July 1995 the European Union Commission published a memorandum addressed to the European Parliament, the Council, the Committee on economic and social affairs and the Committees of the regions on “The development of short sea shipping in Europe: prospects and challenges”. This memorandum describes how short sea shipping can contribute to the improvement of the transport situation. Numerous recommendations are given to member states, respectively their regional authorities and to the maritime industries themselves. Furthermore it contains proposals for measures to be taken at Union level.

The essential points are:

– improvement of quality and efficiency of short sea shipping services;
– improvement of the infrastructure and capacity of ports;
– preparation of short sea shipping to comply with an enlarged Europe.

It is felt that the contents of this memorandum form an excellent basis for coping with future traffic volumes and for supporting deflection of trade from road to sea.

As for the assessment of the situation of competition it has to be taken into consideration that in Germany the establishment of infrastructures is a matter for the public authorities and may not be regarded as an allowance of the public authority.
With regard to distorted competition it is noticed that all other traffic carriers do not have to pay their full

costs. This has to be taken into account when measures for short sea shipping are judged with regard to their effect on distorted competition.

5. The initiative “From road to sea” is one of the most important results of the maritime panel discussions of the industries that has taken place at European level and in Germany during the last years.

The “DMIF”, initiated by the government of Schleswig-Holstein, is centred on possibilities of a stronger inclusion of coastal shipping in the freight transport chains for containerised goods.

The following facts have to be taken into account:

– shipping has idle capacities at its disposal;
– extension of sea transport requires low costs for infrastructure;
– demand for a fair distribution of travelling expenses;
– joint activities of economy, administration and policy in order to make a possible shifting of cargoes attractive with regard to the costs.

Problems:

– shippers have the impression that transport in Europe is mainly carried out ashore;
– the alternative to carry goods from door to door in containers on board of European coastal vessels is to a great extent unknown;
– it is also mostly unknown that this alternative disposes of idle capacities and is environmentally friendly.
– lack of name recognition of coastal shipping by loaders;
– trucks with their flexibility and presence ashore can hardly be replaced;
– after cancellation of the fixed price tariffs and opening of the borders trucks still have better possibilities of pricing;
– technical difficulties concerning the appropriate means of transport (ISO container).

As a result of these considerations it was agreed that extensive joint activities of trade and industry, administration and policy are necessary and that initiatives in the first place have to be started by the business enterprises concerned and their associations.

All attempts to move transportation from the road to European coastal shipping have to be undertaken by all partners concerned (i.e. shipper, forwarding agents, ship brokers, port authorities and shipping companies) on an equal basis.

Action has especially to be taken in the following fields:

1. Political conception for the realisation of the road-to-sea plan.
2. Regulations and loading documents.
3. Attractive short-sea shipping offers in the north German region.

The advantages regarding costs of truck transportation on European medium-haul routes will however continue as long as no other distribution of costs of way (by means of mineral oil tax) takes place.

6. In 1996 the Helsinki Commission recommended that in order to protect the Baltic Sea from illegal discharges all ships should share the expenses for disposal. This would have been a competitive drawback for all Baltic Sea ports compared with North Sea ports, where disposal up to now has to be paid by the polluter or is being subsidised.

Therefore, after months of negotiations the environmental and transportation departments of the German coastal states and the federal government together with the associations of shipping and ports have jointly agreed on a practicable and not affecting competition model for oil disposal from ships according to the no-special-fee system. This recommendation, which has been set up under the chairmanship of the SH Ministry for Economic Affairs, Technology and Transport, stipulates that every ship in the port has to pay a lump sum for disposals – in addition to the port charges. This will cover the costs for handling and organisation of the disposals, investment costs of disposal facilities and their maintenance expenses as well as costs for final disposal. Following a proposal of the Ministries of the Environment and Transport the "no-special-fee-system" will be introduced at the same time in the North Sea and Baltic Sea region.

The recommendation has been submitted to the Helsinki Commission and has at the same time been forwarded to the North Sea coastal states and the European Commission. The Helsinki Commission started the discussion of this recommendation on 6 March 1997. It is expected that the federal government will press ahead their negotiations with the North Sea and Baltic Sea coastal states in order to adopt the regulation as soon as possible.

7. In the Baltic Sea region duty-free trade is of overriding importance for ferries and other means of transport as well as for air traffic. The transport infrastructure of shipping lines, ports and airports is to a great deal supported by the sales volume of duty-free trade.

According to a resolution of the European Union Minister of Finance of 1992, duty-free trade will definitely run out in the European Union on 30 June 1999 in order to implement the "principle" of the internal market.

In the European Union and especially in Germany and the Scandinavian countries lengthy discussions took place regarding the future of duty-free trade.

Abolition means considerable losses:

– jobs (about 3 000 in Germany);
– attractive offers for passengers, people on holiday and older people;
– volume of sale for wholesale and retail industry (shopping tourism);
– tax receipts out of income tax and taxes on enterprises;
– income of ports (port charges) and ship yards (repair and new construction).

Actually the European Union is facing a conflict between the formal implementation of the internal market on the one hand and the labour market with 18 million unemployed persons in the European Union on the other hand. From the point of view of Schleswig-Holstein manpower policy must have priority. An "administrative wiping out" of jobs would not be appreciated by anybody.

The real disparities of the European Union internal market are not caused by duty-free trade but are due to the unchanged high differences in tax rates, which the European Union has not been able to reduce up to now.

Policy and administration are also asked to act now in order to immediately find a solution for the

continuation of the duty-free trade, which should stay effective at least until harmonisation of the general tax on consumption and the turnover taxes.

8. Everybody is concerned with safety on the sea in the Baltic Sea region. A ship not up to standard is a danger both to the crew and the passengers and may also be detrimental to the environment as well as having economic repercussions.

For shipowners, freighters and insurance companies considerable assets are at stake. As far as the fishing industry and tourism are concerned, ecology and economy are closely linked. Everybody is affected by the problems concerning the safety of ships.

For people who live between the long coastal lines of Schleswig-Holstein safety of ships is a subject of constant concern. This comes primarily from the strongly developed interest in shipbuilding and shipping but, on the other hand, also because of the nearness of these people to the intensively frequented shipping routes. It will be just the same for our neighbours.

The call for more protection is therefore understandable. Especially when safety techniques exist but are not used, as is the case in particular with the partly obsolete international tanker fleet.

More than fifty major tanker accidents have occurred in the last ten years, in which people lost their lives and many tons of oil ran into the sea. This in itself should be sufficient to ensure that international safety standards in line with modern technology are applied. This should also apply to ro-ro-ships, even though accidents in which ro-ro-ferries were involved prior to the sinking of “Estonia” already led to the first changes of SOLAS standards by the International Maritime Organisation (IMO). (SOLAS: Convention for Safety of Life at Sea. International Resolution on Safety of Ships by the IMO).

As long as the series of serious ship accidents do not come to a stop the questions regarding safety of ships will be on our minds. We will in fact never reach absolute safety, since human beings will never be able to entirely control the forces of nature. Most of the accidents are due to reasons that are by no means beyond our control and this is certainly a heavy burden for our conscience. It is quite untrue to say that accidents only produce short-lived shock reactions instead of positive action. Thus the improvement of stability and further safety standards following from the findings of the “Estonia” accident have given proof of our ability to act. With the international shipping organisation IMO, the globally acting transport network shipping industry has at its disposal an appropriate and competent instrument. The objective of the working programme of the IMO can in short be outlined as “safer shipping and cleaner oceans”.

To reach this goal, joint efforts are needed both generally and regionally and the Helsinki Convention for the safety of the Baltic Sea is one of our most effective instruments.

9. The extension of the hinterland connections is of great importance for the handling of the Baltic transportation services via shipping and ports. These overland routes have to be improved in such a way that they help sea traffic and open up quick access to the hinterland for the ports. In respect of Germany it may therefore be concluded that the Baltic freeway A20 has to be included in the trans-European network.

This plan will make possible a high-quality road connection parallel to the coastline which will be connecting sea ports from Lübeck via Wismar and Rostock to Stettin. Despite a gap between Stettin and Danzig this connection is at present being continued to the east by the Via Hanseatica which together with the Via Baltica will link Poland and the Baltic Republics to the trans-European transport chains. And in order to make this connection work it is of course very important that this gap is closed. A

continuance of the Baltic Sea freeway to the west with a crossing of the river Elbe emphasises the significance of this transportation system for Europe.

As far as the land-borne traffic is concerned, there are three transport corridors of special importance: firstly the so-called northern triangle – a road and train connection between Copenhagen, Göteborg, Oslo, Stockholm, Helsinki and St Petersburg which connects Sweden via Denmark with Hamburg and Berlin. And secondly another road-train connection from Kaliningrad via Belarus to the Ukraine, including a north-south link crossing the Baltic states. The last two projects are however not part of the trans-European network. From our point of view the *Vogelfluglinie* should become part of the high-speed railway network with the inclusion of the Jütland line, although it is only a conventional route between Padborg and Hamburg.

The fixed crossings such as bridges and tunnels for road and rail that are under construction across the green belt and the Öresund are priority projects. Here a considerable shift will take place, especially in the rail traffic that has to be absorbed by the northern German coastal states. And this underlines from our point of view the necessity to eliminate the bottleneck situation in the Hamburg region by means of an Elbe crossing for both road and railway.

The third fixed crossing of the Baltic Sea, namely the Fehmarnbelt crossing, may not yet be handled as a priority project because it is only at the planning stage. At the present time a feasibility study is being carried out at the request of Germany and Denmark. Results are expected in 1998 and a decision will be made by the year 2000.

This decision should, according to Schleswig-Holstein, include the optimisation of ferry services. Both partners in the ferry services have made large-scale investments in double-end ferries and in the modernisation of ports in order to achieve a speeding-up of the whole transport route.

10. Now I want to make some remarks concerning the financing of the trans-European network. The costs of all projects together amount to approximately 1 thousand million DM. This is easily said, but it is an enormous sum.

The fourteen priority projects of the Christophersen Group alone amount to investments of 200 thousand million DM and a further 200 thousand million DM are required for the additional trade corridors which are the links to middle and east European states. The 2 thousand million ecus which have been made available for the transport sector until the year 2000 are therefore surely not enough to realise these projects. All the Commission can do in this respect is to grant funds for studies, guarantees and subsidise interest rates. Financing of investments is the duty of member states that will no doubt only be able to solve this task with the help of private capital.

Finally some remarks on the assessment with regard to transport policy. Since there are practically no sources of financing, all expectations regarding the building-up of trans-European networks as a sort of European transport road plan should not be too optimistic. But the guidelines are nevertheless a first basis for a joint transport infrastructure policy. For the implementation by member states the inclusion of measures in the trans-European network is at least a helpful political line of reasoning for priority treatment and provision of funds from national sources.

It is good to know that in European transport policy priority has been given to railway, ship and combined modes of transportation. The guidelines can also contribute to this if they are implemented following this objective of transport policy. For modes of transport in the Baltic Sea this means that the extension of ports and hinterland connections must have priority in comparison with the construction of competing road transport systems. This conflict is still pending in the trans-European networks. For

further development of transportation in the Baltic Sea region the realisation of projects of the trans-European network will give additional impulse. It seems important to me that in accordance with the Memorandum of understanding the modernisation of the relevant transport infrastructure of the Baltic states, Poland and Russia should receive our mutual support. Co-operation in this field will be in the joint interest of all Baltic Sea coastal states and also be profitable for the economic development in the whole Baltic Sea region.

Whoever stands by the river Trave in Lübeck and watches the incoming and outgoing ships to and from Scandinavia, the Baltic states and Russia, is bound to notice the economic dynamism of the Baltic Sea region.

Therefore, despite economic problems in several states, the Baltic Sea has at its disposal an extensive economic strength and an efficient transport infrastructure and thus can look to the future with optimism.

TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

The advantages of a network of Baltic cities

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In a more general way, this report outlines the challenges facing cities in the recent European transformation. The specific topic is related to cities in the Baltic Sea region and their prospects of co-operation. First, the Baltic Sea region is analysed as a case for a "Europe of regions" – a concept which should be carefully defined in order to have any analytical value. Second, the idea of urban networking is introduced and specified in the context of transborder co-operation. Third, these two viewpoints are brought together by examining the prospects of urban networking in the Baltic Sea region. This evaluation is based on some basic ideas of the research programme, "Urban networking as a learning process in the Baltic Sea region", whose preliminary phase – based on a Finnish initiative (Forsström *et al.* 1996) – started as a joint Nordic project in June 1996.

Baltic Sea region in a Europe of regions

The discussion of a Europe of regions is of west European origin. European integration is believed to strengthen the power of regions instead of nations. Even though this concept contains much wishful thinking and, to be sure, political persuasion, it can be seen as a challenging starting point. In the socio-theoretical discussion, we may analyse new forms of regionalisation against the "hollowing out" of the national state. This concept is developed by Bob Jessop, in particular (see Jessop 1994). According to him, while the national state still remains politically important, some state capacities are transferred: first, to a growing number of pan-regional, pluri-national, or international bodies; second, to restructured local or regional levels of governance; and, yet, third, some of the state capacities are surpassed by emerging horizontal networks of power which bypass central states and connect localities or regions in several nations.

We can find several dimensions in the discussion of a Europe of regions. I will refer here to two of its basic – and still intertwined – meanings: firstly a Europe formed by politically and administratively more autonomous regions; and, secondly. a Europe of competitive and co-operative functional regions on different spatial scales (cf. Vartiainen & Kokkonen 1995).

Several studies have recently indicated the rise of regionalisation as a major trend of administrative development of the western European countries (see Sharpe 1992 or Goldsmith 1993, for example). More recently, the decision-making bodies of the European Union have shown a green light to the aspirations of regions. The subsidiarity principle and the foundation of the Committee of the regions have reinforced the hopes that regions' voices will be heard even in the formal decision-making of the Union. Strong, self-supporting regions are today also a part of basic ideology in European Union spatial planning. Still, the vision of all the nation-states transforming into a Europe of regions seems to remain unrealistic (cf. Keating 1993, 310). In fact, the most powerful demand for regionalisation has come from

the fault line where regionalism meets nationalism (as in Catalonia or Belgium). We must also note that in the transition countries of central and eastern Europe, the nation-states still aim to strengthen their national bodies.

Regionalisation is progressing, however, not only in politics but also in economics. Many scholars have emphasised that the Europe of Regions will be more of a Europe of city economies and wider functional regions (Lever 1993, for example).

From an analytical viewpoint, the main challenge of a Europe of Regions for any individual region is to strengthen itself by means both of intra-regional and interregional integration. This may be analysed strategically from four different angles (Figure 1).

Figure 1 Four angles for the strengthening of a region (Vartiainen & Kokkonen 1995, Figure 3)

The vertical-functional integration illustrates the strengthening position in the global networks of the economy, while the horizontal-functional integration refers to transregional and especially to transborder co-operation. The territorial integration refers to the strengthening of local networks in the economy as well as in cultural and political contexts.

In this report, our main concern is functional integration but it must be emphasised that a basic precondition of this integration is a sufficiently strong local and regional authority. Moreover, albeit that our concern is co-operation, we must note that the idea of co-operation always includes the idea of competition: the ultimate motive for local and regional agencies to co-operate is to strengthen themselves against each other. As cities "compete"[1] they form alliances which may be regional and/or transnational by nature. The Europe of regions will, consequently, be a Europe of increasing economic competition in which both winners and losers can be found (Selstad 1992).

Transborder co-operation has increased and widened rapidly all around Europe (Cappellin & Batey 1993). For example, EUREGIO co-operation, that started from the Dutch-German border in the 1960s, has already spread to the eastern borders of the European Union. Also, Nordic countries have a tradition of transborder co-operation originating from the 1960s (Nogran 1995). The form of co-operation varies from small scale intermunicipal partnership to transnational region-formation and to networking between regions and cities in different parts of Europe.

Although the Baltic Sea region may be considered as a region with a centuries old tradition of trade and co-operation, with a special reference to the "Hanseatic League", it is primarily an emerging European mesoregion whose integrative power apparently lies in the new (mainly maritime) transborder co-operation in a period of deepening European integration and the dissolution of East-West confrontation (cf. Figure 2). The list of potential integrative forces is vast, stretching from economic relations and transport links to cultural relations and environmental management (Pedersen 1993; Joenniemi 1993).

The context of a Europe of regions constitutes more than just a growing co-operation among the states around the Baltic. Also, Wæver (1993, 26) states that the specific and valuable results of Baltic co-operation will, in the long run, rest with the truly (sub)regional perspective (i.e. in an interplay with regionalisation in the states).[2]

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1 It must be emphasised that the competition of regions is used here basically in a metaphorical way (see the critique of this metaphor by Hallin & Malmberg 1996, 334-5).

2 In this way we may speak about transnational relations instead of interstate relations referring to the traditional domain of foreign policy (cf. Lindström 1996, 60). A fundamental shift here is the emergence of municipalities, counties, non-governmental organisations and private companies as new actors in cross-border co-operation.

Figure 2 "The Europe of regions" (Cappellin 1993, Figure 1b)

The functional core of the Baltic Sea region is composed of the main cities around the Baltic. It must be noted that in the three Nordic countries as well as in Estonia and Latvia, the main nodes lie in the national core areas while in the other countries the "Baltic dimension" constitutes, more or less, an antithesis to the national core areas and capitals (see Figure 3).

Figure 3 Urban Centres in the Baltic Sea region (Kivikari 1996, map 2 based on VASAB 2010 excluding Belarus and Norway).

Urban networking as a framework for transborder co-operation

Although we might see an emerging "regional" dimension behind the new transborder co-operation, I would like to emphasise the active role of cities as key actors of this co-operation because only regions with an urban core are likely to compete for new economic functions, an expanding fiscal base and greater administrative autonomy (Lever 1993; cf. also Robson 1992).[1] Recently, several students of spatial development in Europe have argued the importance of the cities or urban regions as motors of economic development (Castells 1993 and Bailly *et al.* 1996, for example). Cities are also understood as the main collective actors in the new spatial development, not only as physical nodes of a urban system (Vartiainen, 1994).

Cities and their regional coalitions are forced to compete more intensely with one another in an attempt to ensure their position in the spatial division of labour. One way of managing this situation is obviously networking, and that is why we are witnessing the mutual strengthening of urban networking and competition. Urban networking is now an on-going practice in many European countries. In Germany, for example, a major experimental project has begun, attempting to promote the concrete formation of urban networks in different spatial configurations, e.g. around some large centres, between nearby small or medium-sized towns and transborder areas (see Baumheier 1994; also Brake *et al.* 1996). The aim of these networks is to utilise and develop "synergetic effects" by reinforcing interurban co-operation. This policy has been implemented through concrete measures in communications, infrastructure, tourism and culture, technology transfer, municipal management, etc.

In a transnational context, urban networking may refer both to the co-operative arrangements in adjacent areas and between nodes of a polycentric region or to non-adjacent alliances of cities with similar functions and problems. The transborder co-operation between local authorities in southern England and northern France – analysed by Church and Reid (1996) – is an example of the former while the pan-European networks and policy programmes of the European Union (Williams 1996, chapter 8) refer to the latter type.

We may differentiate between two basic points of departure for conceptualising "urban networking":

1. As an economic and organisational principle, it refers to those mutually supportive actions or coalitions that are related neither through markets nor by administrative hierarchies. "A basic assumption of network relationships is that parties are mutually dependent upon resources controlled by another, and that there are gains to be had by the pooling of resources" (Powell 1990, cited in Cooke & Morgan 1993, 44). In the spatial development context, urban networking refers to the local and regional co-operation between public and private organisations concerning business services, innovation, training, communications, etc.

1 I have considered the relation of different administrative levels at length in the case of Nordic countries (Vartiainen & Kokkonen 1995, 108) and Finland in particular (Kokkonen & Vartiainen 1996).

2. In the basic physio-spatial meaning, urban networking refers to the polycentric urban configurations that are interconnected by linear infrastructures along with goods, people, information and money flow. Batten (1995, 313) notes that, "a network city evolves when two or more previously independent cities, potentially complementary in function, strive to co-operate and achieve significant scope economies aided by fast and reliable corridors of transport and communication infrastructure".

These two points of departure evidently meet in the recent Italian discussion summarised and developed by Roberto P Camagni. He believes that "network logic" is replacing "territorial logic", i.e. the abstract Christallerian pattern of a nested hierarchy of centres and markets, as the main organising principle of the interurban links. In this respect, the network operates as a "good club" delivering advantages ("network externalities") solely to the members of the club; this being an intermediate structure between "private" and "public" goods (Camagni 1993, 72). Camagni (1993, 74) differentiates two basic organisational forms of urban networks: firstly complementarity networks made up of specialised and complementary centres; and, secondly synergy and innovation networks made up of similar, co-operating centres. Camagni (1993, 67) also notes that urban networking introduces, "the necessity for an intentional city strategy concerning the functions performed by the city, its role in the spatial division of labour, its competitiveness and linkages with respect to the other nodes of the city network".

Urban networking challenges different actors to learn to co-operate. There is often a long road to travel before achieving benefits of these endeavours. The idea of urban networking is parallel to the "communicative turn" in planning and the idea of localised learning (cf. Healey 1992 or Cooke & Morgan 1993, for example). In that way, planning is understood as a learning process both locally and between the non-local partners. They might be in a different stage of socio-spatial development process as in the case of the Baltic Sea region. So the setting of transborder co-operation is, evidently, much more complicated than that of intra-state co-operation.

Prospects of urban networking in the Baltic Sea region

Developments towards a higher degree of integration in the Baltic Sea region are currently intensified through a number of initiatives by different institutional actors such as countries, regions and different organisational networks.[1] From a spatial planning point of view, the most important of these initiatives is the co-operative endeavour, "Vision and strategies around the Baltic Sea 2010" (VASAB 2010), which is being undertaken by the ministers of planning of the Baltic Sea states. Together with a number of undertakings initiated by the European Union (especially the targeted programmes such as Tacis, Phare and Interreg), VASAB 2010 is likely to intensify the process of regionalisation within the territories of the Baltic Sea states as well as between local and regional actors of different types.

We might present some reasons why a city or urban region is an appropriate level for action in transborder co-operation. First, it is the context of daily actions of both residents and economic institutions (referring to the concept of daily urban area or travel-to-work area). Second, the local governments are at the forefront in managing the new spatial development challenges and social conflicts. Third, cities are more equal units in handling practical co-operation than states of very different sizes (cf. Wæver 1993, 39). Fourth, the need for co-operation often concerns only a defined area or a group of localities.

1 There are now a lot of organisations which may support subregional co-operation in the Baltic Sea region (cf. the list presented by Robert 1996, 61, for example).

Reaching the practical actor level, it must be emphasised that urban networking should not refer only to the local government but also the other prominent public, semi-public and private actors. So the main partners in the development process should be the key actors of the public sector, research and development institutions, economy and environmental management.

I am able to present here only some indicative results of the study, "Urban networking as a learning process in the Baltic Sea region". The main aim of the first phase of this study is to identify concrete (on-going and planned) projects and key actors in urban networking in the Baltic Sea region based on local case studies of different types of cities in Finland, Denmark and Sweden (on the specific topics see below). It must be noted that this kind of approach is rather novel. Up until now, most studies on the Baltic Sea region are based on studies of international relations or on statistics of economy, population, interstate trade, etc. (Joenniemi 1993, Lundqvist and Persson 1995, Kuklinski 1995).

The basic dimensions for evaluating local development strategy in relation to the transborder co-operation in the Baltic Sea region

1. Local economic policy
– Innovation and technology transfer
– Training
– Business services
– Business support organisations
– Tourism

2. Infrastructure
– Transportation
– Telecommunications

3. Socio-cultural relations
– Cultural activities
– Educational institutions
– Social policy

4. Environmental policy
– Environmental protection
– Environmental technology and training

5. Strategic planning and city marketing
– Public administration
– Urban development corporations and contact organisations

The international activities, apart from the traditional twin-city relations, are very new even for the rather active Nordic cities. In the transition countries, in turn, local administration is still in the founding phase. In the last few years, there has been a growing interest toward twin-city relations in the Baltic Sea region in particular (cf. Johansson & Stålvant 1996). They are still mostly in the phase of becoming acquainted with each other but some of them may lead to more long-term development actions.

The spatial reach of urban networking is still very restricted and reflects the actual partitioning of the Baltic Sea region into different subregions (see also Euro-Verbund 1995, a proposal for potential action areas in the Baltic Sea region). The Finnish cities, for example, are orientated basically to Estonia and St Petersburg on the one hand and to Germany on the other hand (it must be noted that in Germany, the Baltic coastal area is only a minor target area in comparison with the southern parts of the country).

Instead of a truly interactive and horizontal co-operation, an actual partnership between local authorities seem to still be much tied in with hierarchical structures of state administration and is of one-way communication and resource transformation by nature. This is particularly applicable to the relationships between the Nordic countries and the transition countries.

Epilogue

There is still a long way to go before the Baltic Sea region could be a "third European core area", as stated in the scenario of the potential Nordic impacts of the evolving European spatial organisation (Veggeland *et al.* 1993). Even the main centres of the Baltic Sea region are subordinate nodes in global and/or in even national hierarchies (like St Petersburg; cf. Eskelinen & Vartiainen 1996) or they are still "mere" national capitals by nature. We may characterise the Baltic Sea region to be not more than a loosely-integrated semi-peripheral region. According to many eminent scholars in spatial development studies such as Amin and Tomaney (1995), for example, it is not conclusively evident that a new economic-geographic order, with a higher degree of freedom for local or regional action, would be beneficial for the peripheral areas. Yet, only proactive cities and regions have any chance in this world and the success of them demands actions at different spatial scales.

TRANSPORT INFRASTRUCTURE NETWORKS IN THE COUNTRIES OF NORTHERN EUROPE AND LINKS WITH THE EUROPEAN NETWORK

The problems of maritime transport beyond the Arctic Circle

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The NSR contributed to a large extent to the opening up of deposits of oil, natural gas, gold, diamonds, non-ferrous metals, to logging and timber processing, fishery and seafood processing. The large cities north of the Arctic Circle – Murmansk and Norilsk and railway lines have been built. The population of the Arctic region is around 2 million. But economic development is being hindered mostly by isolated locations, with a chronic lack of infrastructure, supply network, enormous losses in raw materials and the grave ecological consequences due to vulnerability of northern environment.

The opening up of the vast arctic areas in Russia is closely connected to the extensive use of forced labour. The large projects (mines, ports, railways, etc.) claimed the lives of hundreds of thousands of prisoners. The free settlers in spite of relatively higher income suffered from the severe living conditions that were much worse than in other parts of the country. This gap has been widening. The industrial expansion and following environmental destruction have heavily undermined the living conditions of the indigenous population – fishermen, hunters, and reindeer breeders – and led to health deterioration and a drop in life expectancy.

The strict non-democratic management system in the Arctic region was represented by NSR administration, Dalstroy (gold extraction) and in the recent decades – the Tyumen oil and gas, Yakutia diamonds and gold extraction authorities. The sectoral industrial goals have been usually achieved but always at a heavy social and environmental cost.

The technological advances in 1930-1960 (the world's first nuclear-powered icebreaker “Lenin” in 1959 followed by a number of the most powerful (75 thousand hp) nuclear ice-breakers) provided the speedy large-scale development of the NSR. But in the 1960s the overall technological backwardness of the USSR became apparent. Today the lion's share of the ice-going fleet is being imported from Finland.

The militarisation of the Arctic in the 1950s became an obstacle to normal economic development and closed the region for foreign participants.

Since the 1970s, fundamental changes in the NSR development took place. Due to the introduction of new nuclear and diesel-electric icebreakers and ice-class ships the year-round navigation was launched between Murmansk and Dudinka. The intensive growth of oil, gas, diamond and non-ferrous metal ores production produced a traffic volume along the NSR (million tons per annum): 1980 – 4.95; 1985 – 6.18; 1987 – 6.58. Since then the traffic volume has been declining (1990 – 5.5; 1991 – 4.9) due to the drastic slowdown of Russian economy. The largest drop occurred in cargo supply to Yamal Peninsula (0.5 million tons of pipes) due to the stoppage of opening of new oil and gas deposits. The Dudinka

harbour servicing the Norilsk Nickel Complex showed the highest figures on NSR cargo traffic – 2.2 milllion tons (out of which – discharged – 0.77 million tons). The major part of export cargo (mainly timber) goes through Igarka (0.7 million tons per annum). In 1991 fifteen ships (including one under foreign flag) were conducted along the NSR with 210 000 tons of cargo.

Out of 5.5 million tons carried per annum on the NSR

Deliveries to the Arctic region from Russia (other regions): – 2.63
Shipments from the Arctic region to other Russian regions: – 1.56
Imports to the Arctic region: – 0.01
Export from the Arctic region: – 1.19
Transit: – 0.12

As to the fleet quality, out of 250 cargo ships operating in the Arctic only 141 are ice-class vessels and more than 50 per cent of them are more than twenty years of age. The average age of cargo ships exceeds thirteen years.

Such conditions (high degree of wear and tear) create a high risk of navigation disruption. According to the official estimates even with allowance for expected decreased traffic volume in the Arctic regions, to cover the requirements of the near future about 150 new ships with total deadweight of over a million tons will be needed.

The icebreaker fleet is in a better technical condition. Eighteen main route icebreakers are serving the NSR traffic with total power capacity of 753 thousand hp. This includes four nuclear-powered “Arctica” type icebreakers (75 thousand hp each) and two new nuclear-powered “Taimyr” icebreakers (50 thousand hp). Another two nuclear-powered icebreakers of 75 thousand hp are under construction. At the same time five diesel-electric “Moskva” icebreakers built in the period 1960-69 are to be destroyed.

The average capacity (and parcel size of shipments) of vessels is around 33 thousand dwt which complies with the depth limitations on the NSR, but few vessels within this category have the necessary ice-class. The average earnings – the rate paid for the dry cargo on the transport market between Europe and Far East amounts to $ 32.5 per ton. The vessel earns between 27 thousand and 140 thousand dollars per trip.

Virtually all Arctic ports under operation (maybe besides Dudinka) need a radical reconstruction, modernisation and expansion in spite of the decrease of cargo handling activity.

It is well known that up to now the development strategy was mostly oriented towards heavy production needs – therefore the raw material (resource-extraction) approach predominated. No other region has such close and at the same time such one-sided links with the national economy as the north.

Following the overall tendency of lowering the resource and energy-intensity of production and of increasing the value density of tangible goods, this process generates new users demands to delivery quality which could be defined as “just-in-time” principle which gave a powerful impact on intermodal transport and container system development. The establishment of worldwide intermodal transportation

system could be considered as a step of long-term evolution of the transport system characterised by a sequence of replacements in which faster and (this is crucial) higher-quality transport modes and technologies substitute the traditional ones to increase speed, flexibility and quality in transportation turnover.

Therefore, the new market demand in the post-industrial economies is connected with the intersectoral and spatial restructuring. The transport system in its turn derived at this stage a new function by hanging into a propulsive sector of the economy. The quality of transport services becomes the major factor. The propulsive role appears as a complicated distributive and logistic system that determines the shifts and allocations of productive branches, appearance of new and restructuring of existing economic centres.

Therefore, taking into account the new features of overall development, the approach to the development of the Arctic region has to be gradually altered .

1. A shift towards a resource-saving policy to push down the energy and resource consumptions of the GDP and to slow down fuel production.

2. Alteration of the foreign trade pattern towards sharp drop in unprocessed fuel (oil and natural gas) export.

3. Raising the efficiency of extraction – at present the oil stratum output rate does not exceed 40 per cent.

4. Revision of resource prices – they should contain an element to cover the “post-resource” development.

5. Revision of approaches to the complex industrial development in the extreme conditions and fragile environment of the Far North: is there always a need to build up a super-structure of deep processing of the extracted raw materials?

6. And maybe the most important feature – gradual revision of specialisation – transition to non-resource type of development: recreation and tourism development including the international one; development of transportation and transit as well as communication functions, including intercontinental line services; revival and development of traditional branches and activities of the indigenous population.

The social aspects of the Far North's development should become the major ones along with the resource-saving strategy. The continuing high-latitude urbanisation process clashes with such principles.

A special system of social zoning of the northern region should be developed so as to reach the required number of permanent residents in the Far North. The elaboration of the optimal type of development for different areas – nodal, linear-belt, or areal-continual type – should be based on introduction of the new labour – and nature-saving technologies and equipment. These different types of development make certain demands on the transport systems and especially on introduction of the intermodal ones.

The transportation cost of a twenty-foot container carried by the nuclear ice-breaking container ship is calculated to be 20 per cent higher than for the conventional one in the first twenty-year period. However, if the life span of the nuclear-powered container ship is longer it will become more economical. It is known that the total cost (freight, stock, insurance, etc.) decreases as the haulage time becomes shorter. So, the NSR, which cuts the transportation time span, would offer great advantages for relatively high-value commodities.

However, the Arctic region has been suffering from some financial and under-utilisation problems: shortage of funds due to reduction of state investments and subsidies, drop in cargo traffic, drastic rise of prices for new ships, cost of servicing, repair and fuel supply.

After the USSR disintegration, the NSR passed fully under Russian jurisdiction, but twenty-four vessels were taken over by Lithuania and seven by Latvia – all of them ice-class tankers of 55 thousand dwt (about 20 per cent of total capacity of Arctic tanker fleet). Since Russia has now only two major ports on the Baltic Sea and two in the north (Murmansk and Arkhangelsk) the international role of NSR is increasing. Since 1990 according to the "Regulations of NSR Navigation" the NSR is virtually fully accessible to international transit traffic. However, of all ports along the NSR so far only Igarka has been opened to foreign vessels, four ports – Dikson, Dudinka, Tiksi and Pevel would be the next ones. In the autumn of 1991 the interest of Russia in international co-operation on the NSR was confirmed. This was supported by new legislation on foreign trade deregulation, foreign investment, on access to concessions for natural resources development.

But the consequences of "perestroika" affected first of all the northern regions because of the break-up of the traditional economic links, uneven price deregulation, inflation, shrinkage of government investment and subsidies in industry and transport sectors.

Priority measures in transport field for stabilising the economic development of the northern regions include:

– deregulation of fuel prices;

– ensuring a vital level of supply under state supervision but with appropriate economic incentives;

– fixing an amount of government investments in the programme of cargo and ice-breaker fleet modernisation and port facilities reconstruction;

– demonopolising and partially privatisatising (joint stock companies) transport as well as industrial enterprises;

– rationalising shipping taxation to encourage more efficient fleet utilisation and expansion of NSR as a transport main line;

– extending and/or introducing preferential conditions to foreign investors in the industrial and transport enterprises in the north, including free economic zones establishment.

There is still a very strong tendency to regard the north regions as the main energy, mineral and timber resource base of the Russian economy in both short and long term in spite of the global trend of lowering the resource intensity of production. Nevertheless, the crucial specialisation changes in the northern regions economy could be felt – a number of rather ambitious projects of the 1980s have been rejected or postponed indefinitely.

This includes a number of transport and power station projects. The new stage of NSR development is expected to put an impetus to traffic increase, to conform to gradual change of cargo structure, but also to provide cheaper, more reliable and regular haulage.

At present transportation costs in the Arctic regions account for up to 50-70 per cent of the consumer cost "cif" while inventory stocks are rated at 400-600 days. Maritime haulage of liquid gas from the Yamal Peninsula is a viable alternative to ecologically dangerous gas pipelines.

The transport potential of the NSR can be seen from the table giving the distances between a west European port (Hamburg) and four north Pacific ports via the NSR and main alternative routes:

From Hamburg to:

Shipping routes via	Vancouver	Yokohama	Hong Kong	Singapore
NSR	6 635	6 920	8 370	9 730
Suez Canal	15 377	11 073	9 640	8 377
Around Cape	18 846	14 542	13 109	11 846
Panama Canal	8 741	12 420	12 920	1 520

Recently, a steadily growing trend has been acknowledged in transit traffic along the NSR. As seen from the above table the NSR is the shortest route connecting Europe with East Asia and North America, and additionally there are favourable conditions for Arctic cruise industry. Another argument is the availability of relatively advanced logistic support (icebreakers, specialised port equipment and navigation services).

Investigation of competitiveness of the NSR gave favourable results considering not only direct delivery costs but also the time factor. There is another alternative route – the combined sea-railway transit via Trans-Siberian main line (the so-called – "land container – bridge") but this line is considerably over-utilised and this bridge does not work properly.

The transit cargo potential of the NSR estimated by the UN statistical department at about 20 million tons per annum is certainly underrated. It does not take into account the generated US cargo (coal, Californian fruit and vegetables, etc.) as well as the feedback effect of the new transcontinental routes causing new cargo flows.

A special issue is the tourism traffic development that needs a thorough scrutiny. Intensification of international shipping by the NSR will promote economic and social development of the Russian Arctic region. There are some prospects to set up a system of food supply to the eastern sector of Arctic through regular deliveries from the US Pacific coast and south-east Asian ports. In this case, the ocean-going container ships could be used in combination with lighters or aircraft. The foreign currency earned by international haulages will be channelled into the modernisation of the NSR transport facilities.

THEME 3

THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

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THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

Regional impact of the CAP on the agricultural activities of northern European countries

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1. Introduction

Agricultural land use still influences the shape of European Union in a significant way, even though its economic importance is declining. Some 45 per cent of the land within the Community is in agricultural use. Taking into consideration that agriculture manages landscapes around brooks, rivers and lakes, it has also a great effect on the environmental condition as well as on landscape quality of these water areas. And together with forestry, which covers another 33 per cent of the land, European farmers have a marked responsibility for nearly 80 per cent of Community land.

Common agricultural policy is the skeleton law for agricultural activities of all kinds. Therefore changes in the CAP as well as changes in national agricultural policies have regional effects. These effects are not only on land-use patterns because agriculture is part of the diverse economic, ecologic and social structure of rural areas.

The importance of the agricultural sector for regional development differs between the member states and their regions. In this connection, chapter 2 gives a short overview for north-west European countries (Denmark, Finland, Germany and Sweden) as well as for Baltic Sea countries willing to access European Union (Estonia, Latvia, Lithuania and Poland) over selected examples of the general economic setting and the significance of the agricultural sector. After that important CAP measures and their regional impact are described in chapter 3 with focus on aero-environmental measures as they leave room for regional characteristics. These descriptions lead to implementation problems of the CAP in chapter 4 and to some starting points for solving or reducing them. As far as possible regional examples mostly from (east) Germany and Finland accompany a comparative national survey.

Due to the fact that other speakers at the seminar deal with forestry, this subject has not been dealt with in this paper with the exception of a few short remarks.

2. General economic settings and the significance of the agriculture sector

As agriculture plays an important role in diverse rural areas, it should be able to meet the demands of its various functions and opportunities within the rural areas of the European Union. Especially regions with problems in other sectors of the economy are, due to lack of alternatives, more dependent on the contribution of agriculture to regional added value and attraction. What is the state of the economic situation in northern European countries these days and what role does agriculture play, particularly as a source of income and employment?

2.1. Situation and tendencies in northern European countries

Out of the four countries being compared here, Denmark and Germany show better results in terms of GDP development. Denmark's economic situation developed well due to a strong stabilisation policy. Its unemployment rate (Figure 1) has been decreasing since 1993. On the other hand in Germany – because of reunification problems, as well as in Finland unemployment has either been growing or stagnating at a high level. Due to the break-up of former trade partner the Soviet Union, Finland experienced a considerable decline in GDP and a growing unemployment rate until 1994. Sweden also had a majoreconomic crisis in the early 1990s. Its effect, particularly on unemployment, was significant (from 3.3 per cent in 1991 to 9.8 per cent in 1994) but not as dramatic as in Finland, where unemployment grew by more than 10 per cent during that time.

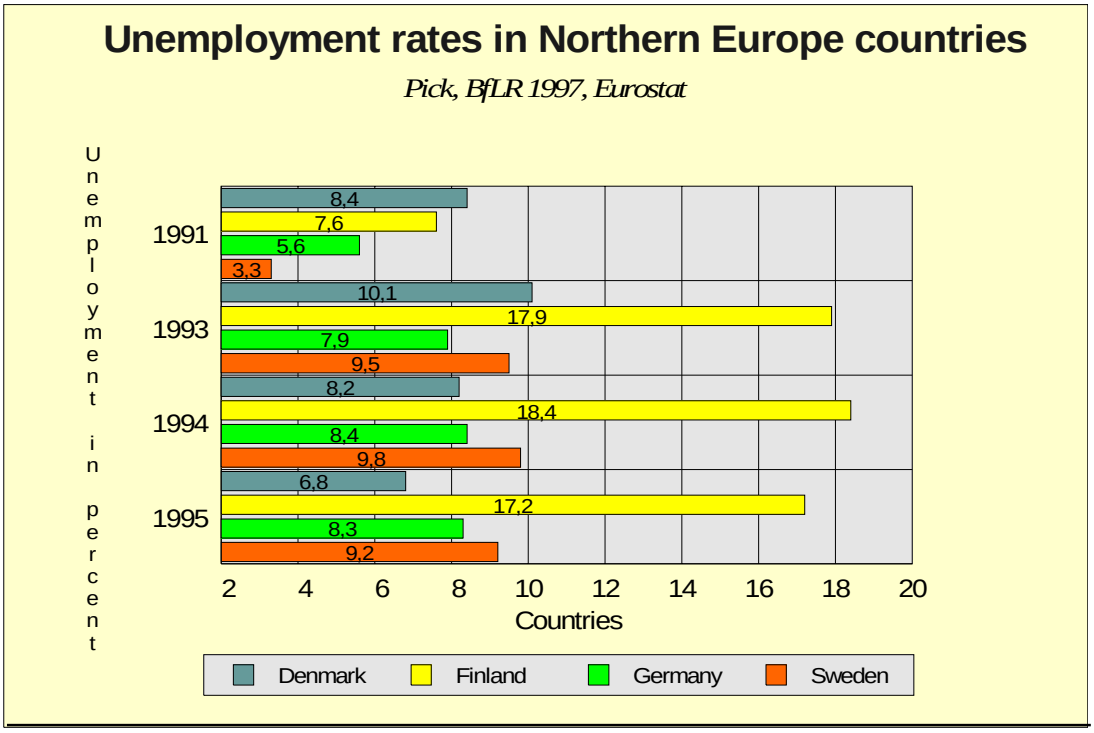

Figure 1

These average national figures seen from a regional point of view illustrate huge interregional disparities between different kinds of rural areas. The unemployment rate in Germany may be used as an example. The German situation shows that a growing GDP does not automatically lead to more employment. Despite a growing GDP, Germany's unemployment rate grew to more than 11 per cent in 1997. Unemployment rates varied between 14.3 and 25.4 per cent in February 1997 in the new *Länder*. In some municipalities unemployment is even higher. The high unemployment in rural agrarian areas of the new Länder is mainly the result of the breakdown of the old agriculture structure and adapting processes, not only of the CAP. From 820 000 jobs in agriculture in 1989 some 160 000 remained in 1996. A lot of people who lost their jobs have not been able to find new ones so far, due to scarse labour market possibilities outside the agricultural sector, in peripheral rural areas.

The agricultural quota in the GDP differs between 1.1 in Germany; 2.3 for Sweden; 3.5 in Denmark and 5.2 in Finland with well-known interregional differences. To see which role agriculture plays in the labour market, gainful employment in different sectors may give an insight. In Sweden agriculture has comparatively low importance for the labour market whereas in Finland still 7.5 per cent of the working population have employment in agriculture and forestry. In many peripheral Finnish municipalities those employed in agriculture and forestry account for over half of the total labour force (Aaltonen 1993). Although the importance of agriculture is declining for the regional labour market, it still plays an important role in certain rural areas. In Germany for example, where the average national percentage of paid employment in agriculture is 3.3 per cent, the interregional disparity shows percentages from 0.1 to 17.3 per cent.

Corresponding agricultural importance for the different regional labour markets and income can be found. Special problems may occur in connection with on-going decline in farms and agricultural labour force in regions where on the one hand agriculture is an important factor for regional employment and on the other hand, industry and service sectors cannot offer sufficient alternatives to unemployed farmers.

To be able to recognise which CAP measures may have the most effect on certain countries and their regions it is necessary to see which agrarian structure is dominating. The agrarian structure in Denmark in terms of farm size in hectares seems to be able to compete more easily on European agriculture markets because of the elatively high percentage of farms with more than 50 hectares (some 22 per cent, Figure 2). In Finland only around 3 per cent of farms belong to this highest class, in Sweden close to 17 per cent and around 11 per cent in Germany. In all countries the average farm size has increased over the years, except for the new *Länder*, where it has decreased since unification.

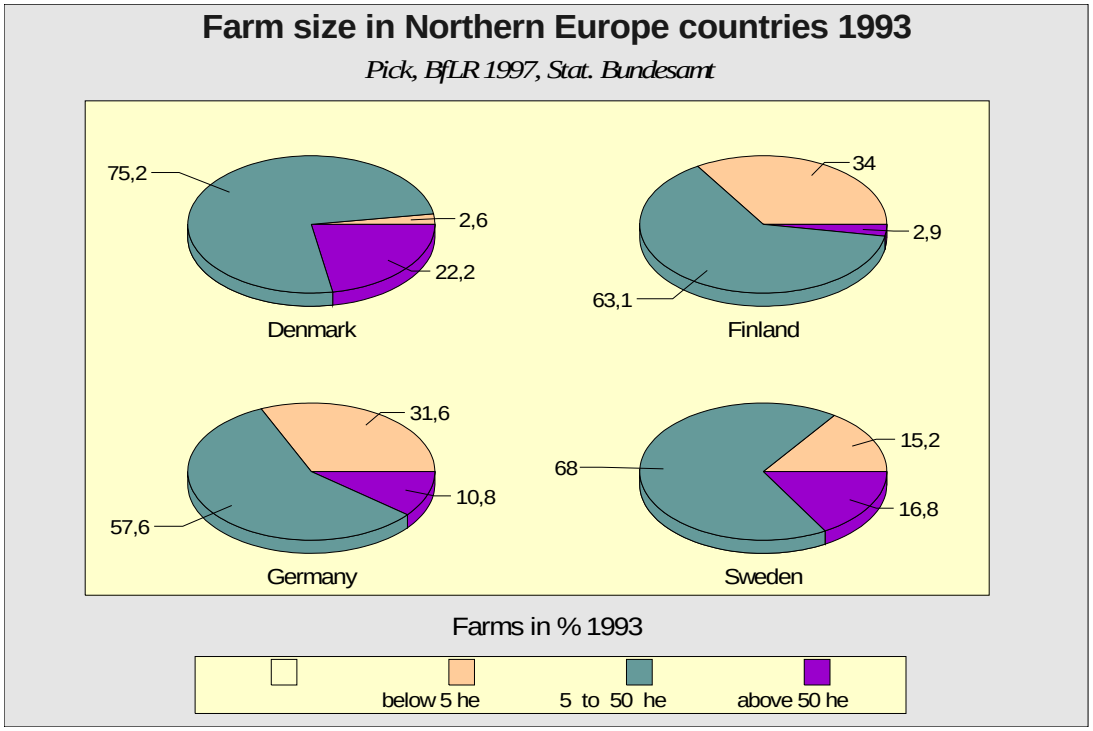

Figure 2

In Germany close to 100 per cent of the large farms are located in the new *Länder*. In the new *Länder* the average farm size (more than one hectare) was 183 hectares in 1995, whilst in the old *Länder* it was only twenty-two. And within the new *Länder* average farm size differs from 275 hectares in Mecklenburg-Vorpommen to 110 hectares in Sachsen.

Concerning land use, arable land plays a dominant role especially in Denmark with some 60 per cent of the total agricultural and forestry area (Figure 3) but also in Germany with around 34 per cent. In Sweden and even more in (north) Finland, forestry dominates with respectively 54 per cent 76 per cent of the total agriculture and forestry land use. Arable land covers some 8 per cent of the Finnish and some 7 per cent of Swedish farm and forestry land. This is in contrast to Germany where yet another 15 per cent of total farm and forestry land is used as grassland; grassland hardly plays any role in Sweden (0.8 per cent) and in Finland (0.1 per cent). This agricultural and forestry land use is more than food and non-food production. It has a profound effect on European landscapes and culture.

This short description may be enough at this point of the text and will be used as a basis for discussion in chapters 3 and 4. The following even shorter overview for Baltic Sea countries is in preparation for parts of chapter 4.

2.2. Situation and tendencies in Baltic Sea countries wishing to join the European Union

Estonia, Lithuania, Latvia and Poland could make progress before joining the European Union. Inflation has been reduced to between 20 and 25 per cent in the past three years, which is still a lot but compared to 1993 data of around 190 per cent for Lithuania or 100 per cent for Latvia it is a significant achievement. Unemployment rates between 4 and 15 per cent do not differ much from many countries in the European Community. But there is still a much lower GDP compared to the European Union average and the social and economic conditions differ much more than they did in the case of earlier European Union accessions.

Concerning land use Lithuania and Poland utilise close to 50 per cent of arable land and around 30 per cent of forests. In Estonia and Latvia it is the other way around. Between 7 and 13 per cent of the agriculture and forestry land is left for grazing. Labour force employed in agriculture plays an important role in Finland and some German regions, as well as in Poland (approx. 27 per cent of the population), Lithuania (23 per cent) Latvia (19 per cent) and Estonia (18 per cent). In contrast the agrarian structure in terms of transformation of farms developed significantly after the changes brought about by the Perestroïka.

Figures 4 and 5 show the changes between the ways farms operated. Before the big changes and after in 1994. Before the changes Poland was the only country which had a high percentage (77 per cent) of farmland worked by private farmers. In Latvia 9 per cent of agricultural areas were in private use and in Lithuania and Estonia only 4 per cent.

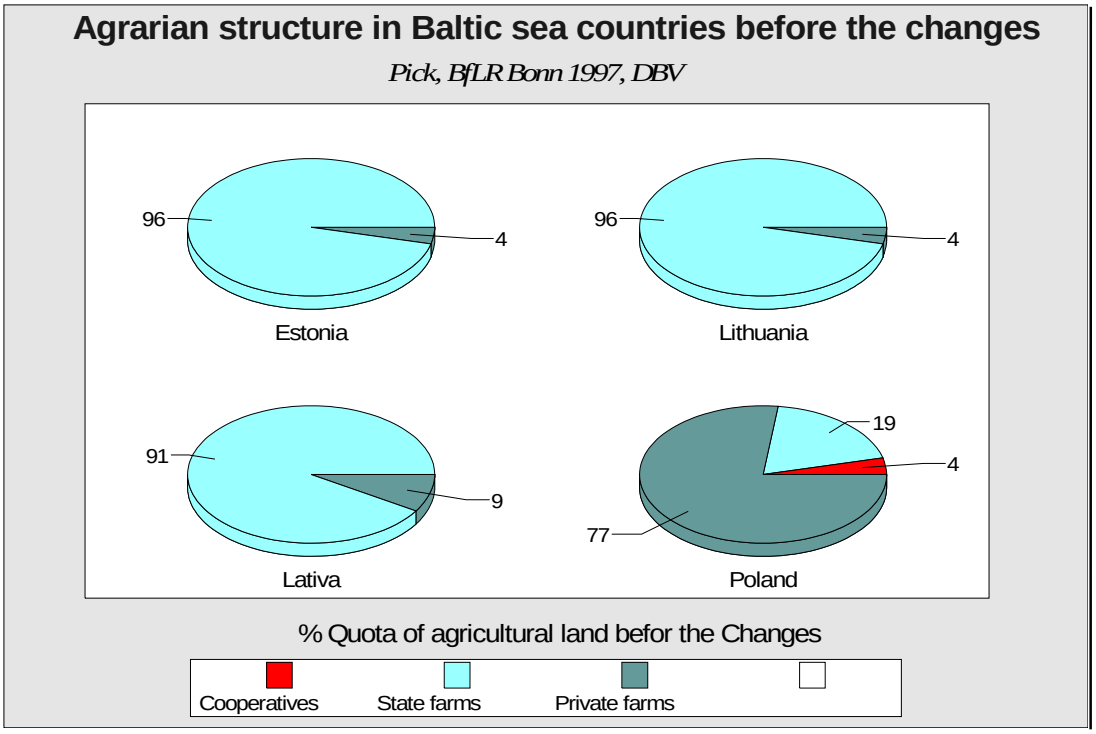

Figure 4

This picture completely changed except for Poland. In 1994 privately cultivated farmland in Latvia accounted for 64 per cent, Estonia 67 per cent and Lithuania 81 per cent. In addtion to this a significant

proportion of land, particularly in Estonia and Latvia is worked by co-operatives.

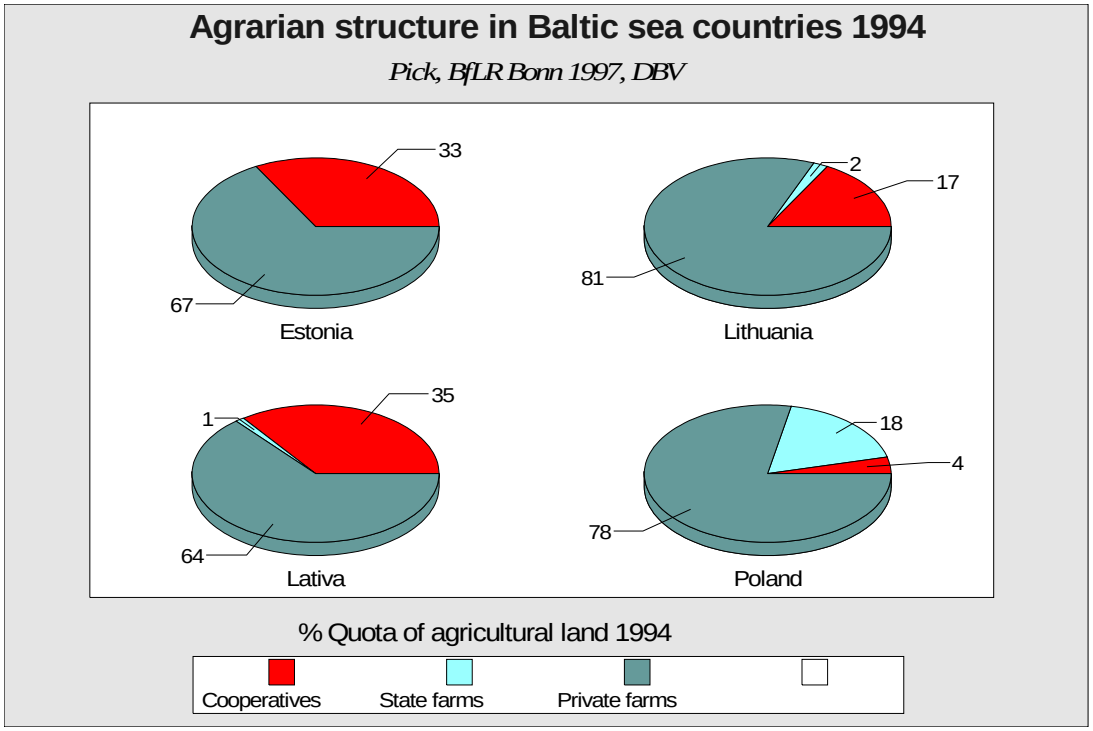

Figure 5

The above-mentioned relatively low unemployment rate will rise in the near future, due to modernisation and privatising processes in agriculture and industry requiring a smaller workforce. Other problems in the agrarian sector are non-profitable production structures as well as inadapted manufacturing and marketing structures. One good example of non-profitable producing structures is the very low average farm size of private farms between two hectares in Estonia and approximately seven hectares in Poland.

3. Selection of important CAP measures and their regional impact

The common agriculture policy has for a long time placed too much emphasis on growth in production and productivity. That policy led, from an economic point of view, to a better agrarian structure in terms of increasing farm size, but on the other hand the number of jobs in agriculture dropped sharply. Several problems arose such as the ever-increasing costs in terms of rising surpluses and resulting market and regulation costs in addition to growing environmental problems in intensive farming regions, especially the loss of species and landscape diversity.

The last major agricultural reform reduced producer prices in line with the work market, which gave supply and demand an opportunity to determine market prices in agriculture. It was also aimed at reducing regulation costs. Due to the fact that declining crop prices reduced salaries, it was agreed to pay price compensation payments to the farmers. Accompanying measures were created to encourage environmentally-friendly farming, afforestation and early retirement for farmers.

Table 1

Set aside area in northern Europe countries 1995
Area in hectares or as a percentage
Pick BLR 1997, DBV

	Denmark	Finland	Germany	Sweden
Total selected area	2 018 000.00	1 591 000.00	10 156 000.00	1 737 000.00
Of that set aside	253 000.00	212 000.00	1 470 000.00	329 000.00
Set aside as percentage of total	12.50	13.30	14.50	18.90
1994 to 1995 %	-1.00		-1.20	

The agrarian reform once again increased the number of European Union regulations, rules, etc. The European Union alone is annually responsible for some 4 000 sets of such regulations and rules for the agricultural sector (Agri-service International 1997). For regional and local partners in particular it is often not easy to deal with this flood of regulations which is due to additional national rules even more complicated at local level (see chapter 4.4.). The above-mentioned price compensation payments are only paid to farmers if they participate in the cyclical set aside programme or if they apply for an area in which a maximum of 92 tons of cereals (small producer regulation) can be produced.

3.1. Fallow rules and price compensation payments

Table 1 shows northern Europe fallow areas in 1995. The cyclical fallow rate for 1995 was lowered from 15 per cent to 12 per cent; in 1996, due to growing demand on the cereal markets it was lowered to 10 per cent and for the harvest in 1997 it was lowered again to 5 per cent. Land set aside to fallow cannot be fertilised. During the fallow period in general the use of vegetation is prohibited. The growth and fertilisation of certain non-food crops is however permitted (chapter 3.1.2.). The cyclical fallow rule and the relevant price compensation payments are especially important for arable farm regions.

3.1.1. Importance for arable farm regions

For arable farming regions cultivation of cereals and often also rape plays an important role for farm income. Therefore cereal price reductions of the CAP as well as the relevant price compensation payments are of great importance for these regions. With regard to land-use structure described in chapter 2.1., Denmark and Germany have a significant percentage of farmland used as arable land. An example of such an arable farming region is Uckermark county, located in the north-east of the state of Brandenburg close to Poland.

An analysis of the agricultural financial aid granted to Uckermark county was carried out in 1995. It showed that aside and price compensation payments are the most important measures in terms of the amount of agricultural financial aid granted to the region. Around 73 million DM was paid in 1995, 100 per cent paid by the European Union agricultural guarantee fund. Altogether over 72 per cent of the agricultural financial aid in Uckermark county was spent on measures with no direct environmental link, such as the above-mentioned compensation payments. Measures of ecological importance (for example those mentioned in Table 2) accounted for only 18 per cent of the financial aid and 9 per cent was paid for overlapping measures such as the village renewal programme. Similar situations concerning fallow

and price compensation payments can be found in other arable regions of northern Europe.

3.1.2. Indirect subsidy for non-food production on fallow lands

One could think that cyclical fallow leads to extensification of production at regional level. But this cannot be concluded automatically, since (intensive) non-food production on fallow land with certain crops is permitted. For this non-food production farmers need to have a contract with manufacturing companies concerning the industrial use of the whole crop before sowing.

If farmers use their fallow land for non-food production, they still get fallow premium, but without the price compensation payments. Thus fallow premium can be seen as an indirect subsidy for non-food production. These circumstances make non-food cultivation on fallow land more profitable and leave land capacity for other crops to be cultivated. In Thüringen more than 7 per cent of the arable land (this means some 46 per cent of set aside land) is used for the cultivation of non-food crops, another 6 per cent in Sachsen and 5 per cent in Sachsen-Anhalt. In the new *Länder* in particular non-food production seems to be more profitable in regions with good soil quality such as the *Magdeburger Börde*.

3.2. Animal premiums

Animal premiums represent only 6 per cent of the agricultural aid in the county of Uckermark under analysis. Taking into account that in the new *Länder* animal production, which required a large labour force, was reduced to below 0.5 animal units per hectare due to the unification process, this aid is not sufficient to raise animal density. Farmers with dairy and (or) meat production often work with a loss of income in their animal production which they compensate for with the high price compensation payments for their arable land. Even the Biosphere Reserve Schorfheide Chorin had to look for farmers to raise their extensive animal production to be able to keep valuable cultural landscapes open.

3.3. Agro-environmental measures concerning Regulation 2078/92

To reduce the environmental problems of farming mentioned at the beginning of this chapter, the accompanying measure 2078/92 was very important to convert to or to continue environmentally-friendly farming. Table 2 shows the number of hectares in use for environmentally-friendly farming concerning Regulation 2078/92 in northern Europe. The percentages differ between 2.4 per cent in Denmark to 74.2 per cent in Finland. Regulation 2078/92 has to be co-financed and translated into detailed action by the member countries in contrast to, for example, the price compensation payments which makes the national level and/or the state level (Germany) responsible for creating attractive individual measures within the framework of 2078/92.

Table 2

Agri-environmental measures in northern Europe 1995
Data from 15 October 1995 in hectares (2078/92)
Pick BLR 1997, DBV

	Denmark	**Finland**	**Germany**	**EU-15**
Total agricultural area	2 712 000.0	2 522 000.0	17 307 700.0	138 375 700.0
Agri-environmental area	64 700.0	1 870 700.0	4 956 900.0	18 194 400.0
As percentage of total	2.4	74.2	28.6	13.1

3.3.1. Environmentally-friendly farming

There are big differences in the quantity of environmentally-friendly land use between the regions. In 1996 close to 30 per cent of German agricultural land was used in a environmentally-friendly way, some 23 per cent – grassland and some 6 per cent – arable land (Agrarbericht 1997 and Table 2). The *Länder* percentages differ between 1.3 per cent in Schleswig-Holstein to approximately 88 per cent in Bayern.

Table 3 illustrates the creation and economic importance in terms of financial aid granted for individual agri-environmental measures in Uckermark county.

Table 3

Environmentally-friendly farming in the Uckermark related to Regulation 2078/92

Measure	**Description**	**Designated area**	**Payment**
Environmentally-friendly farming on arable land	Different rules, plant protective agents are generally prohibited including artificial fertiliser in some cases	Arable land	180-1200 DM/ha/96 depending on version and plant
			Total 1995: 0.3 million
Environmentally-friendly farming on permanent grassland	Low animal density between 0.3-1.4/ha no plant protective agents or artificial fertiliser, no irrigation	Permanent grassland	From 300- X DM/ha depending on animal density
			Total 1995: 3.1 million
Organic farming	Conversion to or continuation of organic farming according to Regulation (EWG) No. 2092/91	Nationwide	Conversion: 1996 300-1200 DM/ha continuation:1996 240-1000 DM/ha
			Total 1995: 0.4 million
Cultivation of fallow grassland	No pesticides and no artificial fertiliser but economic use of vegetation allowed	Specific permanent grassland areas	150-400 DM/ha 1996
			Total 1995: 0.1 million
Environmentally sensitive management of periodically flooded permanent grassland	No pesticides or artificial fertiliser and animal density below 1.4	Specific grassland areas	300-500 DM/ha 1996
			Total 1995: 1.1 million

Pick, 1996 with the help of Uckermark county administration

3.3.2. Organic farming

Organic farming is a special form of environmentally sensitive agriculture which – due to production methods requires a large labour force and frequently the manufacturing and marketing of farm products (for example bread or cheese) is carried out by the farmer himself – offers more jobs (per hundred hectares) on the regional labour market than traditional or particularly input intensive farming. Organic farming as a percentageof total agriculture land use ranges between 1.5 per cent in Denmark and 3.4 per cent in Sweden (Table 4), but it has high annual growth rates. The annual growth rate for organic farming in Finland from 1990 to 1995 was more than 100 per cent.

It can be concluded that Regulation 2078/92 supported by Regulation 2092/91 has a significant influence on the growth and development of organic farming (see also Lampkin 1996).

Table 4

Certified organic and in-conversion land in northern Europe countries
Pick, BLR, Lampkin 1996)

	Denmark	**Finland**	**Germany**	**Sweden**
Organic land 1995	38 260.00	25 800.00	272 140.00	101 460.00
Organic land 1996	42 180.00	44 730.00	310 480.00	105 000.00
As a percentage of total 1996	1.50	1.90	1.80	3.40
Percentage annual growth rate 1990-95	24.10	103.70	47.50	17.80

4. Implementation problems of the CAP at regional level

4.1. Diverse regional problems requiring assistance from European Union (funds) in a more co-ordinated and flexible way

From chapters 2 and 3 it can be seen that a long time ago the CAP speeded up the changes in agriculture structure which led to an increase in the average farm size but also to a loss of jobs. These job losses (farmers losing their jobs or their farms) often occurred in areas with weaknesses in other sectors of the economy with a low financial stability of the municipality in question.

With regard to the financial weakness of some rural municipalities it should be mentioned that the European Union as a rule contributes only 50 per cent (75 per cent in Objective 1 regions) of the costs for accompanying measures like Regulation 2078/92 or village renewal programmes (paid by the agriculture guidance fund), whereas product-related compensation payments are totally subsidised by the European Union. Therefore in the medium term product-related compensatory payments should also be combined with environmental and social injunctions to be in line with the problems and aims of both, rural areas and society as a whole.

European agriculture policy has to be more closely connected to a policy for European rural areas of which the development of a sustainable, environmentally-friendly agriculture is a part. More independent, local and innovative development ideas have to be implemented within the framework of integrated rural development.

4.2. How to utilise CAP at regional level

As seen before in chapter 3, the flood of CAP regulations becomes complicated at regional level, where national additional rules also have to be taken into account. There is a need for assistance not only for farmers but also for municipalities especially if they are located in a region such as the Uckermark which, for historical reasons, had not many possibilities to exercise competitive market structures in terms of risks and opportunities.

A regional example from Uckermark shows how two single projects take the variety of major regional problems into account, such as high unemployment rates, environmental problems of intensive farming, need for measurement-assistance for farmers and the difficult financial situation of rural municipalities. The Project “Women and agriculture or women and environment” was the result of co-operation between the Ministry of Food, Agriculture and Forestry, the Ministry of Labour, Social Affairs, Health and Women, local interest groups and a private research institute. Twenty-five unemployed women learned a lot about environmentally sensitive agriculture and measures and projects related to Uckermark. They work on farms in Uckermark, trying to find the most effective way for a given farm to optimise its income. The first two years the women get paid by the project to give them a new start or at least a break. The long-term hope is that after two years the farms will realise the benefit derived from the work of these women and be willing to pay for their services. At the end of 1997 the first phase of the project will be over. Some of the women will have a permanent job by then. For the others and for some of those who are still unemployed, the project managers are going to try to get a follow up to the projects.

Such projects are essential considering that unemployment rates of 27 per cent (February 1997) are not rare in parts of Uckermark and women are the ones for whom it is harder to find a new job (see also Fink *et al*. 1995).

There is also a need for (cheap) assistance for example in Poland and the Baltic countries. The European Senior Service Network (ESSN) is an initiative to connect western business expertise directly to small and medium-sized firms and farms (Agri-service International, 21 February 1997). They use the skills of retired professionals at minimal cost.

5. Outlook

Regulations of the European agriculture policy have to be more flexible and more closely connected to the local financial situation and regional characteristics. This should not lead to more regulations neither in agriculture nor in other policies but to greater delegation of competencies at regional level.
Future agriculture policy should also try to integrate social and environmental needs. Ecology and ethics

are (new) quality criteria for agricultural production (see also EU-Nachrichten March 1997). Sustainable agriculture therefore includes care for the environment as well as for social balance and acceptance, subsidiarity and co-operation. It also aims to strengthen the power and potentials of the regions of Europe.

The regions of Europe expect European agriculture policy to provide a suitable framework for different types of agricultural production. Within the framework of the Community,it could be left to the regions to create certain measures based on regional potential and characteristics (see also Urff 1996). Regulation 2078/92 is a first step in that direction as it leaves room for national and regional measurement design.

THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

Principal issues and prospects for northern European agriculture

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1. Introduction

The development of the central and eastern European Countries (CEEC; Poland, Czech Republic, Slovak Republic, Hungary, Romania, Bulgaria, Lithuania, Latvia and Estonia) has been taking place under the conditions formed by the general socio-economic situation in these countries. The objective of this paper is to outline main issues and prospects for the future of the rural areas and agricultural activities in Poland and other CEEC.

The paper examines main spheres of changes: from peasant to farmers' agriculture in Poland (from collective farms to private farms – in other CEEC); from centrally planned to market economy; from "country" agriculture to more global agriculture (the association of a number of these countries with the European Union). The paper also analyses rural development and farm structure strategies and alternatives.

All these transition processes from the economic point of view are characterised by general changes in the national economy, deeply affecting the situation in rural areas and agricultural activities. This transformation creates new economic environment forcing farms and enterprises to pass through a painful process of adaptation to new conditions.

Seven years after the launching of systematic reform process from the centrally planned economy to the market economy, economic achievements of central and east European post-socialist countries are impressive (for example positive growth of the GNP). Rural areas, agriculture and the food industry are important for the CEEC. However, these countries are facing formidable challenges which include (with some exceptions, only): unemployment, the crisis of public finances, inflation, a slow pace of structural changes, a foreign trade deficit, and a different social situation of worst-off population groups. This important process has proved to be more complicated than expected, which has detracted from the effectiveness or the methods chosen to carry forward changes in economic, political and social costs of transformation. The process itself has become slower and longer and runs into additional obstacles created by the gap between popular expectations and efficiency of the system and policies pursued. The economic situation makes it necessary and possible to initiate new programmes, policy and development strategy for the rural areas and agriculture.

2. The transition process from peasant to farmer economy

In the period of the centrally planned economy, Poland did not have a collectivised agricultural system. The present size of farmers' economy determines its significance for the acceptance and implementation of the market economy.

It is the individual family farm that plays the main role in agriculture. Because of this, the strategies and concepts of state policy must concern mainly individual farms. Economic-agrarian sciences continue to stress the thesis that a family farm possesses its own internal mechanism of sustainable development and adaptation. Nevertheless, external impulses are of decisive importance, not only to individual farms, but also to agriculture as a whole. This means that the present-day family farm, although undergoing transformation and evolution, maintains its own needs and ambitions. It is thanks to this aspect that the family farm has succeeded in surviving in most difficult conditions and circumstances, meeting needs of the family as well as the production requirements of the farm itself, isolating it from external conditions and difficulties. In the course of economic development (and the process of decollectivisation in CEEC) this face of the farm is changing rapidly.

One of the main objectives of reform during the transition period was to decollectivise agriculture and re-establish private property rights. Putting land and other farm assets into private ownership or private operation took a number of different forms, leading to different degrees of fragmentation of ownership and of farms. Large-scale collective farms in Hungary, Czech and Slovak Republics were turned into private co-operatives or other business entities leaving the members the choice of other options. State farms have mostly been privatised (the same as in Poland). In the new structures emerging in all CEEC, private farming – mainly individual farms – is gaining in importance. A large majority of private farms remains generally of a small type, oriented towards own consumption and short marketing channels.

As a general feature in the countries, which had a predominantly collectivised agriculture in the pre-transition era, it appears that the dualistic character – very large scale collective or state farms on the one hand and very small individual or private plots on the other – is changing. The average size of what is left of the state managed farms or their successors, e.g. the private co-operatives, has decreased significantly, while at the other end of scale, the size of individual farms is slowly increasing. This tendency can be expected to continue in the future and to contribute to the increase of efficiency as the larger units reach more manageable proportions and the smaller ones acquiring more land can benefit from economies of scale. For the medium term, however, the forms of private producer co-operatives associations that have emerged will most likely continue to play an important role in agricultural production and the focus of the smaller farms will continue to be the production for own consumption and local markets. The rate of structural reform will also depend on the emergence of functioning land markets, which so far has been hindered by the delay in most countries of the definitive settlement of property rights.

The economic mechanism of farm structure changes is related to the efficiency and profitability of different groups of farms. Among these important criteria, the major findings for Polish agriculture are as follows:

– the level of agricultural income gets higher as the size of farm increased; part-time work is becoming less popular for larger farms;

– in the aggregated level of data, no difference can be found in terms of shares of crop production and animal production in total agricultural production for a different size of farm;

– land productivity is higher for smaller farms;

– the level of the hired labour force is low for all sizes of farms; even for large-sized farms, family members are the core of labour force;

– profitability is higher for large farms; smaller farms are losing money in agricultural production (only the farms categorised for the size larger than fifteen hectares are making profit; average size of a peasant farm is seven hectares);

– efficiency is higher for larger farms (the values in the absolute terms are not much different from each other by size);

– fixed assets per hectare are higher for larger farms.

Changes in macroeconomic conditions, lack of investment, production fluctuations, slow process of expansion of land use per farm, less flexible marketing system are considered as constraints in improvement of efficiency, profitability and stability in farm management. At the farm level, increases in efficiency, profitability and stability of farm management should be accomplished. All these categories are important for rural development and changes of farm system.

3. The transition process from centrally planned economy to the market economy

In the 1980s and in the beginning of the 1990s, CEEC underwent profound changes in political, social and economic spheres. Agriculture and food sectors are subordinated to the economic reform programmes similar to other sectors of economy. Most of the prices of goods and services were liberated from central control and most of the subsidies and preferences given earlier to agriculture were withdrawn. In the next period, even though the governments were frequently replaced, the liberal market policy was advocated and continued, but the general economic situation in agriculture and rural population worsened (in Poland as well as in other countries including not so advanced countries as Bulgaria and Romania).

During this transition process, the farming sector was under the pressure of the following:

– problems related to the process of decollectivisation and privatisation of the state farms;

– low profitability of agricultural production;

– low level of agricultural incomes and unfavourable trends in macroeconomic income transfers.

The systemic novelty that was brought by the market economy means that the demand connections and demand limitations are becoming decisive both for the individual farms and for the whole food sector. The transformation from the supply mechanism to the demand mechanism is very difficult. It is reluctantly accepted by the main groups of rural population. It can be seen on the example of the present period of the development of Poland that the current agricultural policy is a mixture of different options and remains under the strong pressure of interests and current needs and loses strategic goals from its field of vision. This finds expression in the weakening of the rigours of the market reform expressed by the introduction of minimum agricultural prices, barrier duties or compensating payments.

Another important problem related to the future of the post-socialist agriculture is evaluation, as up to now the market did not start up innovative mechanisms on wider scale, i.e. the application of new technologies in the farms. The paradox of the present situation consists in the fact that the technologies and organisation of the production process in the main sector of agriculture, i.e. in peasant farms (for example in Poland), remain traditional., but the global and unit use of important outlays of industrial origin has decreased. It can be evaluated that the scope of market changes did not fully induce the expected adaptive processes in the farms, and the farmers and agricultural policy increasingly point out the need for increasing state intervention in this market.

4. The transition process from the country's agriculture for the integration into EU

In December 1991, an association agreement was signed between European Union and Poland, the Czech and Slovak Republics and Hungary. The document states that each associated country's final objective is to become a member of the Community as soon as it meets the economic and political conditions required. This agreement envisages a transition period of a maximum of ten years in order to achieve free trade conditions for industrial products. No such commitments have been made for agricultural products. At the beginning of the negotiations it was agreed that for these products the European Union concessions should exceed the concessions granted by the CEEC.

Among economists, there are different opinions on these agreements and the strategy of agricultural development as a process of adjustment to the conditions of the European Union. It has been evaluated that in some of the CEEC the current efficiency in agriculture is at the same level as the European Union agriculture in the years 1955-1965. This means that before opening to the European Union and the world markets the CEEC need to significantly increase their economic efficiency in agriculture. There are some aims that have to be achieved:

- to keep the country's food export potential and integrate agriculture and food economy into the international economic co-operation on a broader scale;
- to continue the protection of the best and the most productive and effective groups of farms;
- to create a new system of price stabilisation schemes and agricultural income policy;
- to develop the technical and social infrastructure in rural areas;
- to stimulate the development of ecological agriculture.

The pre-accession for a transition period before the integration into the European Union creates a number of new possibilities, challenges and threats for agriculture related to the associated countries' labour force and financial markets opening. For example, for Polish agriculture, the most important can be the competition and effectiveness of external pressure. This pressure can have a positive impact on the reconstruction process and changes in agriculture. The future free market for goods, services, capital and people means a real economic revolution in the agricultural and rural environment during the years before the integration into the European Union.

The long-term strategy should be oriented towards increasing the competitiveness of associated countries' agriculture and food economy by:

– choosing a more complementary structure of production;

– applying more advanced technologies;

– accomplishing institutional and innovative changes;

– increasing the effectiveness of production factors;

– improving the quality of products, etc.

As a result of this strategy, we may expect a higher efficiency in the use of resources use and the levelling of development discrepancy between agriculture in associated countries and agriculture in the European Union.

The pre-accession period should be used for making the necessary adjustment of Poland's as well as other CEEC agriculture designed to counteract the following potential dangers:

– disturbance in the system of food and agricultural product prices caused by considerable allocation of public funds to support prices, and the use of supply control instruments, including all the direct and indirect economic and social costs;

– insufficiently fast and effective reaction of domestic enterprises to increased competition which may result in the loss of domestic and export market shares;

– incurring of budgetary losses caused by an ineffective fiscal supervision system;

– weak position of CEEC food products on the market of the Union resulting from the absence of modern marketing techniques;

– weaknesses in the system of credits for agriculture and the rural areas preventing these countries from obtaining the financial support needed for carrying out the necessary structural changes;

– insufficient support given to the restructuring, development and growth of competitiveness of the agro-food sector by domestic research institutions, the education system and training organisations;

– low effectiveness of the institutions charged with the drawing up of programmes and with the management of the structural funds which may lead to their insufficient utilisation and bring about negative economic results for the weaker social groups and the less developed regions.

The implementation of the CAP will mean fundamental changes in the way CEEC farmers manage their businesses. Therefore, it is necessary to carry out an information and education campaign addressed to the rural population that should facilitate early adjustment at local level and prepare them to take on the challenge of integration with the European Union.

5. Rural areas development constraints

In our opinion, the transformation process in the agricultural sector can be implemented mainly through changes in the non-agricultural sector. In this respect, both modernisation of the agricultural sector and multifunctional development of rural areas, as well as innovation processes, depend upon entrepreneurship that is conceived as:

– an ability to display resourcefulness and creativity with an inclination for risk, or

– ability to adjust oneself to the market economy requirements, establishment of new businesses, modernisation of the existing ones including farms (activities that can be pursued by natural or legal persons).

The following activities for developing marketing of agricultural products and private sector food processing are undertaken:

1. The development of a network of wholesale and retail markets to improve the system of sales of agricultural products, to promote competitiveness, to lower costs and to diversify markets.

2. The rationalisation of networks of institutions in charge of standardisation and examination of food products, quality control and consumer protection.

3. The preparation and implementation of the amendments to regulations concerning contract agreements and improvement of arbitrage procedures, regulation and supervision over professional groups, such as stockbrokers or insurance brokers.

This approach to the rural regions suggests that rural area development barriers will be the same as those imposed to the entrepreneurship development in any form whatsoever.

Development of rural areas faces several constraints. These are external constraints of macroeconomic nature related to the general economic policy, economic system and legal framework. In particular, the government has taken the following measures:

– the package of solutions at national level promoting investments in rural areas (e.g. tax allowance and privilege system, etc.);

– rules of state companies privatisation, including food economy with particular concern for its specific features;

– preferential approach in the sectors, which could become country's highlights on the international markets and microregion development locomotives;

– stability and sustainability of the economic policy elements (taxes, duties, credits, foreign investments attracting conditions and the overall system of investment stimulation).

Macroeconomic background of rural areas development is meant to be, on the one hand, the existing ecological, social and economic possibilities of every microregion (community, parish) i.e. its resources, which should be used in the most efficient way, and, on the other hand, the activity of local authorities, institutions and organisations which should be concerned with showing the way of the best use of these local resources.
Rural development is locally determined by the following factors:

– microregion (e.g. community) location and possible economic advantages;

– historically determined structure, including the impact of the state-owned farms and large industries with a monopoly for employment;

– importance and type of agriculture in microregion development;

– local infrastructure conditions;

– social and professional structure;

– system of ownership and capital resources;

– effectiveness of rural institutions including performance of commune self-government;

– type of local population and its socio-cultural features providing a basis for initiatives including business.

Geographical location is an important factor for the commune economic policies. Generally, factors such as town proximity (particularly the capital or larger towns located in agricultural areas), state border proximity (particularly with economically developed countries), exceptional tourist and landscape features are taken into consideration.

6. System of institutions in rural development and transitions

The essence of the development possibilities of rural areas in all CEEC depends on a joint implementation of two inseparable processes:

1. Modernisation of agriculture which has to lead to many structural transformations (farm structure, social and professional structure, structure of productive assets, etc.).

2. Multifunctional development of rural areas, not traditional functions resulting from a multifunctional job profile in the country (many jobs are outside agriculture), its urbanisation and industrialisation (development of social and technical infrastructure).

The institutions serving the processes taking place in rural areas could be divided from the point of view of the functions they are performing as follows:

– creating the structure – they have impact on the transformation process of social, economic, vocational structure and also agrarian structure;

– integrating – their role is to create a relationship between agricultural farms and economic subjects based on the market rules (external functions);

– establishing the elites – in consequence it will create and strengthen the groups of elite; economic, social, authorities, etc.

The following institutions established in Poland may be given as examples of institutions which have instruments influencing the changes in the structures: Agency for Restructuring and Modernisation of Agriculture, Agricultural State Property Agency as well as foundations, funds and international institutions which appeared when Poland undertook the accession process to the European Union (Phare, FAPA, ASAL, etc.).

The second type of institution comprises enterprises, unions and associations, social and professional organisations of agricultural communities, Agricultural Extension Service Centres (ODRs), institutions dealing with consultancy services, advisory service and also dissemination of information.

The obvious connection between the above-mentioned three functions shows that it is difficult to point out the institutions that would have only one function. There are also local institutions established at local level which either initiate projects (regional development agencies, entrepreneurs or economic initiative associations, foundations, funds) or collect funds to finance those projects.

The creation or modernisation of the existing structure must be accompanied by the development of an institutional superstructure. This process must accompany ownership transformations, as well as the development of all kinds of enterprises, vocational improvement of the workforce, progress and changes of the lifestyle in rural areas and the way of farming. Many institutions of this kind, non-existent in the centrally planned economy have to be established in rural areas of Poland, as well as in all CEEC.

Among the institutional barriers to the development of rural areas there are severe deficiencies in the following areas:

– efficient rural banking;

– development of intermediary service offices (including job offices, notaries offices);

– book-keeping offices, agencies facilitating efficient trade and promotion.

The transition to a market economy system required the building of new institutions and organisations replacing former omnipotential state bodies. The role of the state should be maintained but new professional and fully responsible institutions representing the government should be created. Already new governmental agencies have been created in different economic sectors. In rural and agricultural sectors, three important agencies were set up, namely the Agricultural Market Agency (AMA), the Agency of State Property in Agriculture (ASAP), and the Agency of Restructuration and Modernisation of Agriculture (ARMA).

To create conditions for development in rural areas in Poland the government has started up programmes, most of which involve measures to combat unemployment. In pilot communities, incentives exist to create new enterprises with stable workplaces for rural people. Apart from creating as many new workplaces in rural areas as possible, the government is interested in the migration to the cities of people who are not able to find any job in the agricultural sector. The organisation of new workplaces and the alternative income sources outside the agricultural sector will influence the improvement of the agrarian structure in Poland. In order to attain this goal, a programme of agricultural settlement has also been instituted.

Basic problems of the agricultural sector in Poland, which have led to the decrease of rural households' incomes are: low efficiency accompanied by small and dispersed private farms structure, still limited possibilities of private farmers and public services in facing the challenges of a market economy, as well as inadequately developed market institutions and private trade channels, especially at the wholesale

level. Moreover, inadequate infrastructure is still a substantial obstacle in the development and economic diversification of rural areas.

To conclude, one could state that the changes that have taken place in agriculture in the first period of transformation were beneficial. Excessive employment in agriculture remains the main problem and the consequence of a dispersed agrarian structure, low yield of marketable agricultural production, low efficiency of labour use in agriculture and in general low income of farmers. Changes in the situation will be slow and are dependent on an increase of the demand for labour in non-agricultural sectors.

THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

Importance of the forests

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1. The forests and forestry in Europe

Europe is a rich densely populated continent with about 35 per cent forest cover. Europe accounts for about 5 per cent of the world's forests. Unlike the forests of many other regions, where deforestation is proceeding at a rapid pace, Europe's forests have been steadily expanding since the beginning of the twentieth century in both area and growing stock. During the 1980s, Europe's forest area expanded by about 1.9 million hectares according to United Nations Economic Commission for Europe and FAO (European timber trends and prospects: into the twenty-first century, ETTS V). There are about 0.28 hectares of forest and other wooded land for each European. That is much less than the world average of 0.63 hectares per capita. However, here in northern Europe with our sparsely populated, forest-covered countries the situation is the opposite. For instance in Finland we have 3.9 hectares of forest per inhabitant, in Sweden 2.6 hectares and in Norway 1.6 hectares.

Fellings in Europe are about 420 million m^3 which is about 70 per cent of net annual increment. Despite the fact that Europe harvests much less than the maximum biological potential of its forests, and thus has the physical potential to expand domestic removals considerably, it imports large volumes of forest products from other continents. In 1992 the net imports were around 66 million m^3, of which nearly half were in the form of pulp.

2. Forests and forestry in Finland

Geographically, Europe is a large area and is divided into a number of vegetation zones. These ranges from the Sub-Mediterranean zone in the south to the Arctic-Alpine zone in the Nordic countries and mountainous areas. The European forests are thus very different from each other in terms of their biological and ecological characteristics. There are of course also some differences between the northern European countries. However, as a background for the discussion about the importance of forests for the regions I will present some facts and figures on Finnish forestry.

2.1. Forest ownership

Finnish forestry is primarily based on forests owned by private families, who own 64 per cent of the Finland's forest area. Forest industry companies own 8 per cent, the state 24 per cent, and others (including municipalities, parishes and other collective bodies) own 4 per cent. Most of the privately owned forests are located in southern Finland, while state owned forests are predominantly in northern Finland. Hence the shares from the growing stock and annual increment owned by private families are

bigger than the share from the forest area, 69 per cent and 72 per cent respectively. Private forests are also the main roundwood source for the forest industries, accounting approximately for 79 per cent of the total roundwood fellings (1990-1994). Especially in the rural areas forests provide a significant source of income and an important form of capital.

The number of private forestry holdings is approximately 430 000. Forest ownership is small scale as the average size of private forest holding is thirty-eight hectares. In earlier days, farmers used to be the largest group of private forest owners. Now about half of the private forest owners are farmers, and the other half are so-called forest estate owners, most of whom are wage-earners or pensioners. The objectives of forest owners are diversified due to the large number of forest owners and their changing values. The significance of the multiple use is increasing continuously.

2.2. Forest industry

The forest industry plays a key role in the Finnish economy. The industry accounts for about a fifth of the total value added of Finnish industry as a whole. Together, the forest industry and forestry contribute around 8 per cent of Finland's gross national product. In 1994, the Finnish forest industry provided direct employment for some 68 000 people. Indirectly, the industry provided work for another 120 000 in other sectors, principally engineering, chemicals and transport.

The Finnish forest industry is essentially an export industry, as its output is many times higher than domestic demand. In many other countries, the forest industry caters mainly for the domestic market. In fact, only 10-15 per cent of world forest industry production is exported. In the Finnish paper industry for example, the share of exports from total production is 90 per cent and in sawmilling industry it is 75 per cent (1993).

The main markets for Finland's forest industry are currently in Europe: in 1994, Europe accounted for almost 80 per cent of Finland's forest industry exports, with 67 per cent of the total going to the European Union countries. The biggest individual buyers are Germany, the United Kingdom and France.

The importance of the forest industry to the Finnish economy is most clearly illustrated in exports: in 1994, the forest industry provided some 34 per cent of total commodity exports. And the fact that the industry requires a smaller import input than other export sectors further underlines its importance. Most of the industry's main raw material – wood – comes from Finnish forests. A high proportion of the energy it uses (roughly 53 per cent) is also generated in Finland. The contribution from imports averages only about 16 per cent. In consequence, the forest industry accounts for around half of Finland's net foreign currency earnings.

On top of this, the forest industry makes a substantial indirect contribution to the Finnish economy, as most of its investment commodities such as paper machines, pulp digesters, roundwood mills and forest machines are manufactured in Finland. These products account for some 15 per cent of deliveries by the engineering industry, which is thus closely linked with the forest industry. Other closely allied fields include the chemical industry and transport. The entire chain of forest sector expertise, from forest management through to forest industry monitoring systems, forms Finland's forest cluster. This in turn supports the skills and competitiveness of the parties contributing to it.

2.3. Multiple functions

As a principle of old Nordic land-use traditions, there is a public right of access (every man's right) in Finland. It permits everyone to use all forests freely for hiking, for picking berries and mushrooms, fishing and for other recreational activities. This has made it possible to implement the objectives of multiple-use forestry in all forests without having to set aside vast forest areas only to meet recreational needs of people. However, due to the growing popularity of recreational use, it has been necessary to modify forest management practices in order to satisfy the new forest user groups. This is especially the case in southern Finland in areas close to cities and other settlements.

The right to hunt belongs to the landowner who can rent it e.g. to a hunting club. The inhabitants in northern Finland have the right to hunt on state-owned land. Reindeer herding is practised in the northernmost part of Finland that forms the reindeer-herding region of about 11.4 million hectares. The right to carry out reindeer herding does not depend on land ownership, and any citizen of the European Union living permanently in the reindeer herding region can own reindeers. Nevertheless, reindeer herding is still nowadays the most important to the traditional livelihoods together with fishing and hunting, thus forming the material basis of the culture of the Sami people.

2.4 Forestry organisations in Finland

Forest and Park Service: the Forest and Park Service manages, utilises and protects the state-owned land area of 8.5 million hectares and about half a million hectares of lakes. Most of these areas are located in eastern and northern Finland. In 1994, the Forest and Park Service became a state enterprise that is also given social and official duties. Its tasks include the management and sustainable use of state-owned forests, management of nature conservation areas, and the promotion of recreational use of state-owned lands and waters. The government finances the activities related to the nature conservation and to some other social duties.

Forestry Development Centre: the Forestry Development Centre is a development and expert organisation making proposals and submitting motions pertaining to forestry. It provides development, expert and training services for the Ministry of Agriculture and Forestry, for forestry centres and for other parties. It is also responsible for the administrative service tasks of the forestry centres.

Forestry Centres: there are fourteen regional forestry centres in Finland. They provide forest owners with training, information and extension. They also prepare forestry plans, carry out forest improvement activities, and distribute forest improvement grants and loans annually taken into the state budget. In addition, the forestry centres control the implementation of the forestry legislation at regional level. Regional forestry centres supervise forestry associations.

Forestry Management Associations: there are about 265 forestry management associations in Finland. Forestry management associations are forest owners' organisations aiming at the improvement of professional forestry knowledge and skills among their members and other forest owners in their relevant districts. The associations provide forest owners with professional assistance in all forestry matters. Forest management fees fixed by law and by different service fees finance the activities of the associations.

3. Definition of sustainable forest management

The 1st ministerial conference on the protection of forests in Europe was convened in Strasbourg in 1990, by the governments of France and Finland. The 2nd ministerial conference on the protection of forests in Europe pick up on the forest principles of the UNCED with the aim of implementing them at national level and improving upon them as a basis for further regional and international co-operation. The Helsinki Conference (1993) and its follow-up have a general European background. The resolution of the Helsinki Conference reflects Europe's commitment to global environmental issues and to co-operation with countries with economies in transition:

– H1: General guidelines for the sustainable management of forests in Europe;
– H2: General guidelines for the conservation of the biodiversity of European forests;
– H3: Forestry co-operation with countries with economies in transition;
– H4: Strategies for a process of long-term adaptation of forests in Europe to a climate change.

Sustainable forest management was defined at the Helsinki Conference as follows: “Sustainable management means the stewardship and use of forests and forest country in such a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems”. The signatory states, committed themselves to the stewardship and use of forests and forest country in a sustainable way (H1), and recognised that the conservation and appropriate enhancement of biodiversity (H2) is an essential element of sustainable forest management. The follow-ups for H1 and H2 have therefore been closely linked. The main achievement of the follow-up process has been the adoption of a set of feasible criteria, quantitative and descriptive indicators for evaluating the progress of efforts to follow the principles of sustainable forest management and conservation of biological diversity of European forests.

4. The forests are still important for the employment and the regions

Forests and forestry have a central role in the general regional development work. Especially in southern Finland private forestry has a very important role in the regional economy. As the total income from agriculture is decreasing the relative importance of forestry is increasing.

Forestry plays a particularly important role for the employment in scarcely populated and rural areas. However, despite the increasing production in the forest industry the importance of the forests for the employment is fairly small and is further decreasing. In forestry in Finland the labour force went down from 200 000 persons in the postwar period to about 30 000 persons today. These figures, 30 000 persons on 20 million hectares of forests, also tell something about the cost-awareness in Finnish forestry.

Due to the fact that most forests are private property the income from forestry is of great importance for society. There are more than 400 000 forest owners in Finland. Every year, about 100 000 to 150 000 of them sell wood. The total stumpage price for the forest owners is about 5-8 thousand million Finnish Marks annually. In spite of the fact that many forest owners today live in urban areas, clearly more than half of the income from the stumpage price still goes to rural areas.

5. Participatory planning

5.1. Situation until now

Forestry measures concern many people living in a region, not only foresters or forest owners. That is the reason why participatory planning is a much discussed and implemented, but fairly new concept in forestry, all over the world.

Multi-purpose forest management planning has started in state-owned forests. Regional natural resource plans will be prepared for all state-owned forests. Currently two plans – for the Kainuu and western Finland regions – have been carried out. A regional natural resource plan is a large-scale strategic land-use plan fulfilling the requirements of ecological, social and economic sustainability. Participatory planning, which offers local inhabitants and interest groups the opportunity to participate in the planning of state forests, has been introduced into the process.

Transparency, participation and openness have become a mode of practice in many forms and levels of decision-making creating consensus between parties and thus resulting in substantial achievements.

The Forest and Park Service offers all citizens who are interested in the use of state-owned land the possibility to participate in the planning and decision-making process in these areas. The possibility to participate is offered at an early stage in the projects. Since 1993, the Forest and Park Service has maintained a geographical information system (GIS) listing key biotopes, small sites with special natural values and habitats of threatened species. Projects that have public participation of local people in their planning and accounting of natural resources have been launched. The Forest and Park Service has its own comprehensive planning system for protection and multiple use of natural resources (landscape ecological planning).

The participation of Sami people in natural resource management, for example, has been increasing in recent years. The Forest and Park Service Act underlines co-operation and participation of northern Lapland Sami people in wilderness management. The Forest and Park Service managing state-owned forests has an advisory board for co-operation in northernmost municipalities of Lapland, and the Sami Parliament nominates some of the members of this board. In addition, it nominates Finnish Sami representatives to the Nordic Sami Council. The Forest and Park Service also co-operates with reindeer herders' associations.

Most of the forest management planning carried out by the forestry centres in the private forests fits the definition of multi-purpose planning. A good start has also been made on drawing up nature management and landscape management plans. Nature management plans are primarily intended for those forest owners who set a high priority on nature conservation or nature-related values.

National criteria and indicators for sustainable forest management have been developed. They are based on the criteria and indicators for sustainable forest management adopted for European forests in 1994. In addition, a research project entitled “The strategy for sustainable forestry development in Pirkanmaa region” has been implemented. The objective of the project was to apply the national criteria and indicators in the assessment of sustainability on regional level.

The project is proceeding from the national level criteria and indicators towards sub-national and forest management unit levels. Sub-national applications of criteria and indicators are being carried out on private as well as state-owned lands. In October 1995, a one-year participatory research project was started in the Pirkanmaa region in southern Finland, covering close to one million hectares of forest land. The project is aimed at preparing a strategy for sustainable forestry development including long-term

objectives and implementation guidelines. The project also developed the socio-economic and ecological indicators that could be used in assessing the sustainability of forestry at the sub-national level in Finland. Additionally, the study also gave results that can be used in developing a system that could generate necessary information for certification practices, including field audits.

The Pirkanmaa pilot project results gave feedback on the applicability of the national criteria and indicators at a sub-national level and the need for their future development. The project also provided a basis for a common strategy for the forestry centres in the preparation of regional (sub-national) forestry target programmes according to the forthcoming forest legislation.

Furthermore, a working group on the strategy for forestry in Lapland, chaired by the Ministry of Agriculture and Forestry prepared a proposal for the sustainable management of the forests in Lapland in 1995.

5.2 Regional target programmes

A new Forest Act entered into force on 1 January 1997. The purpose of the act is to promote economically, ecologically and socially sustainable management and utilisation of the forests in such a way that the forests provide a sustainable satisfactory yield while their biological diversity is being maintained.

Concerning the rules for a felling of trees and establishing a new tree stand, only minor things have changed. The most important new paragraphs are the ones about safeguarding the diversity of forest nature. Forests shall be managed and utilised in such a manner that the overall prerequisites for the preservation of habitats characteristic of the biological diversity of forests are ensured.

Another important new issue is the regional forestry target programme. The forest centres will prepare and follow up the implementation of regional target programmes for forestry. These programmes will play an important role both for wood production and environmental target setting. The target programmes cover aspects of economic, ecological and social sustainability. The target programmes are joint efforts. The forest centre functions in co-operation with environmental authorities, representatives of forestry and environmental organisations (NGOs) and other relevant parties.

6. State financing of sustainable forest management

The object of the new Act on the Financing of Sustainable Forestry is to allocate government funding to measures that maintain and promote sustainable management of forests. These measures include guaranteeing sustainable wood production, maintaining biological diversity of forests and the forest ecosystem management projects as well as promoting measures to support the above.

The measures that promote safeguarding sustainable wood production and vitality of forests must be economically appropriate from the perspective of forest ecosystem management, environmental management and conservation of biological diversity of forests. These measures should not cause damage to the surrounding environment.

The restrictions related to different kinds of operations in the forests are mostly addressing small and, from a wood production point of view, insignificant areas. The economical implications of the restrictions have little significance for national forestry, but they may affect individual forest owners. In these cases the new Act on the Financing of Sustainable Forestry will be applied, and the forest owners concerned will receive subsidies. As an alternative, the new Forest Act contains exception rulings.

Additional costs and economic losses may be partly or totally financed by government funds in the form of an environmental aid whenever the measures related to the forest management and utilisation include the maintenance of biological diversity of forests, the environmental maintenance or the utilisation of forests to other than wood production purposes in broader terms than what are defined in the legislation as the obligations of the forest owner.

The Act on the Financing of Sustainable Forestry was only adopted at the beginning of this year. However, since the 1920s a Forest Improvement Act has been in force. This act, focusing merely on wood production, also contains a regional element. The state subsidies have been higher in northern Finland (up to 90-100 per cent) than in southern Finland (30 per cent). By doing this, the state has supported forestry more in regions with little other income than that related to forestry and has levelled out the differences in profitability between forestry in the regions.

This can be, and has been, criticised because state money for forestry has in fact been used not on areas where it would give the best results in forestry terms, but in remote areas with high unemployment and little possibilities for other sources of income.

Furthermore forestry is a very concrete and good branch of business, which has real possibilities to succeed and promote the economy and employment in a region. As a measure for regional policy, forestry therefore is of immense importance.

7. Wood as a resource for energy is important especially for the regions

It is well known that wood is the most important source of energy in the developing countries. It is less well known, however, that wood is still, in volume terms, the single most important source of energy in Europe. Over 45 per cent of the wood that is cut annually is used for energy purposes. Such wood may be in the form of conventional firewood, residues of the wood processing industries (including the “black liquors” arising in chemical pulping), and used wood.

An example can be drawn from the issue of forest sector and energy. Since the beginning of the 1960s the share of wood as a primary energy source has dropped from almost 50 per cent to about 15 per cent in Finland. This is, however, still the highest figure in industrialised countries. Even though the energy content of the timber resources in Finland exceeds by over a hundred times the total energy consumption, the yearly growth of forest biomass could not satisfy more than about 80 per cent of the total demand for energy.

The overall consumption of wood as a source of energy exceeds 25 million m^3/a. Forest industry is the main user of wood as an energy source with approximately 20 million m^3/a (in the form of wastewood and spent liquor). Only a fifth (5.5 million m^3) of the total amount of wood used for energy goes as firewood in dwellings and other buildings. Even though the use of wood for heating in the households has decreased during the last decades, it remains an important energy source nationwide, especially in rural areas. The 5.5 million m^3/a of firewood burnt by households and farms is equivalent to energy produced by a modern nuclear power plant.

Fossil fuels and electricity in most sectors of the Finnish economy have replaced wood. In the forest

industries the role of wood, especially wastewood and spent liquor, as a source of energy has, however, steadily increased – being close to 40 per cent of the total energy consumption. The forest industry is Finland's largest energy user. It uses nearly two thirds of the total energy consumed by the Finnish industry or about 30 per cent of the consumption of the Finnish economy. At the same time, the forest industry is also a major producer of energy and a significant user of domestic energy resources. The forest industry produces about 60 per cent of the heat and 35 per cent of the electricity needed for the production processes.

There is a target set by the government to increase the production of wood-based energy by one third or 10 million m^3/a by the end of the decade. However, price competitiveness of wood for energy is low, which prevents this target being reached. Harvesting small-sized timber only for energy wood has proven to be very expensive. Even though timber inventories indicate the potential to increase the utilisation of small-sized timber for energy, biodiversity and nature conservation are in part restricting the increasing use of wood for energy.

8. Conclusion

It is important to apply a holistic approach to forest policy. Measures concerning the forest sector should enhance not only ecological, but also economic and social sustainability. The significance of the forest sector in the maintenance of the livelihood of rural areas has to be acknowledged. Since this sector has been successfully market-oriented, forest policy does not mean policy oriented towards getting financial support. It is more important that the principle of sustainable forest management shall be respected and that any measures planned for forestry or related fields shall enhance the functional preconditions of the forest sector.

The forests and forestry in many regions in northern Europe could still be developed. Small and medium-sized enterprises should be encouraged to find new markets and use all possibilities for processing wood. More emphasis should be put on schemes such as entrepreneurship and small and medium-sized enterprises in forestry and innovations concerning new products and services. Those regions that do not succeed to process and use their forest resources will lose both in income and employment.

THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

Specific problems of low density rural areas in Nordic countries

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1. Introduction

The focus point of the report will be on the low-density rural areas of Norway, Sweden and Finland. Västerbotten will serve as a typical example of the existing conditions and of what can be done to improve the situation.

Based on available literature and documentation some strengths and weaknesses, as well as opportunities and threats have been identified for low-density rural areas in Nordic countries. The aim of this report is to illustrate these problems and opportunities, and to point out a number of conceivable development strategies.

The problems of low-density rural areas will be dealt with from a general point of view. The problems and opportunities of rural areas are frequently considered to be closely related to agriculture, but in this report we prefer to use a wider perspective. Farming will be regarded as a smaller part in the larger scheme of things.

This report is divided into three main parts. By way of introduction the strategies that have been selected in Västerbotten for our regional development will be dealt with. After that the strategies will be placed in context with an analysis of identifiable problems and opportunities. The European Union's planning from a northern Scandinavian perspective is treated as a third topic. The report ends with a short summary of conclusions.

2. Aims and strategies

For many years there had been no common development policy in Västerbotten, despite the need for a demonstration of strength that all partners would pull in the same direction for the benefit of the county. In order to achieve this demonstration of strength the county administration took the initiative to prepare a county strategy. The strategy has been discussed in a forum. This partnership consists of representatives from the municipalities, the county council, government agencies, the university, employers' associations, employee organisations, young people, women's groups, development groups, etc.

The partnership has agreed upon certain aims and strategies for regional development. It has been decided that priority shall be given to all areas that are considered to be strong and can be developed and, at the same time, specific measures must be taken for the development of the interior.

The aims and strategies embrace many aspects of community development. A few of the long-term strategies are intrinsic to all strategy areas. Such is the case with equal opportunity between women and men and long-term management, conservation, and recycling of our resources. Special emphasis has been made in the following strategy areas:

Trade and industry, economy growth and employment

Long-term, viable job opportunities will be created, mostly in the private sector of trade and industry, in order to stimulate economic growth and to cut down long-term unemployment in the entire county. The separate labour markets for women and men will be changed so as to offer more equal opportunity between the sexes.

In order to achieve the very best development, efforts will be based on the particular conditions characteristic of the coastal and interior areas respectively, for example the environmental and natural resources that are available. These efforts are mainly measures that either support or create conditions that will renew trade and industry, increase processing of goods and services, and establishment and growth in knowledge-intensive sectors. The public sector is to be seen as a prerequisite for the welfare system, the labour market and the employment of women.

Efforts for communications and overcoming distance

Traffic and communications links that are effective, safe and environmentally adapted will be developed both within the county and to adjacent areas (which create gateways to the rest of the world) so that Västerbotten has the ability to develop into a competitive market, even by European standards.

Efforts to overcome distance and to improve communications will reduce the problems of peripherality especially in respect towards Europe and even will take advantage of our east-west geographical position.

Higher education and training

Higher education and training will be improved and adapted to the special needs of the county. Continued expansion of the university in Umea and the university college in Skelleftea is essential. The level of competence in the county will increase.

Opportunities for higher education must increase and accessibility must be improved. The supply of competence must be improved in order to facilitate the continued development of trade and industry. Co-operation between industry and the research community must be fostered. Special efforts are required to promote the small and medium sized enterprises (SMEs). Furthermore R and D efforts in fields where we are most competitive must be intensified. Knowhow as a business idea and an export item needs to be developed.

The world around us and our identity

Administrative boundaries should not constitute an obstacle for the region's development. Through increased internationalisation, the expansion of markets and improved flexibility will provide new opportunities that should be taken advantage of. Co-ordination and collaboration in both north-south and east-west relations should be developed. The image of Västerbotten being a first-rate place to live in should be developed.

Efforts for internationalisation should be aimed at promoting openness, integration and competition that stimulate development. We need to increase co-operation with other regions; develop collaboration in a north-south direction with Europe and in an east-west zone with Karelia-Kvarken-Atlantic. Networks should be strengthened in order to increase the exchange of ideas and knowledge. The competence within the county that is associated with international matters needs to be co-ordinated and improved.

3. Analysis

The preceding aims and strategies are based on extensive documentation and analysis. The situation in northern Scandinavia will be dealt with in this chapter. In the last portion of the chapter the analysis will focus on Västerbotten. It should be understood that generalisations about Västerbotten also reflect general tendencies that are characteristic for northern Scandinavia.

The regional structure and pattern of settlement in northern Scandinavia has evolved from completely different circumstances than those we have at present. The extensive land area with free access to natural resources in the forests, lakes and sea provided the basis for colonisation in a large part of the area. The sparse population and the peripherality of the region were considered advantageous as the need to compete for survival was minimal, and the relative isolation accentuated a sense of independence. Today as we have an internationally integrated economy, low density in rural areas and peripherality are in many ways disadvantageous.

In Sweden and Finland there are small communities that are separated by extensive forests and lake areas. In the Swedish area forests cover half of the land area. Norway has an extensive coastline that has deep fjords that cut deeply into the mountainous interior, a most difficult topography. Northern Scandinavia is situated relatively far from national and international centres.

The northern portions of Scandinavia are sparsely populated. Large land areas and peripherality together with a complicated topography have given rise to a disproportionably large number of small centres that serve relatively few inhabitants. These centres in the low-density rural areas are also geographically far apart and, compared to other communities, rather small. Within the area there is also an interregional lack of balance. The small centres, which are the most remote, have small local markets and subsequently the economic base is relatively scanty. This in turn results in a weak basis for service and transport that leads to increased problems for the centre. All of which is an effect of low density. Not only is the region sparsely populated and peripheral, but the distance to the so-called centre regions, both national and international is relatively long. The distance is often so long that commuting is difficult. This fact has resulted in a large labour market geographically with few inhabitants and little variation in job opportunities. Most peripheral areas have a declining population, a high percentage of elderly, and a shortage of women.

The area has a rich abundance of natural resources. Wood, minerals, hydroelectric power, fishing and a beautiful landscape to name a few examples of the resources. However, nature is relatively vulnerable. The growing season is short, the climate is generally cold with extremely low winter temperatures that can be as low as -30°C to -45°C in the interior. Heavy precipitation and strong winds are common.

If emissions of pollutants, over-exploitation of natural resources or mechanical disturbances harm the environment, the regeneration period for plants and the ecosystem is very slow. Limits have been established for large-scale felling operations since regeneration is inhibited by the harsh climate. Sulphur dioxide emissions, mostly from Russian smelting plants, have caused damage to the vegetation and resulted in acidification of small lakes and rivers.

SMEs are the most common type of enterprise with a large number of companies having fewer than ten employees. A common problem for the local companies is that they must widen the business perspective from the local market to the important and larger national and international "export markets". Agriculture and forestry are still important sources of employment in the area. Most common is small-scale agriculture, forestry, fishing and fish breeding. Manufacturing is often based on the supply of raw materials and high energy consumption.

Partly due to the weak and often limited private sector, many services are performed by the public sector. Per capita cost of population-oriented service production is generally higher in the area as a result of the disadvantages of the economies of scale and the peripherality.

Employment is generally lower in each country than the European average. By the same token, unemployment is higher and early retirement pensions are more common.

The infrastructure of the Nordic countries is generally good. The road standard is relatively good considering the size of the population. The new, so-called infostructure is weaker in the area. The development of integrated services digital network (ISDN) and cellular telephones has been slow, partially owing to the fact that there has been little demand.

The different parts of northern Scandinavia have certain aspects in common. These mutual aspects lead to numerous strengths, opportunities, weaknesses and threats that the areas in the region have in common. Historically there are strong links in the area, both commercial and cultural.

A description of northern Scandinavia can be summarised in a number of observations enumerated below, which are also applicable to Västerbotten:

Strengths and opportunities for northern Scandinavia

– beautiful scenery which among other things constitutes a solid basis for recreation and tourism;

– abundant sources of natural resources, and a long tradition of exploiting them;

– clean water and soil – a good prerequisite for ecological food production;

– good infrastructure and, generally speaking, high quality public service sector;

– the large public sector provides a certain stability to the local labour market.

Weaknesses and threats for northern Scandinavia

- sparsely populated area, small local markets, peripherality and difficult topography;
- delicate/vulnerable nature and slow regeneration, threat of over-exploitation;
- small economic base, lack of advanced industry and private business service;
- dependence on government transfer payments, both in the public sector and the households. High per capita costs in service production;
- weak private sector with a large dominance of very small enterprises.

The County of Västerbotten

The variations in regional development of the different parts of Västerbotten have, of course, a historical background. Two tendencies have been constant throughout the years, namely the differences in development between the interior and the coast, and the variations along the coast from north to south. These areas promise to be different even in the future, each having its own identity with different opportunities and threats.

Strengths

Umea, seat of the county government and a university town – the city is most significant for the development of the entire county. A number of important indicators show growth in Umea. The population for example has increased by 20 per cent during the past fifteen years.

Despite its scattered population, Västerbotten has on the whole an extensive public sector both from the service point of view and as a foundation and prerequisite for development. The county has a combination of low density and a functioning central locality structure.

Västerbotten has an expanding university. The University of Umea offers instruction in a wide variety of subjects. This combined with interdisciplinary research has and will continue to generate spin-off ventures and create job opportunities in advanced fields. Furthermore, our dynamic university has also provided the Umea region with a highly qualified labour market. Persons living outside Umea have the opportunity of attending university courses either by means of a distance learning programme or local study centres. Increased collaboration between the university and trade and industry can enhance the development of industry and society and increase the competitiveness of the companies.

The county's trade and industry are partially based on the utilisation of raw materials. The supply of natural resources such as wood is good in the county, especially in the interior. However, if the county is going to develop in the future these resources must be put to use in another way so that raw materials are processed to a higher degree than occurs at present.

Weaknesses

Characteristic of the interior is a labour market that is both gender-divided and one-sided making it difficult to recruit couples. This is connected with difficulties in filling job vacancies despite the fact that unemployment is relatively high. On the average the level of educational attainment is lower in the interior than in the coastal region. Furthermore it is difficult to recruit qualified labour from outside the interior.

In comparison to the national percentage, companies in the county have a low percentage of employees with higher education diplomas. The internal in-service training is also inadequate. The university could and does play a stimulating role in establishing contacts with the SMEs in the county for the purpose of development.

Many of the companies in trade and industry are established in traditional industries. Difficulty however lies in finding new industries. Entrepreneurship is high in the county. However, the number of business closures is also high which results in a low net increase in entrepreneurs. Many of the businesses are started due to the lack of alternative employment. They may have relatively simple production that is non-competitive in the long run.

It is most important for the inhabitants that the national and international infrastructure be formed so that the disadvantages of their peripherality are not increased and hopefully decrease. The distance to large population centres is great. Trade and industry in the county are dependent on rapid and reliable transportation of passengers and goods. Demands for safe, flexible and organised traffic flow/logistics can be heard from the various sectors in the communities, e.g. schools, public medical service, culture and tourism.

Threats

Many areas in the county have relatively high employment in the public sector that has contributed to a high total employment and a fairly low rate of unemployment, especially among women. As a result, communities have been able to sustain an acceptable service level, even in the most remote areas of the county. At present, both the federal and municipal governments are being forced to make severe budget reductions. There will be reallocations in the general federal grant system as well as budget cutbacks that will be unfavourable to poorer areas. Inevitably an accelerated relocation of people from low-density areas will follow, as well as a slowing down of Umea's expansion.

A profitable business idea should probably be financed on terms that are in tune with the market. In the interior there is lack of venture capital, which leads to difficulties for establishment and investment. One contributing factor could be the low loan value for real estate. Product development is a very risky enterprise and if there is a lack of capital anywhere from conception to the finished product, the entire project could be stranded.

Acidification is still the major environmental issue. In Västerbotten it is mostly the watercourses that are affected. The problem is greater in the eastern areas where the precipitation of acidifying air pollution (sulphur and nitrogen compounds) is the heaviest. Along the coast it is estimated that 80-90 per cent of the sulphur deposited originates from foreign sources.

Västerbotten has experienced sweeping changes in its landscape and its flora and fauna as a result of intensive cutting operations, abandoned farmland, gravel pits and peat cuttings, hydroelectric power stations, road construction and mining operations. The discontinuation of farming and increased rationalisation threatens the culture-historical aspects of the landscape as well as numerous valuable

biotopes that are so important for the preservation of biological diversity. In the forestry sector, the new forest policy that has been in force for a couple of years has involved changes for the better. Many forest farmers are now attempting to harmonise forestry methods to the requirements for long-term viable development.

Opportunities

The beautiful and varied nature is a natural condition for recreation and tourism. Our nature can for the most part be characterised as “wilderness” with natural values. The province of Lapland that lies partly in Västerbotten offers numerous opportunities for tourism in the mountains. Cultural environments have a potential as interesting places to visit.

Technological changes mainly in the field of communications have created new opportunities for enterprises. Technology makes them less dependent on time and place. Establishment has occurred in the interior of central booking offices whose site can now be either a small community in the interior of Norrland or a larger city along the coast or in southern Sweden. In the field of mobile telephone systems the digital network, GSM still has poor reception in Västerbotten. The older analogue NMT system does, however, cover most of the county. There is a need for development of modern telecommunications and information technology so that most areas in Västerbotten are covered. Technology can also create opportunities for training and education in the interior. So far the use of new technology has been very limited.

A high extent of processing is most desirable in a geographic position like that of Västerbotten. A typical example of this is in the forestry sector where most of the raw material sells as pulp or lumber instead of being further processed into furniture or bioenergy products. This would mean that the transportation costs for the customer would be lower, thereby reducing the effects of peripherality. With this perspective it is easily understood that a high extent of processing is important. In addition to increasing the extent of processing of export products, the production of services should be supported which influence the customer to come to the product, especially in the fields of tourism and recreation. Even in other areas where service is important there should be an ambition to improve the level of competence.

International relations need to be intensified. Sweden's membership of the European Union provides direct and indirect opportunities that must be seized. Increasing internationalisation must immediately become a natural part of the job, and should be introduced together with new working routines and forms of co-operation. Västerbotten's geographical position having borders with Norway and Finland and its proximity to the Karelian Republic, the Barent Sea Region, and route Moi Rana-Umea-Vaasa provides excellent opportunities for co-operation across borders. For many years now, co-operation in certain areas has been well established over the Kvarken Straits, and also with Norway, but it should be developed further and strengthened. Networks that have been created during the past few years should also be intensified. In Västerbotten the conditions are conducive for a successful increase of internationalisation.

The recent openness towards the east for trade and investment from the west can create a new pattern of trade. Cities in both the east and the west will be confronted with new opportunities and threats. Some of their historical roles will become obsolete as they search for new functions. A demand for transport and communications emerges in order to channel the new flow of goods, services and people.

An analysis of Västerbotten can be summarised in the following assertions:

- growth and development can be further stimulated if the various areas in Västerbotten utilise their unique qualities;
- establishment/expansion/extended processing/new business activities must be stimulated in order to dampen the effects of stagnation in employment for basic industries and the public sector;
- the competitiveness of trade and industry can be strengthened if the extent of processing is increased and production methods are developed;
- if a long-term viable society is to be created, environmental considerations must be applied in the pursuit of growth and development;
- increased international receptivity, integration and regional competition contribute to improved development in the county;
- the infrastructure is relatively well developed, but efforts are needed for new technology and maintenance;
- the content in terms of knowledge for production need to be improved if the competitive edge is to be sharpened. The level of competence in trade and industry can be raised if co-operation is expanded among the upper secondary levels, higher education and businesses;
- the geographical position of Västerbotten is favourable in an east-west direction and unfavourable in a north-south direction;
- women and men must be given equal opportunity in society.

The following chapter includes analysis and discussion of problems and opportunities prevalent in northern Europe in terms of European spatial planning.

4. European planning from a northern Scandinavian point of view

Both Finland and Sweden have been members of European Union for a couple of years. With the development of the European Spatial Development Perspective (ESDP) the European Union influence on the development of northern Scandinavia will increase and become more direct. It is therefore important to take into consideration the differences that exist between the Scandinavian geography, urban system and environment and the corresponding features of the central European countries.

In the reports published by European Union concerning spatial planning, discussions are often in terms of three different scenarios. The first scenario considers the development of cities and their collaboration with one another and the adjacent countryside. The second scenario addresses among other things access to infrastructure and knowledge. The third and final scenario deals with the protection of the natural and cultural heritage.

Scenario 1: Towards a more balanced and polycentric system

This strategy emphasises the desirability of a balanced and polycentric urban system. In the ESDP work, measures can be seen that emphasise the need to decentralise growth, to increase economic diversification, to strengthen the medium-sized towns in particular, to develop polycentric urban networks, to curb the suburbanisation process and to promote co-operation between urban and rural areas.

Västerbotten's strategy includes among other things measures that promote collaboration over the Kvarken Straits with Vaasa and a programme for rural areas which in part aims to improve co-operation between urban and rural areas. Furthermore, other measures are aimed at reducing the significance of distance.

The population is unevenly distributed over the Swedish countryside. The trend for long-range population growth is very stable and indications are that there will be continued concentration in the most densely populated urban areas, and a decline in large areas of north-western Sweden. Sweden's population density is approximately 10 per cent of that of the European Union, and the country is characterised by both low density outside urban centres and long distances to the most important markets. It is difficult for Swedish urban areas to conform to the European goals and description systems for population centre system development. The regional importance of Swedish urban areas is often much greater than that of comparable urban areas in Europe.

There is a chain of medium-sized cities along the coast of northern Sweden which constitutes the development potential of the region. These six cities are often regional administrative and/or industrial centres. From north to south we have Lulea and Pitea in the north, Skelleftea and Umea in the centre, and Örnsköldsvik and Sundsvall in the south. Two of the cities in this chain are located in Västerbotten, namely Umea and Skelleftea. This chain of cities is linked together by Euroroute E4 and each city is usually at one end of a road system that links the coast with the interior in an east-west direction. All cities have national airport facilities that are situated in proximity to the cities they serve. North of Sundsvall there is no railway connection along the coast that links the larger cities. The existing trunk line is situated in the interior and runs parallel to the coast. Many sections have a low standard. In the immediate future, negotiations will be held on the problems of financing the “Botniabanan” a new high-tech railway along the coast, extending from Sundsvall to Umea.

The urban pattern in the Nordic countries differs from that of the rest of Europe since it is small-scale with small urban centres and long distances. For this reason it is important that the ESDP system can support and strengthen the development of networks between small and medium-sized cities. Generally speaking, it is imperative that in continued work with the ESDP, equal consideration is given to problems that are characteristic of low density zones as well as densely populated areas.

Scenario 2: Provide parity of access to infrastructure and knowledge

This strategy emphasises an improved accessibility to infrastructure systems and information. There is of course an imminent risk that the advantages of new information technology will favour those regions that have already been favoured in Europe.

In spite of a relatively good distribution of institutions of higher education in the European Community there remain large differences in the general levels of education. There is a risk that accessibility to peripheral regions will diminish which in turn would tend to lead to an escalation of fragmentation.

Västerbotten's strategy includes, among others, measures that will improve communications in the

county and with the world at large. Efforts will be primarily made in the modern field of infostructure. The county strategy even contains measures that will improve accessibility to higher education and for the harmonisation of the infostructure to the needs of the county.

ESDP has advocated regional policies that support investments impeding the overloading of the infrastructure, that limit traffic flows in burdened areas, that improve service and the extension of the communications infrastructure for peripheral regions, that develop strategies opening the European Community more to Third World countries, and that initiate supplementary measures for the development of European networks.

Scenario 3: Wise management and sustainable development of Europe's natural and cultural heritage

This strategy emphasises the importance of preserving valuable natural and cultural environments. In the rural areas we will be dealing with the processes of marginalisation and depopulation. These processes will probably continue despite the development policies for agricultural regions and the European Community's structural funds. In the highly urbanised areas a decline in agriculture could result in the land being adapted for ecological use or it could be used as a recreation area for the urban population.

The primary threat to the valuable natural and cultural values in Sweden is not urbanisation and tourism. To a great extent the threat comes from the changes in agriculture and forestry. The agricultural policies of the European Union, the CAP, will have a significant influence on the Swedish landscape in the next few years. The most serious threat to the natural and cultural heritage should be the extensive acidification that to a large extent is generated by air pollution from other countries.

It is essential that consideration be given in the European spatial development perspective to development possibilities of the landscape in addition to forestry, agriculture and fishing. This especially concerns the urban-land relationship where Sweden will strive to change the economic basis of the landscape to strengthen by development of a cyclical principle, by the development of services in recreation and energy, and through ecologically-based agriculture which takes the principles of biological diversity into consideration. The interesting thing from the Swedish point of view is whether or not the ESDP can influence the European Community's agricultural policy so that the policy is in accordance with the aims of UN Agenda 21.

The circumstances and conditions for agriculture in Västerbotten are completely different from those in central Europe. The climate can almost be described as subarctic, which under other normal circumstances would more or less make effective farming impossible. Proximity to the Atlantic with its warm Gulf Stream is an important factor that makes the climate less harsh and more favourable for agriculture than other regions located at high latitudes. The long summer days with many hours of sunshine also compensate for the cold winters. During the postwar years however, agriculture was marginal and in the interior it was nearly obliterated. The few agribusinesses that existed usually had other sources of income. Forestry is an important source of income. It is also in forestry that the development potential exists since the opportunity to increase the extent of processing and improve incomes. Eventual changes must be made in consideration of the natural and cultural environmental interests.

Since acidification in Västerbotten is for the most part caused by foreign sources, it is only through international agreements on emissions control that the problem will finally be dealt with.

5. Conclusions - the specifics

Västerbotten is a county with a large area and low-density population. The population is concentrated on the coast with almost 50 per cent of the inhabitants residing in Umea, the seat of the county government or in its commuter belt.

A smaller section of the population lives in the rural areas of the interior. The urban centres there are small and the distance between them is great. Even the distance from Umea to Stockholm is great. These small urban centres are subsequently limited and offer weak local markets for goods and services. A large number of those who are employed are working in the public sector.

In other words it is no easy task to develop this county due to large-scale problems in many areas and disparate interregional differences. What is required is that each area in the county must take stock of itself and give priority to its strengths and opportunities.

In Västerbotten there is a consensus that we have some strategies and essential areas that most parties will concentrate on in order to develop the county. They are as follows:

– generally speaking, the extent of raw material processing must be increased in order to diminish the problems of peripherality: raw materials can be processed further, and the content in terms of knowledge for goods and services can be increased. Efforts should be taken in the traditional basic trades and industries (wood, mining, food production, tourism, etc.)

– efforts to promote new establishment and entrepreneurship – new technology, and new businesses should be able to evolve in Västerbotten;

– environmental consideration – if a long-term viable society is to be created, environmental considerations must be applied in the pursuit of growth and development;

– internationalisation – increased regional co-operation and collaboration, both within the country and outside. We need to broaden our base and we seek co-operation in order to strengthen our good points. Internationalisation should take place both in a north-south and an east-west direction;

– information technology – great effort has been made to develop a comprehensive multimedia communications network in the county – “AC Net”. This facilitates the reduction of costs for the use of new technology in every part of the county.

Higher education – the county has a university and branch campuses which are obvious foundations on which efforts to improve the level of competence and extend the degree of processing for trade and industry can be built. The combination of efforts in information technology and higher education result in excellent opportunities for distance learning.

THE FUTURE OF RURAL AREAS AND AGRICULTURAL ACTIVITIES IN NORTHERN EUROPEAN COUNTRIES

Rural tourism in northern European countries

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Throughout the 1990s, rural tourism has had high priority in the European Union's programmes relating to tourism. This has been natural, considering the wide interest taken in rural districts and the "green" values they represent. At first the term used was "ecotourism" but after the launching of the concept of sustainable development, terms like "environmentally acceptable" or "environment friendly" tourism have gained popularity. The latter term has been closely associated especially with rural tourism. In his speech to the Ecotourism conference in Athens in May 1994, the Director General of the European Union DG XXIII, Heinrich von Moltke, said:

> "Indeed Europe has a rich diversity of rural regions which, if developed for tourism, could help to counteract the problems of mass tourism. Already, it is estimated that 25 per cent of Europeans take their holidays in the countryside enjoying a wide variety of rural environments, local cultures and pursuits, e.g. farm tourism, spa tourism, open air activities such as horse riding, fishing and so on. Tourists who are becoming increasingly more sophisticated go to the countryside in search of the natural environment away from the cities; but at the same time, these tourists seek well-preserved environments which offer quality tourism products and services."

A discussion on northern Europe rural tourism could perhaps be opened by dealing in a few words with the future of European rural districts. This future was outlined in the European Conference on Rural Development held in Cork, Ireland, in 1996. The theme of the conference was "Rural Europe – future perspectives". The conference adopted the Declaration of Cork that stated:

– that rural areas – which are the home of a quarter of the population and account for more than 80 per cent of the territory of the European Union – including their inhabitants are a real asset to the European Union, with the capacity to be competitive;

– that agriculture is and must remain a major interface between people and the environment, and that farmers have a duty as stewards of many of the natural resources of the countryside;

– that agriculture and forestry are no longer predominant in Europe's economies; that their relative economic weight continues to decline, and that, consequently, rural development must address all socio-economic sectors in the countryside;

– that European citizens pay growing attention to the quality of life in general, and to questions of quality, health, safety, personal development and leisure in particular, and that rural areas are in a unique position to respond to these interests, and offer grounds for a genuine, modern development model of quality.

Furthermore, the conference announced a ten-point rural development programme for the European Union: sustainable rural development should become the fundamental principle that underpins all rural policy in the immediate future and after enlargement. A growing share of available resources should be used for promoting rural development and securing environmental objectives.

Policies should promote rural development which sustains the quality and amenity of Europe's rural landscapes (natural resources, biodiversity and cultural identity), so that their use by today's generation does not prejudice the options for future generations.

Here it should already be specified what “sustainable development” means in the case of tourism.

The Council of Europe defines sustainable tourism as any form of tourist development or activity that respects the environment, ensures long-term conservation of natural and cultural resources, and is socially and economically acceptable and equitable.

In the Baltic Sea region, which covers the major part of northern Europe, sustainable tourism and the impact of tourism on environmental aspects in general have been considered at a high political level. Despite the apparent lack of a concerted effort towards sustainable tourism in the Baltic Sea region, the future does not seem entirely gloomy. Several international bodies in the tourism, environment and assistance sectors are now beginning to join forces to achieve better control of tourism.

The Agenda 21 for the Baltic Sea region is a major step in the direction of achieving sustainable tourism. As a political framework it offers the Baltic Sea tourism industry an opportunity of taking a lead in implementing sustainable development, whilst at the same time ensuring profitability.

Furthermore, in the Saltsjöbaden Declaration, Towards an Agenda 21 for the Baltic Sea region, the Ministers of Environment stated that tourism is one of the sectors of crucial importance for sustainable development in the Baltic Sea region.

On the private side there is the Baltic Sea Tourism Commission (BTC), which is a non-profit organisation with 152 members from twnety-one countries. The BTC's aims and objectives are to co-ordinate and develop the tourism industry within the region, at the same time promoting its members' economic interests. One of the special aims of the BTC is to promote the natural and sustainable development of travel and tourism within and to the Baltic Sea region. This year in September, the BTC will hold its annual conference in Gdansk, Poland, where sustainable tourism will most likely be a topic on the agenda.

What, then, was the origin of rural tourism in northern Europe? I will be talking about the history and content of this sector and field of tourism from a Finnish perspective, as I know it best. The process of urbanisation essentially created prerequisites for rural tourism. This in turn triggered a romantic return to nature to enjoy its comforting pleasures. Among the upper middle class of the late nineteenth century, this led to the rise of a summerhouse culture first in Sweden and somewhat later in Finland. Already at the turn of the century, it was said that the “noise and hurry” and the anxious lifestyle typical of the towns demanded the healing effect of rustic milieux permitting the overexcited nerves to calm down. The last decades of the Russian rule and the nearby St Petersburg saw the Karelian Isthmus invaded by this new culture. For the local rural population, this phase provided a variety of chances for extra earnings as maids or coachmen, or say in house construction or sale of farm products.

During our century, the majority of urban dwellers have become owners or renters of a summer cottage, so that today the number of these is believed to be around 400 000. In fact, the commonest way of taking one's summer holidays is to spend them at one's own or a relative's cottage; this is what half of the Finns do. The main beneficiaries of this holidaymaking system today are retail traders: many small country shops can keep alive only thanks to the summertime high season.

Initially boarding houses and spa businesses, many of which were created in great numbers in the 1910s and 1920s, conducted the rural tourist industry. Often they professed to promote health by providing fresh air to breathe healthy meals to eat various cures and medically controlled bathing. Particularly the health resorts were often located nearby a mineral spring. One of these (at Runni in eastern Finland) was made really famous because our national hero Marshal Mannerheim used to rest there.

Rural camping started to gain popularity in the late 1930s and had its heyday in the 1950s. But this form of holidaying has never, whether in terms of the number of camp sites or campers or even the standard of services, attained the level it has in Sweden. One reason for this may have been that the state has not subsidised investment in the construction work concerned. The criteria to be used in attributing stars to the camping sites are nevertheless the same as in the other Nordic countries. But it must be admitted that in the present decade camping has not moved ahead in Finland. Both the image and marketing should be enhanced.

The postwar years have seen a revival of urban dwellers' interest in what rural living and, in particular, living on a farm is all about. In the 1950s, this made farm holidaying quite a popular form of vacation. It roused and still rouses interest especially among urban families with small children who have had no contact for example with cows or hens. Animals in fact could have a significant role as a rural tourist attraction. On the whole, many farms have given an “added value” to their touristic products for example by specialising in amateur horse-riding facilities. Some farms specialise in providing services to handicapped children.

Other popular tourist attractions in the 1950s were hikes – on foot as well as on skis. In Finland, the unique Lapland was truly “found” and, next, increasingly employed for the purpose. A parallel development was seen in Sweden and Norway for their Lapp regions. As a hiking country, Norway is in northern Europe the unquestionable number one both for its traditions and its potential. The local counterparts of our cottages are *hytte pä fjällen*, huts up on local mountains.

Since the mid-1970s cottage renting has been the central form of rural tourism in Finland. The product came to consist of separate, fully equipped lakeside/seaside cottages with saunas and rowing boats at the customers' disposal. Given the nature of the product the Lake of Saimaa with nearby waters became the central supply area for cottage holidaying. Now the supply is distributed more evenly over the country essentially because the building stocks on the Lake of Saimaa have not been renewed properly.
The newest development process has been operating since the 1980s. It has involved both diversification

and further specialisation of the product range. At the same time, the overall concept of “rural tourism” has been extended to comprise practically all the different services available for tourists in the countryside. For example, all holiday villages, all the various family hotels of *Gasthaus* type, as well as all rentable leisure dwellings, time-shares and rent-a-farm operations can be included under the label.

For a long time already, Finland has also served as a destination for foreign tourists. First came amateur fishermen, mainly from England, to enjoy the charm of whitewater fishing at our famous rapids in Imatra and Kajaani in the east and at those of Tornionjoki and Teno in the north. In Imatra, the foreign visitors even had a club area of their own with the necessary facilities. The beginning of Finland's independence soon after the first world war marked the inflow of two types of tourists: whitewater cancers and freshwater steamboat-passengers. Finland had of course already gained fame as the country of thousands of lakes or – less romanticly but more precisely – of 187 000 lakes. The Finnish sauna was discovered by foreigners in the late 1920s, and around the same time the notions of sauna, *sisu* (or guts), *poro* (the reindeer) and *pulkka* (the sleigh drawn by the reindeer) made Finland and the Finns original enough for marketing as a world class tourist sight. “Father Christmas” was added to these for the first time in 1939.

Finnish cottage holidaying experienced a massive tourist invasion as a result of the devaluation of our currency (*markka*) in the late 1960s and early 1970s. Germans, in particular, were pleased with the Finnish cottage and lakeside, and there were many who continued to come back – year after year – to exactly the same spot. Neighbouring Swedes, too, came to Finland, to sail and fish in the archipelagos of Aland and Turku.

However, no influx of tourists into Finnish countryside has been experienced as a result of our accession to the European Union from the beginning of the year 1995 despite the investments made in innovation and marketing in recent years. Winter in Lapland has of course become an increasingly general attraction abroad, and exotic activities like snowmobiling, dogsledging, reindeer safaris or ski tours are especially popular. For the purposes of sustainable development, motorpropelled hikes are not considered particularly commendable activities even though environmentally more friendly fuel options have been developed for the engines. There are, however, signs of an increasing interest among Russians in our rural tourist products.

At present rural tourism does not merely involve accommodation of visitors in the rural resorts. It is a highly diversified branch of industry merchandising and combining into marketable and qualified units the different assets of Finnish countryside. These include:

– the spacious rural buildings;
– the unspoilt Finnish nature, woods and rivers and;
– the diverse skills of rural people.

Whatever the form and setting of rural tourism, attention is always paid to people's social and cultural environment and the sustainability of nature.

Rural tourist products are, for example:

– cottages and secondary residences to let;
– holidays with full or half board;
– programmes and services;
– bed-and-breakfast accommodation, and catering services.

At least the following can be distinguished among today's rural services:

– farm holidaying;
– different services giving information about forests, birds or the like;
– trekking on bicycle, by boat, by canoe, on foot, on horseback or by similar means;
– local sightseeing with the help and guidance of local people and small businesses;
– hunting and fishing tourism based on traditional peasant style.

As in Finland, Sweden's tourist industry is essentially based on rural aspects such as landscape and unspoilt nature. Avoiding anything reminiscent of mass tourism, it focuses on peace and rest. First-rate environmental protection is also a typical aspect. A Swedish study on incoming tourism indicated that one German out of four has a cottage to go to and that one in seven arrives in Sweden for fishing. Approximately 10 per cent of the Dutchmen come to do canoeing, whereas Swiss tourists are mainly intent on hiking in the highlands up in the north.

In 1990 the Swedish Government adopted a comprehensive agricultural adjustment programme which is intended to introduce changes in farmers' production structures. One recommended option was rural tourism, which is divided up as follows:

– farm holidaying;
– long-term letting of holiday dwellings;
– short-term letting;
– accommodation in line with the programme “Come and live at a farm”;
– small cottage villages, and
– farm camping.

Of these various categories, farm holidaying – which had already officially commenced in 1972 – has shrunk dramatically due to scarce innovation and marketing and has subsequently been facing poor profitability. On the contrary, the project “Live in a countryhouse” (*Bo på Lantgård*) launched in the south of Sweden has been expanding all the time. In 1994 the 358 farms comprised in the scheme already recorded 65 261 overnight stays. To qualify for inclusion in the project, the house must already be operational and the host family personally involved. The system requires the host's membership of the regional association which checks that the families involved follow the established rules. About one third of the customers come from abroad.

Rural tourism activities in Sweden include farm visits, fishing, hunting, horse-riding and guided tours in the woods. Farm visits provide the visitors with information about various fields of production and an opportunity to make purchases; guided tours take the form of picnics or nature walks as an introduction to Swedish forests and forest economy. For example, you can be taken to see a stream float of logs or be allowed to participate in a sleigh-transport operation involving heavy timber. Some of the farms are run according to ecological principles and, consequently, refrain from using any toxic substances.

More than 10 000, or 12 per cent, of Swedish agricultural enterprises are involved in tourism in one form or another. The farmers' central federation holds that success in this field is based on low costs rather than high income. One advantage is that the farmer, by being present at all times, can maintain his/her services throughout the year without incurring any significant extra charges. Today, about 500 farms are involved in the *Bo på Lantgård* project. Their aggregate turnover, totalling 15 million kronor at present, may come to be improved thanks to the new accommodation-related project called *Svensk Lantmat* (or Swedish rural food) which is aimed at selling farm-grown pure food ingredients and packaged meals to tourists.

In Norway, cottage-renting business has more than fifty years of tradition. The central organisation in the fields has over 2 000 cottages and holiday dwellings to let. Farm holidaying has its own booking organisation comprising around 250 sites. Typically Norwegian specialities are shepherds' lodges high on *fjelds* (plateaux) where tourists can watch or perform rustic chores. Norwegian rural tourism also includes typically educational one-day visits to farms, sometimes equipped with a private ethnic museum enabling the visitor to watch artisans at work. Many other kinds of natural attraction, too – fishing above all – are an integral part of Norwegian rural tourism.

Russia, too, is becoming more active as a provider of various forms of environmentally friendly or so-called eco, tourism. The World Tourism Organisation WTO arranged a seminar on eco-tourism technologies in Novgorod in February 1997. It became evident that rural tourism in Russia is a prioritised branch of development and that there are plenty of small businesses engaged in eco-tourism. Training in the field is still a problem but will be tackled in terms of a three-year project which will be financed under the European Union Tacis programme.

To resume the case of Finland, I would like to say a few words about the questionnaire recently circulated about the national extent of rural tourism in its various forms. Replies to this enquiry were received from 1 756 entrepreneurs, 72 per cent of whom ran a farm business. For 15 per cent of the respondents rural tourism was their main economic activity, 82 per cent as a sideline. A clear majority (76 per cent) of the entrepreneurs have self-contained cottages to let. Farmhouse accommodation accounts for 23 per cent, and courtyard camping in 13 per cent of the cases.

The total letting capacity amounted to 5 084 cottages, 933 of which were in seasonal use. The average number of cottages to let on the farms was 3.9, with an average of 4-6 beds per cottage. All the various modes of housing within rural tourism put together, the total number of beds approximated 37 600.

Housing services only were provided by 559 of all respondents, and no less than 466 of them only provided self-contained cottages. Meals were provided by a total of 735 entrepreneurs but the number of those exclusively specialising in this form of services was only thirteen. Particularly those who accommodate people in the main building of the farm supply meals. Programme services were offered by 1 027 respondents, the most popular programmes being those related to fishing, rowing (or canoeing), skiing (or hiking), presentations of farming activities, a standing show of domestic animals, horse-riding, snowmobiling, and guided forest tours. The number of farms providing a full range of services – that is, accommodation and meals as well as programmes – was about 550.

Marketers of rural tourism in Finland are legions. The largest one is called Lomarengas, a registered association soon to be transformed into a limited company. Nevertheless, just over half of the respondents deal with their own marketing.

The replies to the questionnaire provide a useful basis for the further development of rural tourism. This development work is being prepared and co-ordinated by a special collaborative group for rural policy and a subordinated expert team for rural tourism. The latter has several tasks. First of all, it is responsible for drawing up a long-term strategy and recommending a programme for rural tourism. At regional level it will support active promotion of this branch. Entrepreneurs will be helped to co-operate with each other in the production of information and the marketing of their tourist products. And finally, the group can make proposals and motions for new legislation, projects and funding.

The expert team has set three ambitious targets to be attained before the year 2005:

– first, the average use of rural tourist businesses' premises for the accommodation of guests should be raised from today's under ten weeks per year to twenty-four weeks, whereby the annual growth during the first five years should be at least 10 per cent;

– secondly, the total turnover of rural tourist industry should be increased nearly tenfold – to 1.5 thousand million marks a year;

– and thirdly, the volume of employment within rural tourist business should be raised to 5 000 man-years.

To attain these goals, systematic and long-term efforts are needed at all levels. In this work our basic assets, too, can be grouped into three categories:

1. we must first of all base our efforts on the resources offered by our countryside and nature; Finnish landscape, open spaces, forest, culture and mode of life represented by our traditional countryside people;

2. secondly, we have high quality and an effective quality control;

3. and thirdly, we are advanced in various fields of knowhow.

These various assets should help us transform the capacity of villages into new service products. When we develop rural tourism and touristic co-operation in the future, the village will be both the environmental and operational centre of the plan. Models such as the Austrian *Dorf Urlaub*, the Swiss *Bauernhof Ferien* or the Irish Green Ireland could serve as examples. In all these, the village has a common quality system that requires linguistic unity and consensus about the visitors' role as customers of all the villagers.

Long-term product development with its different tools will be of prime importance. The tools in turn will include the classification of accommodation (so-called MALO), the self-control system for catering services, the regional and ecological forestry planning, the instructions for the preservation of the cultural and scenic heritage, and the instructions on how to apply the principles of responsible tourism. All this will hopefully lead to “Finnish country holidays”, a trustworthy Finnish brand that would be easily marketed all over the world. To achieve success in exports, Finnish rural tourist products should, moreover, take their place in a “Finland window”, an open real-time booking and distribution system. The products in turn should of course meet international standards. The words of the German travel agent Rüdiger Lohf are well worth remembering: “Independent of advertising, the individual tourist will continue to visit the Nordic countries and the classic cottage customer will find his way to his cottage, but the well-off customer will look only for places where the key is not put under the doormat”.

The European Union Commission's action programme for the promotion of tourism has rural tourism

among its priority areas. In addition, the Union has consistently drawn attention to advanced ecofriendly forms and principles of tourism. For example, the fifth Community environmental action programme for the years 1993-1997 includes tourism as one of the five prioritised areas. This concerns especially the planning of tourism in coastal and mountainous regions, and the development of tourist products in other areas in accordance with ecofriendly principles.

Thus, March 1993 saw the adoption in the Union of an Environmental Management and Audit Scheme, so-called EMAS, in which businesses can participate on a voluntary basis. Under this scheme, the enterprise or one of its outlets make or commission neutral Eco-Audits to consistently enhance their environmental management capabilities.

In the early 1990s, Finland was clearly behind such countries as Switzerland, Germany, Austria, Netherlands and Sweden as far as tourism from the point of view of environmental protection was concerned. In 1993 the Finnish Tourist Board began to talk about the crucial principles of sustainable tourism and launched a project for the promotion and development of ecofriendly tourism. The project involved ten environmental reviews relating to various kinds of tourist businesses. Two of these businesses were tourist farms in central Finland. As a result of the project, the pilot farms gave up the use of throwaway goods, lowered their waste output, improved their sorting techniques, and economised in their consumption of raw materials, water and energy.

As all the parties agreed that the project should be continued, the Ministry of Trade and Industry published a handbook on ecofriendly tourism in 1995. In the same connection several ministries engaged in a jointly financed project of creating an Environmental Management System, or EMS, for tourist businesses. This system will be based on quality scheme ISO 9000 and will be capable of certification in accordance with the British BS 7750 adopted for general use in Europe. EMS should be available for use during this year.

Finland has also seen the founding of a new organisation in this field – the Green Tourism in Finland Association. It publishes a periodical called *Luontomatkailu* (nature tourism) for the promotion of environmentally responsible business attitudes. The association feels that a tourist entrepreneur as well as travel agencies must be well and widely informed about the nature and ecology of their region. Events or services foreign to nature shall not be introduced at all. A nature based tourist product should be a genuine performance; it should never offer a poor, an artificial or even a vile experience.

Public tourist authorities are well aware that the tourist of the future will increasingly be attracted by theme – or experience-oriented travel. And of their destination, they will increasingly demand a high standard. Especially attractive will be activities that take place in natural setting: safaris, canoeing, fishing, hiking, cycling, etc., where the tourist him – or herself takes part. Here the organiser needs both the consent of the landlord and the support of the local people. Initially, it may be advisable to find out about the local population's opinions of what type of nature tourists they would prefer to see on their grounds: whether these should be fishermen, hunters, hikers, berry pickers, surfriders or, more generally, young people, pensioners, families, single people or other groups.

Without going into details of the financial support schemes available for rural tourism I would just mention the existence of such support under objective 5b and objective 6 programmes of the European Union structural funds. Also the regional financing programmes under the LEADER II Community initiative look favourably on rural tourism. The finance available under Finland's national law on rural economic activities provides a framework for the subsidising of developmental and investment projects conducted by tourist businesses in connection with farms. In this case the criteria to be applied are those based on the sustainable development of tourism.

By way of conclusion I would observe that development of rural tourism according to the principles of responsible tourist business means that rural tourism must, in all its forms, take account of the social and cultural environment as well as the sustainability of nature. The task is to co-ordinate the development targets of tourism with the principles of sustainable development, environmental protection, nature conservation, biodiversity and the demands of local inhabitants and the tourists themselves. For the consumer the principle of responsibility involves an increment to already proven quality and for the businessman and the entire branch chances for long-haul operations.

THEME 4

THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

CHAIRED BY: Mrs Oddrunn Pettersen
General Secretary
The Barents Euro-Artic Region
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REPORTS PRESENTED BY:

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THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

Cross-border spatial planning co-operation between Finland and Russia

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1. In the early 1990s, due to a change in the political situation, a new stage in the cross-border co-operation between Finland and Russian Federation began. The previous intergovernmental co-operation has now expanded into interactions, in areas on both sides of the border, among official regional and local organisations, enterprises and citizens. An agreement on co-operation in the border areas between Finland and the Russian Federation entered into force in August 1992.

Even prior to this, first contacts regarding spatial planning took place under the umbrella of the Scientific and Technical Co-operation Committee on Construction. Due to the increasing cross-border co-operation in various sectors there was a growing need for interaction concerning land use and infrastructure networks at the central, regional and local levels. Economic co-operation would have been hampered by conflicting proposals, plans, drawn up by the various parties and lacking sufficient agreement and co-ordination among the parties. Thus, it was timely that the authorities responsible for spatial planning on each side of the border should start discussions on closer links.

2. At the same time, the European Union was preparing a document on regional development in Europe, Europe 2000, which covered the development of all-European networks, especially as regards traffic, energy and data communications. The extension of these networks across the European Union borders was also taken into account. On the other hand, the European Union member states wanted to stress their right to locate these networks within their borders. Consequently, the member states and the European Union began work on a European Spatial Development Plan and Perspective, ESDP. The spatial planning ministers in the Baltic Sea area started preparing regional planning visions and strategies for the year 2000 (VASAB 2010). At the same time the Russian Federation presented general spatial structure for planning and housing in Russia. In Finland, the Ministry of the Environment was preparing a comprehensive spatial perspectives document called “Finland 2017, spatial structure and land use”.

3. In September 1993, the Finnish Ministry of the Environment and Minstroi, the Russian Federation Ministry for Construction (now State Construction Committee Gosstroi) held preliminary discussions on eventual spatial planning co-operation across the common border. A new working section was set up under the building sector group on the Scientific and Technical Co-operation Committee of Construction of the two countries. The new section's task was to work with an “Assessment of the possibilities for promoting practical co-operation in the fields of land use, spatial planning and infrastructure”. That basic idea was to engage the border regions in this work and encourage them to take part in the activities of the working section. A common proposal for a work programme was finalised in November 1994. It was based on the traditional exchange of experts and information, although some project type co-operation was also included. Since Finland was, at this time, also joining the European

Union, the work programme was immediately amended at the beginning of 1995 to fit in with the programme-based work in the European Union and European Union financing was sought. For additional work, Finnish and Russian planning consultants and institutes were also engaged in August 1995. At the beginning of 1996, European Union financing was obtained. Practical work then began, and Tacis/Bistro financing was sought for the Russian party.

4. The regional study project or "Spatial planning co-operation between the border regions of Finland and Russia" has been prepared in Finland by the Ministry of the Environment together with the regional councils Kymenlaakso, South Karelia, North Karelia, Kainuu, Ostrobotnia and Lapland and in Russia by Gosstroi together with the region of Leningrad, the Republic of Karelia and the Murmansk region.

The project is functionally based on the four natural development zones. The zones are:

– Southern Finland – St Petersburg Development Zone from Helsinki to St Petersburg.

– Karelian Development Zone (Blue Way), from Vaesa via Joensuu, Finland to Petrozavodsk, Russia.

– Archangelsk Development zone from Oulu, Finland to Archangelsk, Russia.

– Barents Development Zone from Keni, Finland to Murmansk, Russia.

5. The project will take a common view of the existing and drafted plans and projects on both sides of the border affecting regional structures, infrastructures and the environment. The aim is to promote joint projects in accordance with the principles of sustainable development. The project will take into account European Union perspectives and resources, especially the possibility to use the revised Interreg and Tacis financing programmes on border regions, using the means of spatial and environmental planning.

The main objectives of this regional study are:

– to build contacts and create a co-operation network between the regional authorities, planners and various experts;

– to obtain information on both countries' planning practises and develop common planning procedures;

– to produce and analyse information on the current situation and activities for spatial planning;

– to produce a priority list of spatial pilot projects which will be started after this study, and

– to create a basis for arranging international co-financing for pilot projects.

The projects should be completed by 31 May 1997. The interim report was given to European Union in November 1996.

6. The working method on the report has been subsidiarily-oriented from the grass-roots level upwards; a line of action which is, at least in principle, quite common in current European planning procedure. It is useful now to establish the communication system called for by the new situation, to initiate discussions and to work out guidelines for the working process in the future. It does not need to accept just any given, ordinary traditional planning format. It needs to be established whether the trends, actions and assessments of current development presented in several instances can still be considered topical, realistic and acceptable. Even so, the final report, at best, can only be a summary assessment of the general starting points. In other words, this would then be the basis for further modules of spatial planning. It is more of a discussion memorandum, an orientation and a compilation of general "regional studies", than a thoroughly formulated and finished scenario.

In the working model based on four development corridors, there is always the risk of competition between the regions, planning consultants/institutions and/or even central administration in both countries, which would hamper, render difficult or, at least in part, prevent the work. Nevertheless, this has not been the case this time. Neither has the material from several zones been found to be too dissimilar, nor there has been an input imbalance between the regions. The work mandate and the competencies of the parties may, in some instances, have created some misunderstandings. One of the most difficult tasks has been to disperse sufficient and broad information to all parties concerned.

7. Both the overall spatial planning perspective outline dimension and the assessment of practical projects have been taken into account in the study. However, at this point in the study there has been no need to give excessive advance details on how the work should be done and what it needs to focus on. Although the four development zones are essentially similar in many respects, they also display differences; this is why the parties working in each of the zones should formulate their own work and identify the main areas of concern.

There have been noteworthy changes and developments in the working process during the past two years. In the beginning the perspective thinking was prevailing. At a later stage, however, the spatial perspective dimension of course remained important, but had to be supplemented with the assessment of practical projects. One reason for this has been that development in European co-operation in spatial planning has been slower and more complicated than anticipated.

The major differences in the administrative practices, in the economic situations and practical difficulties, have also to be taken into account realistically. It has also proved more complicated than expected to obtain financing for the Russian party.

8. Of course the parties working in the regions on both sides of the border have, when compiling and discussing this material, paid attention to and anticipated the views to be expressed by national and various central authorities. The regional parties on each side of the border have also taken account of existing national plans and projects. The present work will not resolve the issues under the scope of the national authorities. Each administrative sector will come up with proposals in its own field, and will take them to the appropriate national decision-making body. From the parties' point of view, it is both acceptable and natural that they wield influence and outline future decisions at the central administration level, while promoting issues of importance to themselves.

Based on this, and prior to writing the report, the central administrative authorities assess, at least on a general level, the material compiled so far and the possibilities for further action. Several extensive projects, affecting regional structures, are very long-term (years or even dozens of years) and firm commitments to these projects or their initiation cannot yet be made at national or regional level.

The Finnish Ministry of the Environment has presented the interim report and the work to a special

follow-up group at ministerial level in Finland. Other parties represented in this group include the Ministry for Foreign Affairs, the Ministry of Trade and Industry, the Ministry of Traffic, the Ministry of Defence and the Ministry of the Interior.

On the Russian side, the work was discussed among the representatives of the State Committee to Planning and Housing in Gosstroi, and representatives of all ministries concerned, regional and St Petersburg authorities. This discussion was linked to general discussions on the general spatial structure for planning and housing in Russia as well as on programmes implemented in north-western Russia.

9. The study report is compact and consists of the following: preface outlining national stands on the issue; one chapter on each of the four development corridors; one chapter describing a pilot study on nature tourism in border regions. The study material is presented in other files, separate for each development zone.

The study material was collected at the joint seminars and group work sessions, many of which were held on each zone, both in Finland and in Russia.

The participants in the working seminars on the different development zones have been successful in compiling and analysing the available material. For this, the credit goes to the practical organisation of the working groups on essential items.

Generally it was in sessions that the following working groups were agreed upon:

– general spatial issues/economy;
– transportation;
– environment;
– tourism/culture/nature.

The objective of the group work has been the preparation of:

– concrete, tangible proposals;
– proposals needing additional investigations;
– proposals, taken up later but with lower priority.

10. The national studies on the Finnish side are mostly based on document “Finland 2017, Spatial structure and land use” for 1995, updated with information about many international and European Union programmes and developing projects (Europe 2000+, Baltic Sea Vision 2010, Natura 2000, European Spatial Development Perspective ESDP, TEN-Trans-European Networks). Some main titles: overview of planning systems; background and objectives; international development/regional structure; development vision for 2017, starting points/sustainable development, Basic national goals; land use 2017; regional and settlement structure 2017; zones as framework for a regional and settlement structure.

Starting points on the Russian side have been, as was mentioned earlier, “Spatial structure for planning and housing in Russia” from 1994 and continuing development programmes in north-western Russia.

11. Preliminary results on the development zones indicate that in the southern Finland/St Petersburg zone all the parties involved find it useful to continue spatial planning examination and intensify co-operation. Other development zones do not have the same pressure in spatial planning actions but they form appropriate zones for national and regional spatial planning functions co-ordinating territorial and land-use dimensions in different activities.

Such spatial planning projects are topical and realistic. In the southern development zone in some areas on both sides of the border, the development of transport will need spatial considerations. These areas are Lappeenranta-Nuijamaa-Viipuri-Imara-Svetogorsk, Vaalimaa and Vainikkala arcas/zones. The other objective should be e.g. to study areas, needed in the green belt-zone in both countries. In Arkangelsk-zone among other things Vartius area on the border is suitable for spatial examination on both sides of the border. In the Barents zone special attention should be paid to the Murmansk region. Murmansk region is developing the first spatial regional plan in the area, using Finnish experience in spatial planning. It is important, that in the course of the development of spatial plans in the Murmansk and in the Lapland regions, each side takes into consideration the work done by the other side across the border. For the Karelian development zone it is essential to reach the status as an international development zone stretching from Atlantic via Norway, Sweden and Finland to Karelia and Russia with the possibility of carrying out joint actions, especially in the areas of spatial structure, environment, nature and tourism.

12. The pilot project “Development of nature tourism on the border areas between Finland and Russia” is intended to achieve practical results in an assessment of the possibilities for ecological tourism, activities in the wilderness and cultural tourism in connection with land use and environmental requirements and possibilities. The pilot project refers to nature areas of various types on each of the four corridors on both sides of the border. There is a certain advantage to this work that the Finnish consultant is also at the same time working with the development programme (masterplan) for tourism to the Leningrad region, Karelian Republic and Murmansk region at their own request.

13. The work produces information on border area infrastructural development for the European Union and the national and regional programme, for instance, principles of European Spatial Development Perspectives (ESDP) preparation work and in the Baltic Sea region co-operation, especially VASAB 2010. The results of this project are useful for the European Union when linking the objectives of the Interreg programmes and the Tacis programmes.

From the Finnish side, it is important to stress that small-scale infrastructure development in the border areas of Finland and Russia is of great importance for major regional entities, too. It is possible, with relatively modest financing, to achieve significant results regarding the regional development of all-European networks. This should be borne in mind in the further development of the European Union financing systems.

14. As a first step in this stage of the work on cross-border spatial planning co-operation we thus have created connections (partnerships), a working system for the co-operation (co-ordination), first material compiled by the respective spatial planning authorities and major specialised authorities on topical co-operation issues in spatial planning (what is going on) as well as the first results of an initial discussion on the subject (how to start).

THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

Development and protection of coastal zones around the Baltic Sea

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Introduction

Ministers responsible for spatial planning and development from all the countries around the Baltic Sea met at the 4th Conference of Ministers on 22 October 1996 in Stockholm. One of the main topics at the conference was the discussion and adoption of a proposal concerning common guidelines for spatial planning in the coastal zone entitled "Common recommendations for spatial planning of the coastal zone in the Baltic Sea region".

All the ministers approved the proposal. Each individual country has now to implement the coastal zone recommendations in national policies and legislation.

This article describes the background for the initiative as well as the purpose of the common recommendations for spatial planning relating to the coastal zone in the Baltic Sea region. This description is followed by a more detailed description of the individual recommendations. Finally the recommendations are put into perspective and their importance in relation to future physical and spatial development in the coastal zone in the Baltic Sea region is assessed.

Background

VASAB 2010

The initiative for the common recommendations for spatial planning of the coastal zone is part of a major strategy and action programme concerning physical and functional development in the entire Baltic Sea region. In 1992 the planning ministers of all the countries around the Baltic Sea initiated the formulation of a spatial development perspective document.

Representatives of the planning authorities in Belarus, Denmark, Estonia, Finland, Germany (Bonn-Mecklenburg-Vorpommoern, Schleswig-Holstein), Latvia, Lithuania, Norway, Poland, Russia (Kaliningrad, St Petersburg) and Sweden participated in the working group. The report called "Vision and strategies around the Baltic Sea 2010 (VASAB 2010)" and the proposed twenty-one actions were presented and approved at the 3rd Conference of Ministers in Tallinn in December 1994.

The report presents a framework for spatial development in the Baltic Sea region (BSR), the purpose of which is to ensure that "the Baltic Sea region develops a strong identity based on sustainability, enhanced spatial cohesion and cross-border co-operation. Vision and strategies shall assist to harmonise the spatial aspects of the various policies, programmes and initiatives in the region".

The vision describes future development in spatial terms, expressing them through the basic spatial structures:

the pearls cities and urban networks

the strings mobility networks and energy supply (ports, railways, airports, telecommunication, pipelines, electricity)

the patches specific types of areas (coastal zone, islands, border areas, agricultural areas, valuable cultural landscapes, forestry areas, wetland biotopes, protected areas)

and through the planning process:

the system spatial planning (institutional and procedural approaches and problems of spatial planning in the various countries).

On the basis of this vision, strategies and actions that are to make the vision come true are formulated for each spatial structure and each planning process. The ministers approved all twenty-one actions. Some of the actions have a regional dimension and will only involve a few countries, while others cover the entire Baltic Sea region.

A Committee for Spatial Development in the Baltic Sea region (in the following called the VASAB Committee) composed of senior officials was established by the ministers to ensure the implementation of the twenty-one actions and the further development of co-operation in the Baltic Sea region.[1]

One of the actions which involve all participating countries is a project to "elaborate guidelines for spatial planning in the coastal zone", which is based on the vision that "the coastal zone is planned with careful balance between development and protection".

Why do we need common guidelines for spatial planning of the coastal zone?

The coastal areas in the Baltic Sea region are characterised by significant regional differences in terms of land use and the pace of development. The scenario is constantly changing. Together with a number of other partners, the dramatic political changes in the Baltic Sea region following the fall of the wall, the independence of the Baltic states, and the European Union membership of Sweden and Finland will affect the use of landscape. An increasing number of economic activities will involve further incorporation of areas for urban purposes, industrial installations, infrastructure and tourism facilities in coastal areas.

In Denmark one third of the coastline consists of built-up areas or areas which have been set aside for development activities. This visually affects half of the coastline. The same phenomenon is seen close to the capitals of the countries around the Baltic Sea, as well as close to major cities in the coastal zone, e.g. Stockholm, Helsinki, St Petersburg, Tallinn, Riga, Kleipeda, Rostock, Lübeck and Malmö.
Along the Gulf of Bothnia and along the entire eastern part of the Baltic Sea there are enormous areas

1 A more detailed description of this work was presented by Mrs Dzintra Upmace, Latvia during this seminar.

with few or no built-up areas. Some of these areas are used for agriculture or forestry, while others have been designated as various types of protected areas or set-aside areas. In the eastern part of the Baltic Sea region in particular it is still possible to find "virgin nature" where flora and fauna to great extent remain unaffected by human activity.

The tourism industry is one of the fastest growing industries in the world. In many countries tourism is a major contributor to the national economy, both in terms of jobs and in terms of foreign exchange earnings.

It is obvious that large parts of the coastal areas around the Baltic Sea have a special attraction value that could be used much more than is the case today. The nature and culture of the Baltic Sea region are in many ways different from nature and culture in the rest of Europe. It is characterised by white, sandy beaches or rocky coasts, islands and archipelagos of unique beauty, medieval towns and villages of great architectural quality, as well as small, picturesque fishing villages located in the coastal zone or very close to it.

A fundamental precondition for ensuring that these attractions become an active asset enhancing both the standard of living of the local population and future tourist sector development is to protect both the cultural and natural environment through well-considered functional and area-related planning. The use of coastal areas in southern Europe, where developments in the tourist industry have often been dramatic and out of control, teaches us a good lesson as to what may happen if planning instruments do not make it possible to regulate territorial exploitation adequately.

The transition countries are facing major challenges and numerous opportunities in relation to the determination of the future development in coastal areas. The challenges of the future lie in taking appropriate measures to ensure the long-term socio-economic development of coastal areas, to promote environmental sustainability and to protect the natural environment and cultural heritage.

Existing spatial planning legislation relating to activities in coastal areas in the Baltic Sea region

Most BSR countries have provisions in their legislation, which regulate activities that may have an impact on the natural environment in the coastal strip outside urban areas. The width of this protection zone varies from 100 to 300 metres landwards from the shoreline. In all countries this zone is a protection zone which is subject to clear and often very strict restrictions concerning construction and development, or to complete bans on construction. In several countries this zone or borderline area is called a "nature protection zone". Sweden and Latvia also have a protected offshore strip.

There are no clear guidelines however relating to the area behind this protection zone. This means that the construction of new housing, hotels and technical installations behind the protection zone are not governed by any specific rules. This may have a crucial impact both on the visual effect of the coast and on public access to the coast, the beach or the sea.

The intention behind the new coastal guidelines is to define a zone that would not be of the same nature as the existing protection zone of 100 to 300 metres. Instead it should be possible to take special conditions and development potential in individual coastal areas into account, i.e. to formulate guidelines which regulate while at the same time allowing for different interests in the coastal zone. Consequently, the intention has not been to define a new protection zone but rather a new, different planning zone.[1]

Danish experience

In Denmark, development in coastal areas has been monitored for many years. Over the past forty to fifty years an increasing part of coastal areas has been used for various purposes. Towns and urban conglomerations have spread along the coast, areas with summer houses and holiday centres have grown extremely fast in areas close to the coast, and technical installations such as power plants and dumping grounds have grown in size and become more dominant in the coastal zone than has been the case ever before.

The threat imposed by actual developments in the coastal zone made the Danish Parliament decide to introduce a number of special provisions in the Danish Planning Act concerning activities in a three-kilometre zone outside existing urban zones, as well as a number of special rules for the parts of urban zones which are situated close to the coast. At the same time the Danish parliament decided to extend the coastal protection zone from 100 metres to 300 metres on the grounds that the 100-metre zone was too narrow.

The purpose of the new provisions of the Planning Act is to limit the construction of houses and other buildings in the coastal zone, especially open stretches, and to ensure that buildings which must be located close to the coast are located in such a way as to ensure that their impact on the coastal landscape is as unobtrusive as possible.[2]

Given the Danish experience, Denmark offered to act as the main promoter for the initiation and formulation of common guidelines for spatial planning of the coastal zone in the Baltic Sea region, in close consultation with all participating countries. The Danish experience in relation to coastal planning in Danish legislation has thus been taken into account in the formulation of the recommendations for the entire Baltic Sea region.

Coastal recommendations

The issue of development and management in the coastal zone has also been on the agenda elsewhere in the international arena in recent years. This can, for example, be seen from the number of international programmes and activities relating to the coastal zone.

1 A definition of planning zone is given in the section “Common recommendations for spatial planning of the coastal zone”.

2 In April 1997 the Spatial Planning Department of the Danish Ministry of Environment and Energy issued a publication on spatial planning in the Danish coastal zone.

Integrated coastal zone management is an integral, cross-sectorial method comprising all sectors that have an impact on the coastal zone. The OECD has worked with this method and with this issue for several years and is now preparing a review of progress towards integrated coastal zone management in selected OECD countries. In February 1996 the European Union Commission launched a demonstration programme on integrated management of coastal zones.

The VASAB Committee has followed the international debate closely. Analyses and regulations have been used as an inspiration for or direct input in the coastal recommendations.

The most important input is the definition of the coastal zone contained in HELCOM[1] Recommendation 15/1, protection of the coastal strip, adopted in March 1994.

HELCOM Recommendation 15/1 expresses a "deep concern about the increasing pressure for commercial exploitation of the remaining natural coast, particularly in countries in economic transition and countries with no legislation for the protection of the coast, and about the consequences this might have for the coastal environment and the biological diversity of the whole Baltic area".

This recommendation makes it clear that an improvement of the marine environment in the Baltic Sea must be seen in the context of environmental improvement of land-based activities. In this connection a three-kilometre planning zone is defined, within which "major building development and other major permanent changes in nature and landscape be preceded by an appropriated land-use plan, including impact assessment, approved at least at regional level".

In addition to HELCOM Recommendation 15/1, relevant parts of HELCOM Recommendation 15/5 of 10 March 1994 concerning a "System of coastal and marine Baltic Sea protected areas (BSPA)" and HELCOM Recommendation 16/3 of 15 March 1995 concerning the "Preservation of natural coastal dynamics" have been incorporated into the VASAB recommendations.

The overall goal for VASAB co-operation in the Baltic Sea region is to create a coherent, well-functioning region based on development, environmental sustainability, freedom and solidarity. The VASAB Committee has been influenced by the statements and initiatives set up in the United Nations final document from Rio de Janeiro, 1992: the Rio Declaration and Agenda 21, especially Chapter 17 of the Agenda 21. Inspiration and input have also been taken from the World Coast 1993 Conference, which expresses the urgent need for coastal states to develop and strengthen their capabilities for integrated coastal zone management plans, and the UN Washington Declaration on Protection of the Marine Environment from Land-based Activities, adopted in November 1995.

Common recommendation for spatial planning of the coastal zone in the Baltic Sea region

Sustainable development in the coastal zone is a basic goal. The coastal zone must be planned in such a way as to ensure a careful balance between development and protection. The common recommendations for spatial planning in the coastal zone must be so flexible that the most expedient localisation of new activities in the coastal zone can be recommended, but they must at the same time be so restrictive that the greatest possible coastal area along the Baltic Sea is preserved and kept free of new urban development and in such a way that existing cultural and natural heritage is not spoilt.

1 HELCOM (Helsinki Commission working with the "Protection of the Marine Environment in the Baltic-Sea Area").

Structure and content

The purpose of the recommendations has been to formulate a set of rules – a kind of toolbox – which can be used and incorporated directly into national and regional/local planning relating to the coastal zone.

The common recommendations – or guidelines – are divided into four parts: preamble, objectives, recommendations and planning procedures.

The preamble describes the need for such guidelines and explains why it is important to monitor and control future physical and spatial development in the coastal zone.

The objectives express the desired directions and visions for future development:

- to protect and develop;
- to strengthen the economic and social development in a sustainable manner;
- to secure biodiversity;
- to secure and maintain natural and cultural heritage.

The recommendations contain a list of regulations and provide guidance for the process of spatial planning and management in the coastal zone. This is the most important part, since it specifies the planning tools. Selected issues are explained in greater detail below.

Definition of the coastal zone

All countries participating in VASAB are also parties to HELCOM. From the beginning, the VASAB Committee was therefore bound by definitions already adopted in HELCOM Recommendation 15/1. The question was then whether a three-kilometre planning zone was wide enough from a planning point of view. Proposals for a five-kilometre zone were tabled. Also the size of the small protected strip was discussed. The Committee concluded that a three-kilometre planning zone would be able to meet the objectives and therefore decided to use the HELCOM definition as is was.

The planning zone around the Baltic Sea is now defined in accordance with HELCOM Recommendation 15/1:

- a planning zone of a least three kilometres landwards;
- a generally protected strip outside existing urban areas and existing settlements of at least 100 to 300 metres landwards and seawards from the mean water line.

In addition to planning considerations, the VASAB Committee believes that it would only be possible to achieve the objectives for the future through co-operation and co-ordination.

Moreover, the use of common objectives and definitions by various authorities and institutions wherever, such common objectives and definitions are appropriate would be able to create a synergy effect. The development of the coastal zone will benefit from a more cross-sectorial approach to the solution of spatial and environmental problems.

Comprehensive plans

In order to ensure functional and sustainable development of the coastal zone, activities in the coastal zone should be based on overall national and regional plans determining the overall framework for the use of land. These plans must take overall long-term interests in society into account and must ensure functional cohesion between future development in the coastal zone and the country concerned in general. More detailed plan should be drafted at appropriate levels in order to ensure the participation of local authorities and the general public.

Functional justification

One of the most important principles underlying the recommendations is to keep the coastal zone as unspoiled as possible from such construction and infrastructure that may be expected to jeopardise natural and cultural resources and recreational interests. Planning for new activities concerning urban development, construction, infrastructure, vacation centres and leisure facilities in the coastal zone outside existing urban settlements should therefore be based on a planning-related or functional justification for a coastal location.

A planning-related justification could be the expansion of existing cities or towns, where the location of new urban areas outside the coastal zone is not geographically possible or would be contrary to important planning considerations. Extensions to infrastructure and public service functions in which investments have already been made, and where a stop would result in significant economic losses, are further examples. Finally urban development in smaller islands and archipelagos should be mentioned, in particular such situations where the purpose of insuring the development and survival of local communities outweighs the wish to protect coastal areas.

A functional justification could be installations which require a location close to the coast for various reasons: sea transport, fishing activities, cooling water, wind (e.g. windmills) or waste deposit areas (in order to protect ground water resources further inland from potential contamination).

Keeping open stretches of coast free of construction

A comparison of topographical maps of the Baltic Sea region issued forty years ago and similar recent maps show how the towns have spread along the coasts. The objective is to preserve the open stretches of coast. Urban development must therefore mainly take place inside, close to or behind existing settlements to avoid scarnered development along the coastline.

Green wedges or strips inside cities or between cities located close to one another should be maintained or even established in order to ensure that new urban development will not create a visual barrier along the coast.

Impact assessment

Large constructions, infrastructure projects, land reclamation and other significant permanent changes in the coastal zone should be preceded by either an appropriate regional or local land-use plan or a special regional or local impact assessment covering both visual and environmental aspects.

Windmills

One of the objectives of VASAB is to further the use of renewable and environmentally-friendly sources of energy. Energy produced by windmills is a renewable form of energy that in most countries would be seen as a functional justification for a location close to the coast. When adequate areas with sufficient wind have been designated, it should be ensured that the location is not contrary to existing plans and not detrimental to sensitive nature and bird protection areas. A concentration of windmills in groups or windmill parks may also ensure a more efficient use of individual areas and this keeps areas with a more valuable natural environment and cultural landscape in coastal areas free of such windmills.

Sewage and waste deposit

The designation of areas for the discharge of sewage and for waste deposit is a general problem. The choice of location depends on a number of factors including geography, ground water and the environmental impact on the drinking water. There are significant variations from locality to locality.

The discharge of untreated sewage should be avoided in the coastal zone, and waste deposit areas should only be allowed following approved land-use plans and appropriate regulations such as regional and environmental impact assessment requirements.

Natural values

There are huge areas in the Baltic Sea region which are rich in natural values. Very few have already been turned into nature protection areas but the majority of them are now being used for farming or forestry purposes. Future agricultural reforms and changes in ownership and production patterns, particularly in transition countries, will undoubtedly have an impact on the layout of landscapes. These areas should therefore be incorporated into a green infrastructure in order to create a better concept of the sustainable development of human settlements.

Vacation centres and leisure facilities

Vacation centres and leisure facilities include holiday hotels, camping sites, youth hostels, marinas, golf courses and leisure parks. The location of such facilities must be based on an overall national or regional tourism policy and must comply with local land-use plans. Centres must be incorporated into the landscape in such a way as to ensure that the recreational values and the natural beauty of the coastal zone is preserved and that public access to the coast and coastline is ensured.

Cultural heritage

The historical development of towns and the structure of settlements from medieval to present times are reflected in many towns and rural areas in the Baltic Sea region. This cultural heritage must be preserved. Instead of planning new building areas, the historical settlements must be renewed and reestablished.

Planning procedures

The coastal recommendations conclude with a number of practical guidelines concerning future development, including implementation and monitoring. By adopting these coastal recommendations the ministers recommend that the objectives, the recommendations and the planning procedures concerning spatial planning of the coastal zone should be included in national legislation and policies. The implementation of the recommendations is regarded as a national, regional or local issue subject to the principle of subsidiarity and the division of responsibilities in individual countries.

Assessments

Protection and development

The formulation of the recommendations may convey the impression that more emphasis is placed on protection than on development. This is not the case. On the contrary. The recommendations are not to be used to stop undesired development in the coastal zone but rather to point out and determine what should not be done, the purpose being to ensure positive and sustainable development.

The recommendations are intended to be of use for countries such as Denmark, which needs very restrictive management of the coastal zone, and countries such as the transition countries, which are in the midst of a restructuring and development phase.

Conflicts relating to the use of land

The recommendations may also be used to prevent disputes. Conflicts of interest may easily arise in attractive coastal areas where some parties may want to construct new housing, business facilities or tourist facilities, while others may want to preserve the special natural values in the area concerned.

Coastal planning in urban zones

The majority of the population in the Baltic Sea region lives in cities or small towns.[1] Most of these towns and cities are located in the coastal zone, with the exception of towns and cities in Poland and Germany. Owing to the still high rate of employment in the primary sector in the transition countries (20 per cent), a considerable increase in urbanisation in these countries may be expected.

The population concentration in coastal regions and the expected urbanisation growth in the transition countries will mean increased pressure on towns and cities located close to the coast.

However, the recommendations do not include towns and cities. At present, there is no common interest in the Baltic Sea countries in formulating guidelines for spatial planning in the coastal areas of urban zones.

1 The urbanisation rate varies between 58 per cent in Estonia, 62 per cent in Poland and Finland, 86 per cent in Sweden and 91 per cent in St Petersburg. Oblast (figures from 1992/93, the VASAB 2010 report).

Political opinions

As mentioned in the introduction, the common recommendations for spatial planning in the coastal zone in the Baltic Sea region were tabled at the 4th Conference of Ministers in the Baltic Sea region in Stockholm on 22 October 1996. There was broad political support for the recommendations from all participating countries.

Perspectives

It will most likely take some years before the recommendations have been adapted to and implemented in national and/or regional legislation concerning spatial planning. However, this should not prevent countries from following the recommendations immediately. The ministers thus asked the VASAB Committee to initiate pilot projects concerning various uses of areas in order to gain practical experience in this field.

The financial basis of the VASAB Committee is fairly small.[1] The number of projects that the VASAB Committee will be able to initiate will therefore be limited, as will the scope of the projects initiated.

The European Commission's new Interreg IIC[2] initiative, which is a programme concerning "Transnational co-operation in spatial development", offers new opportunities as an important instrument in this context.

At the Stockholm Conference in October, the ministers emphasised in their declaration that "the European Commission should establish the necessary preconditions to ensure that joint development actions and projects in the Baltic Sea region can be financed both out of funds provided under the Community Initiative Interreg IIC and under the support programmes Phare and Tacis for countries in transition. Only by integrating these two support mechanisms of the European Commission it will be possible to carry out transnational development projects initiated by the member states of the European Union and other countries along the Baltic Sea, designed to promote the spatial cohesion of this region".

However, it is still uncertain whether the European Commission will give the go ahead which would make it possible to match Interreg IIC with Phare and/or Tacis. It will subsequently be up to regional and local authorities to apply for and initiate transnational coastal planning projects.

It will take a few years before there will be any basis for an assessment and evaluation of the importance of the recommendations in relation to sustainable development in the coastal zone. In the meantime the VASAB Committee will, as requested by the ministers, initiate systematic monitoring of the development in the coastal zone and organise exchange of information between the countries concerned.

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1 Annual budget of about DKK 2-2.5 million, which also is to cover costs relating to the secretariat in Gdansk.

2 Sweden, Finland, Germany and Denmark have formulated a common operational programme for the Baltic Sea region that was submitted to the European Commission, DG XVI, in February 1997. The programme was formulated in close collaboration with Norway and the VASAB Committee (the VASAB secretariat has participated in all Interreg IIC meetings as an observer). It is expected that negotiations concerning the programme for the Baltic Sea region will be concluded during the summer, so that the application deadline for the first projects can be fixed in early autumn 1997.

THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

Specific issues concerning the protection of the natural environment in Nordic countries

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Introduction

Diversity in climatic conditions, geology and geomorphology, salt and freshwater regions throughout the Nordic countries led to a very wide range of natural values within biology and landscape. I wish to remind you of the distance from the southern border of Denmark to Spitzbergen, and the distance from Groenland/Iceland in the north – Atlantic Ocean to the deep forests at the eastern border of Finland/Russia. The values of, and responsibility for our part of the globe are overwhelming and beyond any discussion.

Naturally, the very diversified Nordic nature gives each country specific environmental challenges, that have to be solved according to the type of problems and internal procedures. Nevertheless, the Nordic countries have the same conceptual thinking, and in principle, the same approach to the issue. A substantial part of these common guidelines and prescriptions are gathered and described in the report "Protection of Nordic nature" (*Naturvard i Norden-mojligheter och problem*, Tema Nord 1995-501, ISBN 92 9120 8035).

As the Norwegian member of the Nordic group responsible for the report, I had the pleasure to work together with experts from Sweden, Denmark, Finland and Iceland. The report specifies goals, means and methods for the maintenance of biodiversity, for the wise use of natural resources, and for the preservation of landscape qualities in the Nordic countries. Part of what I will be presenting here today is directly referring to the report.

Shift of philosophy – shift of paradigm

In the middle of this century, the need for preservation of natural values was satisfied through the protection of certain areas such as national parks or nature reserves. The efforts concentrated on finding the most untouched, impressive landscapes, areas with key functions for birds and animals and sites with significance for various scientific interests. The results of this immensely important work are outstanding, (and the work is not yet finished). The whole philosophy, as a backbone, was built upon the need for restrictions, regulations and a special status for these areas. But, outside these areas, the business more or less went on as usual. Since then, we have learned that most of the major problems have to be solved outside specific protected areas. This applies not only when we deal with pollution and related topics, but also when it comes to the maintenance of biodiversity, the management of water resources and outdoor recreation areas and the wise use of natural resources.

With the Brundland report "Our common future" and the results of the Rio Conference, with the

Convention on biodiversity, and the Agenda 21, we notice a shift in basic politics. In general, the maintaining and securing of biodiversity is not easily solved within narrow boundaries. Compared to the situation some years ago, the human aspect of nature management is more clearly understood today – at least intellectually. This regards both man as an agent in nature, and man's dependence upon nature.

The shift in worldwide philosophy is also reflected in the Nordic report just mentioned. Some of the common conclusions are listed below as keywords and needs, with the aim of safeguarding the biological and landscape heritage.

– development of sector responsibility;

– development of an adapted physical planning and EIA as an effective instrument;

– use of IT in the development of integrated information systems, as a basis for decisions;

– local involvement and participation;

– the principle of subsidiarity.

These statements or keywords are central in the field of nature management in all Nordic countries.

Trends and threats

In spite of the differences in natural conditions in the Nordic countries, they are in principle facing the same type of threats. One could easily characterise threats as critical areas. But critical areas could just as well mean methods, means of control, etc. The Nordic report discusses human activity on arable and forest land, the coastal areas, freshwater management and protection, and the need for safeguarding wilderness-like areas both for the sake of wild reindeers, big carnivores, reindeer husbandry, etc., and because of our duty to hand over unspoiled areas – a sort of specific Nordic natural heritage – to our children. The need for international co-operation in the field of natural management and protection is expressed and underlined.

Under the umbrella of the Nordic Council, there is a number of on-going projects on nature management. The list of projects also reflects some of the critical areas in land use, and the need for land-use planning and politics. Three of the seventeen on-going working groups elaborate on separate items and problems in the coastal zone, four of the groups concentrate on different aspects of biodiversity.

In geographical terms, I would like to stress the following issues as common critical areas:

– steadily declining wilderness-like areas;
– growing pressure on the coastline and coastal areas;
– change in land-use pattern in agriculture and forestry, affecting biodiversity and landscape values in the countryside;
– pressure on watercourses and rivers.

Going more into details, I take the liberty of presenting examples from Norway. The situation described would be relevant to a greater or lesser degree also to the other Nordic countries.

Areas of undisturbed countryside

In a European context, Norway stands out as a country with vast areas of undisturbed countryside – upland plateaus, mountainous areas and forests. These are essential for maintaining a rich flora and fauna, and are extremely important for outdoor recreation and tourism. They are therefore also an important resource for the business sector and employment.

Until recently Norway lacked well-documented country overviews on what is left of large undisturbed areas of open countryside. In 1992 the Global Resource Information Database (GRJD Centre) in Arendal presented figures showing that the proportion of the country that may be characterised as development-free is decreasing rapidly.

Technological advances and the ever-increasing exploitation of natural resources has led to a gradual reduction in the areas of unspoilt Nature in Norway, especially in the last twnty to thirty years. Working methods have changed and new areas of open countryside are increasingly being taken into use for a variety of societal purposes. This leads to development which little by little "eat up" and fragment areas of undisturbed countryside. Development related to road building, hydroelectric schemes, power-line corridors, industrial and other commercial projects and housing is responsible for the greatest pressures on undisturbed countryside.

Countrywide overview – areas in Norway with a wilderness-like character in 1900, 1940 and 1994

Areas with a wilderness-like character in 1990, 1940 and as of 1 January 1994. They are located more than five kilometres from a major technical development and in 1994 constituted 12 per cent of the country compared with 48 per cent in 1900 and 34 per cent in 1940 (Svalbard and Jan Mayen are not included).
This work was also the starting point for a project, going on right now, on the development of a monitoring programme for this type of areas in Norway. In the second part of the paper, this project will be presented.

Coastal areas

The Nordic countries have different types of legislation for shore protection. In Norway, the first regulation was implemented in 1967, with a general prohibition on buildings and development in a 100-metres zone along the coastline. Since then, there has been a ban on development in the 100-metres zone. In spite of a general political will at central level in favour of such regulations, exploitation of the shoreline has continued until now. One of the obvious reasons is exemption made by the local authorities. In addition to the lack of overview, lack of monitoring in time series, and the lack of aggregated information, this has lead to a piecemeal-approach, where the "small decisions" in reality have developed into a huge scale fragmentation of coastal nature as the years went on.

Naturally, the problems appear along the coasts with the highest density of population, and are more expressed within the southern parts of the Nordic area.

River deltas and estuaries make a special type of shoreline, extremely valuable for biodiversity, with brackish water and often combined with interesting geomorphology. In Norway, the river deltas with neighbouring areas have been "chased" as development areas for industry, building of roads, development of harbours, cultivation of land, etc. In the southern part of Norway, the ecosystems of estuaries and river deltas are severely damaged and reduced in number to a fraction compared with the natural basis.

Sea farming is perhaps, besides oil production, the most rapidly growing industry in Norway. In spite of a very long and diverse shoreline, Norway is experiencing a strong competition between sea farming interests and more traditional uses of sea areas close to the shoreline. Conflicts arise, not only regarding protection of biodiversity, but also recreational interests, local fishermen's interests, local traffic at sea, etc. Today, sea farming is the most prosperous and productive industry in Norway. The discussions reflect that fact, as do many of the results.

Forest and cultural landscape values

Two major and opposite trends are affecting agriculture and landscape throughout Europe; the marginalisation of arable land, and the intensification of food production. In the Nordic countries, Finland, Sweden and Norway, forest production – both the primary, and especially the secondary production – have been industrialised. The following drawing illustrates the development of the situation.

The reduction of natural grasslands and half-open woodlands has severely influenced the landscape and the biodiversity, especially since the mid 1900s. After the year 2000 the gaps between cultivated land and woodland may become even more pronounced and uniform (The Nordic Council 1995).

On the one side, it would not be possible, nor desirable, to “freeze” land use in agriculture or forestry; there must be room for changes in the relationship between human activity and nature as has always been throughout history. On the other side, the trends point in the direction of “loss of biodiversity”, which, of course, is alarming. At the same time, there is no other sector where the necessity of active and well-developed sector responsibility is more essential. The situation calls upon an enhanced co-operation between environmental and agricultural forestry authorities.

It is not my intention to go into details, because this is an enormous field of technical and political possibilities and obstacles. But just for “fun”, seventy-eight of 135 described pasture-dependent fungi in Norway are found on the Norwegian “Red list”!

Rivers and watercourses

Protection and sustainable use of rivers and watercourses is one of the issues for Nordic working groups in 1997-1998. The Nordic countries – and Europe as well – ask for more energy, with a preference for “clean” energy. The prices rise, and so does the pressure on hydroelectric energy developments all over the Nordic countries. In Norway, 340 rivers or parts of watercourses are protected against energy developments. Besides that, Norway has a sophisticated planning system at national level, where non-protected rivers are listed and characterised due to degree of conflicts, economic potential, etc. The pressure from the energy market leads to more ambiguous development plans in already exploited watercourses and a growing appetite on expansion over to virgin rivers.

Energy production leads to loss of biodiversity as well as landscape-consuming technical developments. In Norway, we had the most peculiar situation when recently road building along rivers has had just as severe an impact as the energy producers. At central level, the problems caused by road-development are understood. At district level, however, the old culture of engineering is very much alive.

As this is a colloquy mainly on land use, I will just mention that acid rain has been a constant threat to the biodiversity of Nordic rivers and lakes during the recent decades, and still is. But, for the sake of justice, the very last years we have seen a light in the tunnel, with a significant decline in the acid pressure. This is an evidence of environmental effects across borders, as well results of international understanding and co-operation.

Monitoring land use

In all continents, countries are creating IT systems for monitoring nature. Satellite-photos and digital mapping offer other new opportunities. In Europe, EEA has developed the Corine landcover programme. This opportunity for keeping an account of specific thematic values or characteristics attached to geographical areas made the decisions of many environmentalists and planners come true.

The task of protecting and safeguarding natural values has been characterised by an endless row of big and small battles. In most cases, natural values were doomed to lose. These battles have also been characterised by the "piece-meal syndrome". Technical and economic development is measured against an area-limited value of nature, isolated in time, function and segregated from aggregated effects of comparable damage from corresponding developments. That way, nature has been torn into pieces.

Use of documentation systems in Norway

In a report, dated March 1997, the Ministry of Environment and thereby the Government of Norway invites the Parliament to approve a broad-scale national effort on the development of a documentation system for geographical areas in Norway. The report launches a comprehensive GIS-based programme, to create a basis for decision-makers at local as well as regional and central levels. One of the visible effects and advantages of an integrated documentation system is that national and regional interests, according to policies and aims, could be far more specific and clarified. In a planning situation, national policies could even be more predictable.

The government has made it clear that the task should be accomplished taking into account the following principles:

1. the need for management-supportive information for all levels should be focused;

2. existing information should be utilised as fully as possible;

3. information should be made accessible to potential users as soon as it is at hand;

4. the information gathered should be adaptable for many purposes. Of prime importance to physical planning is digital information for GIS, and the possibility for thematic maps and statistical overviews;

5. the development of new data systems – and the improvement of existing ones – should build upon the principle of user needs and access, and should consequently be open for dispersal and aggregation of information.

From a technical point of view, I am tempted to add some more specific principles based on recent years experiences:

1. the scale and accuracy should be suitable for local planning;

2. standardising and plotting of information should be thematic;

3. information should be held in an "objective" form within each theme;

4. the objectivity and credibility of thematic maps on values of nature should be a main goal;

5. information should be available not only for the administrative and political system, but also for the sectors at all levels, as well as for the public;

6. the system and standardising should be suitable for overlay of thematic maps and for the production of time series.

Monitoring of areas of undisturbed countryside

In Norway, monitoring of coastal areas, river deltas, key areas for biodiversity, landscape values, etc., are on-going projects. As an example one of the projects on monitoring areas of undisturbed countryside is briefly presented at the end of this paper.

One of the responsibilities of the Directorate for Nature Management (DN) is to provide other authorities and the general public with advice and information. The DN believes that it is important to provide documentation and to map the impact of technical developments on the undisturbed areas of countryside in Norway. As part of our programme for the Nature Conservation Year in 1995, a synopsis was presented of undisturbed areas of open countryside in Norway as of 1 January 1994, arranged according to counties and municipalities. The objective of this project was to improve the decision-making basis for local, regional and national authorities when managing resources and land use, and considering individual cases.

Subsidiary objectives

– the sectors will be held responsible for developments which they undertake;

– the development statistics may be used in connection with the environmental audit of the sectors;

– the project is intended to provide local authorities and other planning bodies with more knowledge about the impact of developments within, or close to, undisturbed countryside areas so that such areas may be protected from development at the planning stage, when decisions are being taken and when measures are being implemented;

– development-free areas of open countryside (outside protected areas) will be more easily safeguarded in connection with the preservation of rare and vulnerable species and types of natural environment;

– the project is intended to provide better information about, and knowledge of, outdoor recreation areas of a certain minimum size situated near towns and other built-up areas;

– the overviews and audits will form part of the basis for drawing up a national environment conservation policy.

Definitions

Development-free areas of open countryside: all areas situated more than one kilometre from major technical developments.

Development-free areas of open countryside are divided into zones based on their distance from the nearest development.

Areas close to developments: one kilometre from major technical developments.
Development-free zone 2: one to three kilometres from major technical developments.
Development-free zone 1: three to five kilometres from major technical developments.
Wilderness-like areas: five kilometres from major technical developments.

Major technical developments

The following constructions, installations and disturbances are, for this purpose, defined as major technical developments:

- all public roads (Euroroads, classified national, county and municipal roads, except tunnels);
- all railway lines, except tunnels;
- all forestry roads, construction-site roads and roads leading to summer dairy farms that are more than fifty metres long, have a supportive subgrade layer and are perhaps surfaced;
- all tractor tracks built with public subsidy and corresponding tracks belonging to the Directorate for state forests and land;
- old tracks that have been improved to be used by tractors and off-road vehicles;
- power lines carrying a voltage of more than 22 kv;
- reservoirs (i.e. the whole water body at the maximum regulated water level), power stations, penstocks, onduits, channels and dams, and lakes tapped via tunnels without being dammed;
- regulated rivers and steams including those tapped via a tunnel;
- channels, embarkments associated with rivers and lakes.

Recent investigations show that most of the country has been affected by one kind of development or another. One of the greatest threats to safeguarding biological diversity is the increasing fragmentation of previously undisturbed areas of countryside.

As of 1 January 1994, only about five percent (10 800 sq. km) of southern Norway was situated more than five kilometres from a major form of technical developments. Of the total area of Norway (excluding Svalbard and Jan Mayen), only about 12 per cent (38 500 sq. km) can be regarded as having a wilderness character. In 1990, the figure was 48 per cent, or about 155 500 sq. km. The largest remaining areas of countryside with a wilderness character are patches left in mountainous tracts and upland plateau areas, or in the north of the country. As many as 271 municipalities (60 per cent) in Norway have under one sq. km of land that has a wilderness character.

Synopsis of the remaining development-free areas of countryside in Norway, broken down according to counties as of 1 January 1994

Future tasks

The DN intends to revise this cartographical material every four years. In the course of 1997, data will also be obtained concerning major technical developments undertaken in the period 1988-1994. The next revision will be in 1998. This will provide time series that will be vital for being able to follow the trends. It will also become clear which sectors are responsible for the reduction of development-free areas. These statistics will be extremely important in the years ahead, when developments and disturbances of various kinds will be assessed.

THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

Protection of water resources

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1. Area of concern

Northern Europe, as defined for this report, includes the Nordic countries (Finland, Denmark, Norway, Sweden), the Baltic countries (Estonia, Latvia, Lithuania), northern Germany, Poland and the western part of Russia (Karelia, Kola Peninsula, St Petersburg, Leningrad region and Kaliningrad region).

Nature in this area varies a lot from south to north, and the area is not one homogenous and harmonious unit. There is, however, one shared feature: the Baltic Sea, the largest semi-enclosed brackish water body in the world. All activities in its large catchment area have an effect on it. Over 100 million people live in the area, but the population density is low in the northern part. Many of the countries are quite heavily industrialised and carry out, more or less, intensive agriculture and forestry in large areas.

The region and its water resources have some special features, which are:

– large water systems with many lakes and small rivers, and numerous islands in the northern part of the area;

– a large archipelago with thousands of islands between Finland and Sweden;

– largest lakes of Europe are situated in this area (Ladoga, Onega, Saimaa, Vännern);

– some big rivers with large catchment areas in the southern and eastern part (Neva, Vistula, Odra, Nemunas, Daugava, Narva);

– most lakes and rivers, as well as the Baltic Sea, are partly ice-covered each year;

– frost in the soil layer has a great impact on water infiltration and surface run off, seasonal variations are great due to snow melting in the springtime;

– rising coastal areas in the northern Baltic Sea zone still create new habitats, glo-lakes are unique from the global point of view; and

– high sensitivity to acid precipitation because of the type of soil.

2. Use and quality of water resources

2.1. Main uses of water

The amount and availability of water resources in Europe is highest in the Nordic countries: six to eight times more than in eastern, southern and western Europe (in Norway 100 000 m^3 per year, Finland and Sweden over 20 000 m^3 per year, Poland 2 500 m^3 per year, Germany 1 100 m^3 per year). Water bodies, rivers, lakes and shores are used for many purposes, such as fishing, recreation, power production and as recipients of waste water. Surface water is the main source for water supply in most countries, only Denmark and Lithuania are mostly using ground water, as well as Finland and Latvia uses both surface and ground water. Many watercourses are used for traffic and transport, and there are plans to develop inland waterways in Germany, in Poland, in Finland and in Russia. Improvement of the Warta, Odra and Wista waterways, which are part of an international transit route network from Germany to Kaliningrad and Belarus, is also planned. There are also plans to develop water connection between White Sea and Baltic Sea. Water bodies and shorelines are partly privately owned in the Nordic countries and so is water power in Finland. This is important for the sustainable use and management of watercourses and shorelines, especially in relation to building on shores and to nature protection.

2.2. Aquatic environment

In the boreal region of northern Europe, rivers and lakes are environmentally in relatively good condition. But many of the most important rivers in the area are regulated and also polluted. In the Nordic countries, harnessing of new water power is prohibited in watercourses that are still in a natural state. Some unique and endemic species live in the area, such as salmon and land-locked freshwater seals, only a few hundred in Lake Ladoga (Karelia, Russia) and in Lake Saimaa (Finland) and a ringed seal in the Baltic Sea. Some species have special importance for the local people and their culture, such as salmon in Lapland. Essential for the natural reproduction of the Atlantic and Baltic salmon are Tenojoki River and Tormionjoki River.

Wetlands are the only major ecosystems that have an international treaty, the Ramsar Convention from 1971. The need to protect wetlands and the wise use of them were also discussed at the Rio Conference in 1992. Natural mires are among the least disturbed ecosystems and the Nordic countries have protection programmes for them. In north Poland there are huge undisturbed wetlands. However, marshes, fens, mires, bogs or shallow water bodies are among the most threatened habitat types in all of Europe, and so are they also in some regions here.
Aquatic environments are threatened by:

– water constructions, cultivation, building activities, dredging and fillings;

– drainage, land reclamation and peat extraction, clear-cutting of forest areas;

– water pollution, eutrophication (agriculture, fish farming, point source);

– waste disposal sites, contaminate and industry areas, petrol stations.

Acidification, largely caused by long-range transport of emissions, has become a serious problem. The Femnoscandian shield offers less protection against air pollution than the sedimentary rocks in central and western Europe. Fish mortality has been observed in rivers and lakes; in southern Norway 1 750 lakes are completely devoid of fish, 900 lakes are seriously affected and the Atlantic salmon is extinct in twenty-five rivers because of acidification. In Sweden, damage has occurred in 2 500 lakes. Mysterious disease M-74 damages fish stock in the Baltic Sea.

Burning of oil share in Estonia, and nickel mines and smelters in the Kola region have caused damage to large areas. Nuclear power plants, particularly at Ignalina, Kola and Sosnovyi Bor, as well as the military sites of the former Soviet Union pose threat to aquatic environment.

Water and ice also cause damage to human habitats and structures. Heavy floods have destroyed shores and even villages in Norway, and floods occur regularly on the west coast of Finland, in the Baltic countries and in the St Petersburg area.

2.3. Water quality

Reductions in point source pollution have been achieved in the western and northern parts of the region. However, eutrophication and acidification of water bodies still occur. High levels of nitrogen are found in rivers in Germany, and in the streams and lakes in Denmark. Phosphorus levels in the region are lowest in the Nordic countries, whereas in Latvia, Lithuania and Poland many rivers have high phosphorus levels. The primary source of eutrophication is agriculture, but discharges from fish farming and other forms of aquaculture also contribute to the eutrophication of water bodies. In Germany and Poland, one of the main problems is the pollution from toxic, slowly degradable organic substances and heavy metals. Point source nutrients present another problem. In central and eastern Europe, one third of the municipal waste water is still without any treatment. Municipalities in western Russia also lack adequate waste water treatment, which has caused pollution, for example, in Lake Ladoga and the minor lakes and rivers running into it.

Poor-quality drinking water causes human health problems in some regions. The river Narva, Lake Kohtla and Lake Peipsijarv/Chuedskoe have been threatened in the past by accidents in the oil shale mines and other industries. Pollutants have affected drinking water for the town of Narva. Oil spills into the river Nevezis in Lithuania occur about twice a year. Low quality of drinking water is a problem in Latvia. A large research project on the river Nemunas has shown poor water quality and usability problems. Hazardous situations in the river Daugava have occurred and may occur again. Early warning systems are needed, especially for the measurement of cyanide. Radon gas causes danger for water supply in western Russia. The natural gas pipeline from Russia to central Europe could cause problems to water resources.

Major threats to surface water, as well to ground water, are caused by:

– use of manure and other fertilisers leading to nitrate leaching;

– untreated domestic and industrial waste water (in east and south part of the area);

– emissions from industrial plants, power stations, transport and domestic heating;

– accidental spills of harmful substances (transport, specially toxic substances, oil);

– mutagenic problems with surface water because of humus and use of chloration (in the former Soviet Union);

– lowered ground water levels (caused e.g. by oil shale mining), and

– consumption of ground water for secondary purposes, such as irrigation and washing (in regions with poor ground water resources).

2.4. Medium-term developments

HELCOM (Helsinki Commission – Baltic Marine Environment Protection Commission) has a large programme, the Baltic Sea Joint Comprehensive Environmental Action Programme. The Joint Action Programme (JCP) has identified 132 (now 119) "hot spots". In most cases, the problems are related to municipal and industrial waste waters and lack of treatment. The implementation of the action programme requires a high level of commitment and will need substantial help from the western participants for the central and eastern European countries. Multiple problem areas are St Petersburg, Kohtla-Narva, Riga, Kaliningrad, Warsaw, Krakow and Katowice. Special attention should be given to water supply and to the treatment of waste waters in the Kaliningrad, St Petersburg and Pskov areas, as well as in the Oder and Vistula river basins.

HELCOM has also a programme for the development of management plans for coastal lagoons and wetlands (MLW). In the first phase, plans will be implemented in the Matsalu Bay in Estonia, the Gulf of Riga between Estonia and Latvia, the Kursiu Lagoon between Lithuania and Kaliningrad, the Vistula Lagoon between Kaliningrad and Poland and the Oder Lagoon between Poland and Germany.

UNEP has a pan-European strategy for coastal and marine ecosystems that includes selecting core areas, descriptions of the ecosystems, selection of specific sites, and development of guidelines. The working group of the Nordic Council of Ministers is also preparing recommendations concerning threatened and representative coastal biotopes along the Baltic Sea.

The European Union is promoting the concept of wise use and conservation of wetlands and for river ecosystems and wetlands. Countries should increase awareness of traditionally managed riverine landscapes; conserve the very few major natural and semi-natural rivers (e.g. remaining wild rivers in the Nordic region); promote species reintroduction and habitat restoration; initiate awareness campaigns; create guidelines for the restoration and rehabilitation; ensure that conservation objectives are incorporated into policies affecting wetlands; establish conservation action plans for threatened wetlands for example, boreal raised bogs (Aapa, Palsa) in the Baltic and Nordic regions; and assess the conservation importance of peat bogs.

The European Union also has a directive for habitats, but it needs to be expanded to boreal freshwater and coastal habitats. Freshwater habitats to be added are large oligotrophic or oligomesotrophic lakes and natural or near natural river systems. Coastal habitats would be esker islands, undisturbed islets and small islands, coastal meadows, sand beaches with perennial vegetation and long narrow inlets. Such species as the ringed seal and the black guillemot should be added.

3. Research, monitoring and data systems

3.1. Current situation

Environmental research and monitoring are highly developed in the Nordic countries and in Germany, and are still more intensive than in Estonia, Latvia, Lithuania, Poland and Russia. All of these countries have a mutual interest to the monitoring of the Baltic Sea and the watercourses discharging into it. The HELCOM project “Pollution load compilation” has been carried out since 1985 for the monitoring of inputs into the Baltic Sea from land-based sources. The Finnish Environment Institute operates as the Helsinki Commission's data centre. An environmental data network was set up in 1991 for co-operation among the Murmansk region, the Republic of Karelia, St Petersburg and Leningrad regions, Estonia and Finland.

There are different freshwater monitoring programmes vary in the different countries. All countries have their own national or regional networks, as well as international networks such as the European Union River Network, UNECE/LRTAP/ICP Waters and ICP integrated monitoring. Many countries have a long research tradition of water resources assessment including the influence of human activity on the quantity and quality of freshwater resources. SALMON (Satellite Remote Sensing for Lake Monitoring) is a new European Union pilot project for the evaluation of European lake water quality.

In the Baltic countries, new surface water quality monitoring programmes are in place. Previously, the monitoring system was not complete and it is difficult to assess the long-term trends in water quality. The national reference laboratories in Estonia, Latvia and Lithuania, and Poland too, are currently working towards improving the quality of the data.

3.2. Medium-term development

A co-operation research project Shallow Lake Eco-Hydrodynamics is on-going between eight countries (Finland, Hungary, Austria, Slovakia, Germany, Sweden, Lithuania and Estonia). The aim of the project is to give guidance for lake management.

Ground waters are important for ecological functions. However, there is no systematic inventory of human-induced, lowered ground water levels and other changes in ground water systems. Karelia has began a large project with help of Finland to investigate ground waters. Systematic monitoring of ground water is needed in all countries.

Climatic change may have the following effects on water resources in northern Europe; considerably warmer winters (in Karelia winters will be still colder), an increase in annual precipitation, smaller spring floods, increased flooding in winter, shorter periods of ice cover and higher summer temperatures in lakes, and enhanced leaching of nutrients in winter. One of the main priorities for research is to develop hydrological models that can be linked to both climatological models and land-use databases. Models should be able to predict the effects of climatic change both in spatial and temporal dimensions. They should also describe changes in both water quantity and quality.

The efficient use of data requires it to be stored so that different users, with different purposes, can access the data easily, for example, GIS data banks. To ensure that data collected by multiple organisations in separate countries would be comparable in future, strict standardisation and co-operation is needed.

More objective and reliable information by means of a sound monitoring system is needed for improvement of environmental policy. Information should be provided to the public through, for example, popular and semi-scientific publications and booklets, seminars and exhibitions.

4. Transboundary waters

4.1. International co-operation

In northern Europe many watercourses are divided between two or even four countries. Poland has twenty-four transboundary rivers, and between Finland and Russia there are tens of frontier lakes and rivers. Many transboundary water bodies are used for fishery and for agricultural and industrial purposes. Power generation and water traffic are important activities on several rivers. Transboundary aquifers, rivers and lakes are especially important for water supply in the Baltic countries. Northern watercourses are also necessary for aquatic wildlife and recreation.

There are joint commissions between countries for the management of water, each with a different role. Many different co-operative organisations are acting in the region. Water projects are usually implemented with co-financing. Most funding comes from funds such as EBRD, EUCC, European Union LIFE, European Union Phare, NEFCO, NIB, the World Bank, WWF, SIDA and Finland, France, Denmark, Germany, the Netherlands, Sweden and from national funds. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes is a relevant agreement for shared resources.

Examples of joint transboundary management are the Multiple use and protection plans for the River Teno, and for other shared watercourses, carried out by Finland and Norway. The trilateral co-operation (Finland, Norway, and Russia) has also been successful.

4.2. Medium-term development

There are many different problems in managing watersheds shared by two or more countries. The existing commissions do not have the resources or capability to solve the problems alone. There are areas where more actions are needed.

Close co-operation is needed especially in cases where the major catchment areas of water systems are divided by two or more countries. The same applies to lakes and coastal wetlands, across state borders. Joint action programmes, as recommended in the 1996 Visby Summit, should be developed for the following water systems: the Lake Peipsijarv/Chuedsboe-Pskov (on the Estonian-Russian border), the river Nemunas/Kursiu Lagoon system (between Lithuania, Belarus and Kaliningrad region), the river Daugava (Latvia, Belarus and Russia) the rivers Venta, Lielupe, Odra an the Neva-Ladoga-Volchov river and lake system.

The on-going Gulf of Riga Project is an example of co-operation among states, marine research stations, universities and scholars. The aim is to study environmental problems in the Gulf of Riga and its drainage area, and to determine the impacts of these problems. Union of Baltic Cities (UBS) is beginning a large co-operation between municipalities and local groups round Baltic south-east coast area.

There has been co-operation for over thirty years between Finland and the Soviet Union concerning pollution and protection of the Gulf of Finland, and this co-operation is still continuing with Estonia and Russia. Joint research results have shown that the state of the Gulf is alarming, e.g. toxic algal blooms and the oxygen depletion areas have increased.

The Ministers of the Environment in the region have agreed to prepare a joint Agenda 21 for the Baltic Sea region. The principle part of the Baltic 21 programme is sector-related integration. The priority sectors are agriculture, energy, fishery, forestry, industry, tourism and transportation. This work needs to be integrated into other international and regional programmes.

5. Integrated water resources development

5.1. Need for comprehensive view

Freshwater bodies are finite and vulnerable resources and should be used carefully. The effects of different uses of water on the aquatic environment should be better understood and included in water use planning and decision-making processes. There is a need for integration of sectoral water plans as well.

The action water project in Norway involved broad co-operation among industry and other groups. Multiple use plans of water management are made for several watercourses under this project. The nature management projects in Denmark included the aquatic environment and plans were made in close co-operation with the local people, authorities and trade groups. The integrated water development process was a comprehensive scheme for water resources, covering the whole of Finland in the 1970s and 1980s. Plans included all use of water resources and need for protection, and were made in co-operation with many groups. Plans for important watercourses have been made too, and implementation of some European Union programmes is now based on river catchment areas.

Poland has established seven water management regions corresponding to major catchment areas: Gdansk, Krakov, Katovice, Warsaw (Vistula catchment area), Poznan, Szczecin and Wroclaw (Oder catchment area). In Lithuania, use and protection schemes for water resources have been prepared for twenty-four river basins comprising the whole country. The catchment management plans made for 163 areas in England and Wales, and Canada's Comprehensive basin management strategies (CBMS) are also similar examples.

5.2. Medium-term development

Already in 1977 the UN Water Conference in Mar del Plata took note of the need for integrated water management, and the United Nations Economic Commission for Europe (ECE) gave in 1990 recommendations concerning optimal water management of small catchments. The 1992 UN Environment Conference in Rio also took note of water management and protection problems. The need for protection and careful use of water resources is one of the principles of Agenda 21.

The new European Community water policy (communication adopted in February 1996) aims at more effective integrated water management and protection as well as increased co-operation between member states. The European Commission adopted in 1996 an action programme for the integrated protection and management of ground water. Four main areas which member states should take account of are interaction between surface water and ground water, establishing a freshwater conservation policy, developing codes for good practice in agriculture and monitoring point source pollution.

The European Commission has prepared a proposal for a new framework directive on water resources (Draft of 14 Feburary, 1997). The proposed directive will require co-ordination of water protection

measures within river basins possibly by means of River basin management plans, which cover all significant activities affecting inland and coastal waters as well as ground waters. Integrated management of water resources is important, especially where many interests and needs are similar. The need for new arrangements varies among countries depending on the administration and on the traditions in water planning.

6. Co-ordination with physical planning

6.1. Need for co-ordination

The importance of land-use planning for water protection and management has been recognised in all Nordic countries. Different types of restrictions on land use to protect both ground water and surface water resources have been imposed in all countries, but conflicts between the existing land use and sustainable water management continue to occur.

Water resources and coastal areas have been an important issue in physical planning in Sweden at national level. It was also recommended in Sweden to prepare a special overview of water resources for spatial planning at municipal level. In Denmark, the regional plans include land use of coastal areas, aquatic environment, areas protected because of drinking water and targets for water quality. Ground waters to be protected are identified in physical plans at regional and municipal level in Finland. There are also projects for evaluating how land-use management can support water pollution control. In Lithuania there is a statutory integrated territorial planning system, which includes a requirement to use geological data.

Apart from the immediate impact, land-use patterns indirectly play a very significant role in the quality and usability of water resources. The sources of atmospheric pollution, which cause acidification of the water resources especially in the Nordic countries, are mostly heavy industry and urban areas of western and central Europe. One serious challenge is rapidly rising use of private cars.

6.2. Medium-term development

VASAB 2010 is a co-operation process between the Baltic Sea countries and regions in the field of spatial planning. The report “Vision and strategies around the Baltic Sea 2010 – towards a framework for spatial development in the Baltic Sea region”, was produced in 1994. Coastlines, islands and wetlands are identified among areas with specific problems and potentials. Hot spots as identified by HELCOM, as well as recommendations concerning protection and planning of the coastal strip are noted in the report. In the vision existing and projected inland waterways are presented as “Effective and sustainable links”. One of the four goals is planning in the coastal zones with a balance between development and protection. Protected areas, wetlands and coastal planning areas are shown in the vision. The impact on the aquatic environment and the need for protection of water resources should be taken into account when implementing actions of the vision.

For spatial planning in the coastal zone, ministers responsible for spatial planning and development in the Baltic Sea region gave recommendations in Stockholm in October 1996. Actions in the coastal zone should promote sustainable development and ensure living conditions for the residents, and secure a balance for the coastline, the biological diversity and the cultural heritage. Such planning should cover lakeshores as well.

The European Union has an operational programme for sustainable spatial planning, Interreg IIC for the Baltic Sea region for 1997-1999. The main priorities and measures are balanced settlement structure, communications and energy links, integrated management of coastal zones and islands, tourism and

sustainable development in other specific or sensitive areas. It is important that water protection is taken into account in implementing the programme.

7. Other means and measures

7.1. Legislation, public awareness

Legislation concerning water use and protection has been in force for a long time in the Nordic countries, and there have been good institutional conditions for sustainable management of waters. Denmark had some legislation on water already in the 1600s, and, at the beginning of the nineteenth century, laws concerning pollution and health. Legislation on water existed in the 1800s in Sweden and Finland; the existing laws concerning pollution and environmental protection came in the 1960s. The Baltic countries are now developing legislation and putting it into practise. The countries of central and eastern Europe are at different stages of legislative development. Russia is developing a law for Lake Ladoga Basin and there exists also general law about water.

The implementation of recommended actions will require political commitment and public support. This is important as the major part of financing will in future be domestic, and from the public through user charges or, indirectly, through increased costs. Taxation can be applied so that the users of the environment are responsible for the ecological costs.

Increasing the responsibilities of local governments is important. Involving private institutions, industries and non-governmental organisations to increase co-operation is necessary. People living within the area need to become more aware of environmental values and problems, the threats concerning water resources, and how they can support sustainable water management. Implementing educational programmes on new farming practices is critical. A major public education challenge is the issue of nitrate contamination in ground water.

7.2. Medium-term development

In some countries specialists have developed public advice concerning the reduction of nonpoint source pollution of water bodies from agriculture. Voluntarily made embankments along rivers have proved to be successful. In Germany, local people have founded associations (*Bachpatenschaft*) to maintain small water bodies with the help of authorities. Ponds and wetlands are created by landowners in Denmark, Finland and Sweden.

Estonia is preparing a state curriculum that will integrate the environment into school grades one to twelve. Lithuania has developed a national ecological education programme. Poland has created a national centre of ecological education and is developing a network of seventeen regional education centres. In Finland, there is a national and thirteen regional environmental centres, with education as one task. The HELCOM group on public awareness and environmental education has thirteen possible projects such as environmental journalist training, information centres in the Baltic countries and training for governmental and local administrators and politicians. The participation of non-governmental organisations has increased in all countries. NGOs are important catalysts for many projects, so administrations should support them.

There have been problems of access to information in central and eastern European countries but the situation is getting better. Improved transmission of data is still needed. The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo 1991) is a good starting point. One problem has been that in many countries only professionals and scientists can participate. The EU's Directive on Environmental Impact Assessment should thus be strengthened to ensure public participation early in the process. EIA should be further developed concerning all planning of important water resources and it should be used on all levels, national, regional and local. It should also be better connected to permitting procedure.

8. Main action needed for the water sector in northern Europe

Water resources should be taken into account at all levels and in all development of human settlements, industry and other activities, energy production and use, forestry and agriculture. This requires adequate knowledge, political commitment and public awareness of water resources.

The most important event concerning both the Baltic Sea and the freshwater resources in its catchment area is the implementation of the Baltic Sea Joint Comprehensive Environmental Action Programme of HELCOM. This joint action programme aims to:

– establish requisite legal and institutional infrastructures in all countries;

– further reduce point and nonpoint source pollution, specially 110 hot spots;

– improve water supply and sewage treatment in small towns and rural areas;

– reduce pollution from agriculture, rural settlements and transport;

– protect and restore coastal wetlands; and

– take care of planning and protection of coastal zones.

8.1. Sustainable management of water resources also requires the following:

Protecting ground water

– inventories of ground water resources should be made in all countries;

– zones to protect important aquifers against pollution and risks, especially from agriculture, industry, traffic and settlements, should be established; and

– wiser use of drinking-quality water and development of water saving systems (e.g. compost toilets) should be promoted.

Protecting aquatic ecosystems

Acidification of waters is a serious problem in many areas. Acidifying emissions should be further reduced. Other important issues are:

– natural water bodies and wetlands should be preserved, for example by creating a coherent network of valuable sites (AQUA 2000);
– heavily polluted aquatic environments should be rehabilitated;

– need for restoration of water bodies should be evaluated and restoration should be improved in an ecological way;

– local projects for restoration of aquatic environments should be promoted; and

– new technology for reusing waste water, for example infiltration of gray water, and construction of ponds and wetlands should be promoted.

Reduction of pollution from diffuse sources

Special efforts will be required concerning diffuse sources, which are more difficult to control. In rural areas, as well as in villages, public education has an important role. It is essential that:

– best environmental practice in agriculture and forestry will be applied;

– protection zones and strips will be established along watercourses.

Monitoring and applied research

– national hydrological and limmological networks as well as monitoring of waste water loading should be reviewed to guarantee harmonised data production in all countries concerned; and

– more reliable and comparable data on the causalities between harmful loading and stressing activities and the state and the usability of water resources is needed, same concerns land use. The same is needed for land use.

Data transparency and public awareness

– harmonisation and transmission of data should be developed;

– access to environmental information and data transmission should be guaranteed in all countries;

– education and training concerning the importance of water resources and need of protection should be further promoted; and

– citizen activities should be encouraged and work of NGOs should get all possible support.

Integrated water management

– integrated planning for use and protection of water resources should be applied to catchment areas and carried over into planning;

– mutual cross-country co-operation should be further developed in cases, where catchment areas, lakes or coastal lagoons are divided between countries;

– co-ordinated plans for coastal areas should be drawn up, including protection of the coastal waters.

Water resources and spatial planning

Spatial planning is an important tool for sustainable water management. Comprehensive spatial planning that integrates protection and use of water resources with land-use planning will be needed at all levels – international, national, regional and local. Close co-operation among HELCOM, VASAB and the European Union as well as between regions and subregions is necessary. It is also important that:

– environmental impacts will be taken into account in all development projects (traffic, energy, agriculture, urban infrastructure, etc.);

– sustainable use of water resources will be ensured by careful planning of locations for human activities;

– adequate restrictions on land use will be imposed concerning activities that may threaten surface water, ground water or coastal waters;

– water will be taken as an essential element into town planning and wise use of run off in urban areas will be properly managed; and

– need for protection of wetlands and other valuable water resources will be included in the European Spatial Development Perspective.

THE SPECIFIC SPATIAL AND ENVIRONMENTAL PROBLEMS OF THE REGIONS OF THE NORTH OF THE BALTIC SEA AND THE POLAR ARCTIC REGIONS

How to reduce spatial disparities in the Nordic countries?

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1. Introduction

Economic and social cohesion is one of the main goals in the Treaty on European Union. To reduce peripherality, economic disparities and spatial imbalances is a part of this goal and it can be achieved principally by structural funds (ERDF) and European networks. (TEN) The peripheral situation of the northern parts of the Nordic countries (Sweden and Finland) has been acknowledged through the Nordic objective 6 area and the Nordic triangle of TEN, Transeuropean network. (Road and railways).

The Maastricht Treaty claims that the transeuropean networks are to improve the economic and social cohesion of the Union through increased accessibility of the less favoured regions. However, this enormous investment programme can also be seen as a project to efficiently connect the main economic centres in Europe and so enhance the global competitiveness of Europe. It is therefore possible that transeuropean networks will not reduce the differences in accessibility and economic opportunity between central and peripheral regions in Europe, even if they are of use for the accessibility of the countries in the periphery of the Union.

The Nordic capital and major regional cities are in a situation where the relatively good accessibility to the central parts of the European Union is vulnerable. It is made possible by the regional, domestic and international airline system from Copenhagen, Oslo, Stockholm and Helsinki. Without this international airline traffic, one cannot reach for example Brussels within a day. With other means of transport business travels take several days, even with the European network and the fast trains. Not even from Copenhagen would this be possible without effective international air traffic.

Therefore, it is essential for the Nordic countries to maintain a high quality in international and domestic airlines, to build up regional feeder services to the European network in the member countries and to foster the infrastructure for telecommunication. It is also essential to create networks within the urban system in order to maintain viability in the Nordic remote regions.

2. Short historic review

Integration between the Nordic territory and central Europe in a historical perspective consists of different contacts or networks of different elites. The church has, through its hierarchical organisation, always had a need of a network of power over its holy territory. The leaders of the church: popes, cardinals, bishops and priests, have through history wandered through Europe. Latin was the common language and the values of the church – unifying cement. The monasteries and churches were the

“nodes” in this communication system.

The universities were other “nodes” for continental communication and the Nordic countries were well integrated, at least from the sixteenth century. Swedish students were present in many European universities, but mostly in the northern parts of Europe.

Also the apprentice system worked as a continental network. Master craftsman´s diplomas were often obtained by working for a master craftsman in different parts of Europe and Nordic apprentices were regular guests in this continental arena.

The network of pilgrimage routes carried the Nordic pilgrims to many parts of Europe and its holy places. Knowledge of the continent was brought home.

In the thirteenth century, the Nordic territories were integrated in the trade in the Hanseatic League. Products from the Nordic area were hides and skins, iron, copper, tar, wood and fish. The value of the products fully compensated for the peripheral location of production.

During the seventeenth century a further integration took place through a conscious immigration of Dutch, Walloon and German experts to build up the Nordic industry and infrastructure in form of glass and iron manufactures, channels, fortresses and cities.

During the nineteenth century a strong emigration wave from the Nordic countries to North America was witnessed. From Sweden alone, a million people emigrated, one third of the population. Knowledge of the world outside the Nordic countries increased rapidly.

During the last part of the nineteenth century Nordic industry took big steps out in Europe and the rest of the world. Enterprises such as Nobel, Laval, Ericsson and AGA were in the early twentieth century represented in many parts of Europe. The industrial and financial networks between the Nordic countries and Europe were established early. These patterns have been preserved and strengthened in spite of the peripheral situation of the enterprises.

In the late nineteenth century Swedish railways were constructed and connected different parts of the Nordic countries with the European railway networks. That enabled enterprises, scientists and ordinary people to increase contacts with different countries in Europe. Cultural and pleasure trips became quite common.

In our time, after the second world war, not only the elites of the Nordic countries have contact with Europe and the rest of the world. Through tourist traffic, from the 1950s a huge charter traffic, “islands” of the European continent have been known to many individuals from the Nordic countries. The distances in patterns of travel have thus increased, even if the “mental” integration in Europe is not well developed. The Nordic, specifically Swedish and Norwegian, resistance to the European Union according to recent public opinion polls, is a sign of this phenomenon.

Integration of the Nordic countries into the European context has thus a long historical tradition. But integration was segregated. It was a question of contacts or networks of different elites. Today's integration is a question of blending countries, regions, enterprises and the populations in the Union and to some extent, into the rest of the world.

3. Summary description of the Nordic territory

Sweden, Finland, Norway and in some cases Denmark are parts of the Nordic territory in a geographical, topographical and cultural perspective.

Due to the topographical situation, regional policy issues have a long history in the Nordic countries. Except for Denmark and the southern parts of Sweden, long distances and the wide pattern of settlements and communications have forced the countries to work with regional policies, among other things with the question of peripherality.

The total land area is about 1 150 000 sq. km with a population of about 23 million. Due to the geographical position and cold climate in the north, population is unevenly distributed. Most people live in the south below a line from Oslo in Norway to Helsinki in Finland. Population density here is forty-four per square kilometre compared to only six in the north, compared with an average 145 in the European Union.

Average population density in Norway is thirteen per square kilometre, in Sweden nineteen, in Finland fifteen and in Denmark 120.

Cities of any size are all in the south. In Norway, there are only three cities of more than 100 000 inhabitants, in Finland six and in Sweden eleven. In Sweden 50 per cent of the population lives in cities of more than 50 000 inhabitants, in Finland thirty-five and in Norway twenty-seven.

Land use is very different from most other parts of the Union. In Norway, Sweden and Finland agriculture accounts for only 5 per cent of the land area compared with 35 per cent in the Union and grassland covers 3 per cent compared to an average of 24 per cent in the rest of the member states. Forests cover more than 50 per cent witch is more than twice as much as in the European Union.

Communication systems also differ from more central parts of the Union, especially in the northern parts of the Nordic countries. There are few roads or railway lines per square kilometre, as for instance two km roads per 1 000 sq. km compared with twenty-five in Germany and sixteen in Denmark and twenty-five km railway per 1 000 sq. km compared to 123 in Germany and fifty-three in Denmark. Air traffic is therefore very important in the Nordic countries, more important than in the Union. The number of flights is up to twenty per inhabitant a year compared to five in Germany and ten in Denmark.

Telecommunications have also been developed fast and well with up to 700 trunk lines per 1 000 inhabitants compared to 430 in Germany and 480 in France. The number of mobile telephones per person is the highest in the world.

The traditional trade and industrial products are still very important in the Nordic countries as, for example, paper, paper pulp, timber, iron ore and steel in Sweden and Finland and fishing and the merchant fleet in Norway. Machine tools, electrical goods, electronics, telecommunication equipment and pharmacology dominate modern industry. Norway also produces oil and has a great offshore industry.

Average GDP is much the same as in the Union. Participation of women in the labour force is higher than in the Union. The public sector is an important employer, especially in the scarcely populated areas, where local authorities provide a wide range of services.

The Nordic historic legacy in the form of infrastructure, built environment, countryside, welfare, peoples lifestyles and daily life, forms a resilient structure which changes only gradually and therefore represents an important starting point for strategies on how to reduce spatial disparities in the Nordic countries. Nature conservation, protection of the environment and sustainable development are issues that concern the people in the Nordic countries and great progress has been achieved in this field.

4. European Union policies regarding peripherality

In the new Treaty of the Union economic, spatial and sustainable development are supposed to have substantial effects for further integration and coherence. Social and economic coherence is one of the main goals of the Union.

Means to achieve this are, among other things, community regional assistance, (ERDF) transeuropean networks (TEN) and the protection of the environment, including measures concerning spatial planning and land use.

Coherence means among other things spatial balance. There is a need to plan the territory of Europe accordingly in order to avoid wealth and population being concentrated in the centre. This can be achieved by strengthening links with remote regions and increasing the accessibility of sparsely populated areas in the periphery.

The Commission and the policy-makers in the Union are well aware of the question of peripherality. The northern countries can be said to be a periphery in some respects in the Union. This has been acknowledged through the Nordic objective 6 area and the Nordic triangle of TEN, transeuropean network and its road and railway links. But physical accessibility is measured increasingly in terms of cost and time, rather than distance. The transeuropean networks will in some respects improve domestic, transnational and international accessibility of peripheral nations and regions by reducing travel time, but many regions will still be poorly linked to access points in the major network. Therefore, it is necessary to develop secondary networks and access points to major networks in peripheral countries and regions. The problem created by the transeuropean networks is that motorways, high-speed trains and airports form a mesh of a much larger size than in the past. The regions covered by this large mesh but without having access to the network and its access points, are significantly disadvantaged and risk suffering stagnation and decline. The question of secondary networks and their connection with the main networks, especially the transeuropean ones, is therefore a major issue for spatial planning in the northern region of the Union. The strategy is to construct a network with a finer mesh for both roads, railways and air traffic, that on one hand gives access to the European network and on the other hand links northern cities and settlements with different economic and educational profiles to one another.

In the ESDP, European Spatial Development Perspective, a joint project between the Committee on Spatial Development and the Commission, the member states have adopted this strategy as a major goal. The TEN project must be developed with a combination of express rail and road links between major centres and airports with a goal of tying in peripheral regions. The various mainline stations or nodes must be served by regional feeder services in such a way that an improvement of accessibility, coupled with preservation of the environment, is made possible between urban areas and sparsely populated rural areas. Infrastructure for telecommunication will supplement conventional systems for transportation and is therefore very important for peripheral regions in the Union.

Regarding the transport infrastructure in the Nordic countries, some principles can be established. The road network accounts for the major part of both goods and passenger transport in the Nordic countries, particularly for shorter trips. The railways are expected to increase their market share for longer distances. Air traffic is an international transportation hub for industry, research, business travel and

tourism. Shipping has, and is expected to retain, an important role for goods and passenger transport in an environmentally-adapted transport perspective. Information infrastructure is expected to become a powerful supplement to more traditional forms of transport. The most recent plans for transport infrastructure give priority to long distance transport. Smooth and easy access to markets in Europe is important. However, it is equally important for people and for industry that the transportation system also works well at local and regional levels, since it is here that the great majority of trips are made. In the long run a joint approach to the Nordic transport system should be developed, illustrating the opportunities for co-operation between modes of transport within the framework of overall environmental goals. In addition, a joint, integrated transport strategy of this kind should be integrated with European transport policy. Such a strategy could include a system for combined traffic in co-operation with better-developed coastal shipping in the Baltic. In this context the inland waterways of Europe may also be of importance. A review is probably also required of the national airport structure in terms of regional accessibility.

5. Prospects at the macro scale

For Norway, Sweden and Finland the TEN project reaches Oslo, Malmoe, Gothenburg and Stockholm. Finland is extending the net with a supplementary high-speed railway between Turku and Helsinki and has plans to extend it to the Russian border. Sweden is extending the net to Falun/Borlange and Joenkoeping. Sweden and Finland both have plans on extending the high-speed lines to Lulea and Oulu in the northern part of the Baltic Sea, the Bothnia Bay. These two cities can function as a base for the development of the vast northern part of the territory, the Barents region. The two cities are already working together to develop the Bothnia Bay region. In spite of a harsh climate and a sparsely populated hinterland, the living standards are much the same as in other parts of the countries due to regional policy, a large public sector, public transfers and capital intensive units of production generating high value-added per person employed, as for instance hydroelectric plants mining and processing industries.

This area is well served by universities, research centres and vocational training centres. The area is also reasonably accessed to respective country´s capital region and with the Union by road, rail, air, sea links and telecommunication.

These means of transports should be maintained or improved in order to reduce peripherality and maintain the possibilities for further development of the region.

The greater area, the Barents Sea region, which also includes Russia, has vast but unexploited natural resources. Co-operation in the Barents region was formally established in 1993 and the Nordic countries, Russia and the European Commission signed a declaration. It will take time to develop this region and the infrastructure needed to meet the objectives for the area regarding economic development, tourism, science, technology and environment will be hard and expensive to establish. The “twin cities” Lulea and Oulu can foster and be a base for this development. But the responsibility for the development must not only lie with the Nordic countries but also with the Union as a whole.

More and immediate progress can be achieved by increasing trade and cultural exchanges in the Baltic Sea among the countries concerned. To the west, the opening of the Oeresund Bridge and the Fehmarn link, establishing a direct connection with Schleswig-Holstein from the Oerestad region (Malmoe-Helsingborg-Helsingoer and Copenhagen) will probably increase trade with western Germany. The main communication links from Oslo-Gothenburg-Malmoe and Stockholm-Malmoe, both part of the European network (TEN), will be directly connected with Denmark and the greater Hamburg region.

The traditional Swedish link from Trelleborg to Sassnitz will increase in importance and open up a new main link and development corridor to eastern Germany, Berlin and southern Europe. This link will also

connect the Nordic part of the transeuropean network with Germany and the wider European transport network. This link will be very important in the future, since Berlin probably will arise as a new economic centre in Europe.

Further to the east, many millions of people live in the Baltic Sea region on the east coast of Sweden, in the south of Finland, in the Russian enclaves St Petersburg and Kaliningrad, on the northern coast of Poland and in the Baltic states. This area has, in spite of the different economies and states of development, enormous potential for development. The infrastructure must however be improved in order to make integration within the countries, between countries and between the region and the rest of Europe possible.

Small business and cultural co-operation between Finland and Estonia, between Finland and the other Baltic states and between Sweden and the Baltic states and Poland has started on a small scale and this process will accelerate in the future.

Finland is working very intensively on the development around the Gulf of Finland with cities like Helsinki, St Petersburg and Tallinn. Also, Stockholm may be a part of this development area with a great potential for the future. This will probably be the core area for development in the north and middle part of the Baltic Sea region.

There are several other development projects around the Baltic Sea like, for instance, between Umea and Vaasa between Karlskrona and Gdansk in Poland.

Finland also has a number of co-operation projects on its border with Russia. Those projects are especially important since the Finnish border is the only border between the Union and Russia.

The historical tradition of trade and co-operation between the countries around the Baltic Sea has thus been renewed in recent years with the expansion of commercial and cultural relations and the creation in 1992 of the Council of Baltic Sea states. The countries have also worked together with a spatial vision for the area, Visions and strategies around the Baltic Sea 2010, which was presented in 1994. The main goal in this vision is to create a network of cities and settlements and improve links between urban centres and surrounding rural areas, ensuring spatial cohesion and an attractive and sustainable urban environment.

The second goal is to create an effective transportation system, above all in the states in transition that provides condition for effective spatial integration.

A third goal is to elaborate a concept for protection and development of valuable natural and cultural landscapes.

6. Peripherality and some other challenges within the Nordic countries

Compared to their most important competitors, the Nordic countries are characterised by the sparsely-populated zones between the urban areas as well as by long distances to its most important markets. Population density is about one tenth of the European Union level. Many regard this dispersed structure and the opportunities for a life close to nature as an important part of what makes the Nordic countries unique in a European perspective. This structure creates good conditions for the ecocycle adaptation of urban development but must also be co-ordinated with transportation systems that reconcile national, regional and local traffic needs.

The present urban system reflects the Nordic historic development. Urbanisation has proceeded through decentralised concentration. To preserve the main outlines of the settlement structure, action is required to ensure that the Nordic lifestyle will continue to function, at both macro and micro levels. Modern transport and communications technology must be used in an imaginative and strategic manner. New approaches and working methods are needed to achieve these goals.

The sparsely populated rural areas in the northern countries require special attention in regional policy. Advantages in the weaker parts of the settlements must be safeguarded. Often they have a small business tradition that could be supported by investments in new information technology. The rich cultural environment in these parts of the northern countries also provides opportunities for future culture-based tourism. One important general development factor in the rural areas in the northern countries is increased access to education and research facilities throughout the entire urban area and its settlement structure.

Gateways and bridges to a changing world

The Nordic countries are economically well-integrated with Europe and the rest of the world. Half of their industrial production is exported, and imports are of about the same size. Northern and western Europe are key areas for Nordic exports, as they have been since the Nordic countries were industrialised. Nordic universities have international contacts, of importance for research and development (R & D), within the same geographical area.

Today, great changes have taken place in the political map of Europe. Contacts with central and eastern Europe have been re-established and European co-operation has intensified. Sweden and Finland are now members of the European Union. As a result the Nordic countries can develop new gateways to the outside world.

Other bridges can be built up through university co-operation, cultural exchange, industrial and commercial development and international city-twinning in the Nordic European Union area.

Future economic and business development

Progress in the Nordic industry and services has been achieved by increased rationalisation and specialisation and by exploiting economies of scale. Today this also applies to the public sector. As a result of the deregulation and privatisation, public activities such as the postal service, telecommunications, transport and energy production may now follow the same pattern. In combination with continued strong international competition, with considerable attendant risks of rapid structural transformation, the result may be instability in industry and business and in local labour markets. This is one of the reasons for current hopes for increased activity in small and medium-sized businesses as well as in service industries with a large degree of information technology and high technology.

The geography of welfare

In Europe large, densely populated regions have a higher standard of living than smaller, more sparsely populated regions. In the Nordic countries there is hardly any difference in terms of living standards between the high-density metropolitan regions and the sparsely populated areas in the north. One explanation is that the countries have a public sector that accounts for more than 60 per cent of GDP. A large proportion of these funds is distributed between people and regions. The sum of these transfers has resulted in the far-reaching levelling out of incomes, employment and service levels between Nordic regions. This has had great significance for the regional stability that has characterised the countries during the last quarter of a century.

There are now clear indications that the volume of these transfers will decrease in the coming decade. The political parties seem to agree that the imbalance in the national budget must be eliminated and public debt must be reduced. Public expenditure will probably be given a more growth-oriented profile.

Municipal income will probably decline in the near future as a result of a drop in tax revenues and reductions in government grants. The growing number of schoolchildren and elderly people will increase the pressure for savings and effectiveness, as will high unemployment.

It is therefore necessary to carry out a careful location of new additions to urban development and well-developed regional public transport services, in order to maintain regional service to the majority of the population.

Information technology, communications and settlement patterns

It is obvious that both society and people's values and behaviour will change as the result of the transition from the industrial to the information society. But the spatial consequences will be minor, even though many telematic enthusiasts argue that travel will decrease considerably and settlement patterns change drastically. This is because only a small proportion of the workforce will become “full-time telematicers”. Others will work in the sphere of telematics, but will rely on various types of workplaces. Most employees will be bound to conventional places of work.

One conclusion is that developments in information technology will result in considerable changes for Nordic households in many, as yet relatively unknown respects. But the core activities of daily life like travelling to work, looking after the family and children and enjoying the natural environment and outdoor recreation, will dominate the lives of most households.

The physical accessibility of places of work, education, services and cultural facilities will therefore continue to dominate travel in the future, but it will be supplemented by telematic communications linking daily regions with a range of national and global networks.

7. Prospects on the micro scale, the settlement pattern

Nordic current settlement pattern can be described as a number of islands in an archipelago. The nodes in the urban system are the regional “capital cities”, the central cities of the counties.

They have access to a good and well-differentiated labour market, well-equipped service centres, higher education facilities and good external communications.

Expected changes in the structure and organisation of industry and services may result in further specialisation and rationalisation. In any case the rate of change will be rapid for the foreseeable future. Rapid – but unavoidable – change threatens local and regional employment as well as current patterns of life. In local labour markets, and especially in the older industrial towns between them, basic industries may experience difficulties.

These disruptions can be absorbed or alleviated by a town network, a system of towns and regions in co-operation – because individuals are able to commute to work for shorter or longer periods of time without having to uproot the rest of the family.

The linking together of Nordic settlements will enable towns with different economic and educational profiles to complement one another. Industrial towns with high export intensity, low activity rates for women, low levels of education and a narrow economic base can be linked in the network to higher education towns with a high level of public employment, a high profile in education and a differentiated supply of services and cultural amenities.

The countryside outside the network

Areas outside the network require special attention in regional policy. As a result of the effectiveness and robustness of the network, more regional development action can be directed to rural regions outside the core network. In many cases the weaker parts of the settlement structure have a small business tradition which could be supported by investments in new information technology. The rich cultural environment in these parts of the Nordic countries also provides opportunities for future culture-based tourism.

To make this network possible, the towns should be linked by rapid regional trains for the simple reason that, given the distances in the Nordic urban system, neither car nor bus can handle daily commuting within reasonable time limits. This makes it possible to realise an urban system for sustainable mobility, which can – with more stringent environmental requirements primarily for private cars – retain the present extensive mobility without too many sacrifices on the part of the individual. A public transport-based structure creates more robust labour markets, both in a society where the car still has a dominant role and in a society where environmental constraints increase the role of public transport. Towns and cities in co-operation also set up new conditions for future investments in roads, airports and other terminals.

Nordic towns

The Nordic goals stand for the preservation and enhancement of spatial, architectural and social values in the urban environment. This requires a well-directed urban development policy so that important regional functions are located in the centre of settlements close to public transport centres. This approach improves conditions for active urban life, with the centre as an arena for commerce, culture, ideas and social contact.

Nordic towns are low-density, green settlements. The conditions for establishing ecological cycles are good. If settlements are to live in symbiosis with the surrounding countryside, then the role of green areas in and around the urban area must be strengthened. The structure of green space requires the same care, in terms of urban development, as does all other infrastructure.

The small settlement

The greatest attribute of the small settlement is its material and cultural resources. Many small settlements also have a small business tradition that forms the basis of the local economy. This can now be expanded somewhat by establishing small businesses based on information technology.

Changes in the external world can threaten the existence of small settlements. At regular intervals there is talk about shops being closed down, and the withdrawal of post offices, banks or public transport services.

Small settlements outside the major communication corridors therefore need to develop special kinds of links to each other and also to larger towns. Small settlements also have the potential to develop new forms of social care and other common community services, which can in turn generate local involvement and identity as well as a sense of social security and mutual responsibility.

The medium-sized town

Larger settlements provide a relatively complete range of homes, jobs, activities, service and leisure facilities inside their urban area.

Compared to the metropolitan cities and the settlement structure in general, these medium-sized towns spend 20 per cent less energy on transportation. The urban structure is easily grasped and is at the same time full of variety. Urban parks and green areas provide a good leisure environment.

A forward-looking strategy for these towns will be to protect the existing resource management structure. The quality of daily life is regarded as an important development factor and a strong force in the development of the medium-sized town. This is the context in which the policy of network-building between medium-size towns should be seen.

8. Conclusions and summing up

The question of peripherality of the Nordic countries has many dimensions.

One is accessibility of Nordic capital cities and major regional cities to the transport networks of central parts of the Union.

Another is peripherality within the countries. The Nordic remote sparsely populated and vulnerable local labour markets must find forms to survive in a world with fast changes in the structure and organisation of industry and services.

A third question is about accessibility for industry and services to markets in the Union and to the rest of the world, as well as new competition from transforming countries in central and eastern Europe.

A fourth is about segregation in accessibility and future possibilities for reaching people, education and culture in Europe for other groups than the economic elite.

There is also the question of mental accessibility. Even if places are within physical range, mental reach takes up a lot of time for many people.

To tackle all dimensions of pheripherality and spatial disparities, many co-operating strategies and tactics are necessary in the Nordic countries.

It is essential to maintain the domestic airlines, to build up regional feeder services to the European network and to foster the infrastructure for telecommunication. It is also essential to create networks within the urban system in order to create an enlargement of small local housing and labour markets and maintain viability in the Nordic remote regions.

This enlargement should be achieved by connections of cities and settlements by rapid regional public transport systems. By daily commuting more people will have a chance to get better job opportunities, as well as carry out necessary activities in the region.

The general urban development policy in the Nordic countries should also preserve and enhance the Nordic legacy of low density green towns in good contact with the surrounding countryside and the spatial, architectural and social values of the Nordic settlement pattern.

Mental resistance can be overcome by increasing trade and cultural exchanges in the Baltic Sea area and the rest of Europe. Cross-border and transnational co-operation among regions and nations is thus very important for the Nordic countries. Besides new opportunities in travelling in the traditional way, the new information technology will open new possibilities in the integration process in the Baltic area and in Europe as a whole.