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Regional development studies

The Nordic countries - what impact on planning and development in the Union?



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Preface

Each year, the Directorate-General for Regional Policy and Cohesion of the European Commission launches a number of studies in the field of regional policy and regional planning. These studies mainly aim at providing a basis for policy formulation internally, as well as the preparation of programmes and initiatives and a basis for analysing the impact of current or planned activities. The most interesting or innovative of these are published in a series entitled 'Regional development studies'.

With this series, the Directorate-General hopes to stimulate discussion and action in a wider sphere on the research results received. The publication of the studies is addressed to politicians and decision-makers at European, regional and local level, as well as to academics and experts in the broad fields of issues covered.

It is hoped that by publicizing research results the Commission will enrich and stimulate public debate and promote a further exchange of knowledge and opinions on the issues which are considered important for the economic and social cohesion of the Union and therefore for the future of Europe.

Readers should bear in mind that the study reports do not necessarily reflect the official position of the Commission but first and foremost express the opinion of those responsible for carrying out the study.

Introduction

This is the synthesis report of the Nordic impact study prepared within the framework of the Europe 2000 study programme.

This report includes the executive summary and a section on political implications. To a large extent the findings and conclusions presented here are derived from 11 special studies.

It must be stressed, however, that this synthesis report contains a number of additional findings, analyses and conclusions which cannot be derived from the special studies.

Throughout the working process — but particularly during its latest phases — we have been acutely aware that our findings, analyses and the conclusions derived therefrom might be marshalled in the inventories of various national and EC parties with a view towards strengthening their respective negotiating positions. This has not been permitted to influence our work.

All through the research process we have tried to obtain the best possible information from competent and centrally placed authorities. Without compromising the confidential nature of the study, NordREFO conducted a symposium in the autumn of 1992, with responsible spokespersons for Nordic governments and regional authorities as well as all contributors to the special studies. The intention was to generate ideas on the construction of our main scenarios for Nordic impact and to avoid mistakes in the presentation of Nordic regional policies.

Copenhagen, June 1993

Noralv Veggeland
Senior Executive and
Scientific Project Coordinator

Contents

Executive summary

Key issues: The Nordic countries — what impact on planning and development in the Union?

1. Structure and logic

The synthesis report is organized into six parts followed by a summary of political implications.

Structurally, the synthesis report moves from more general and basic considerations and analyses towards ever more specific and — in policy terms — operative ones.

Stated differently, one might say that the present volume proceeds from a general overview — a relevant comparison between Norden and the present European Community (Part I) — and relevant institutional scenarios for Norden/European Community in the year 2000 (Part II) to a catalogue of identifiable, potential Nordic impacts on Europe, whether weak or strong (Part III), to what we determine to be strong impacts (Part IV).

Due to the broad nature of its discussion, Part III may also serve as a useful key to a further immersion in Volumes II to IV.

Out of the potentially strong impacts we zoom in on a special class of impacts which we consider to be the most operative and regionally, spatially and politically significant, i.e. transnational region-building — in other words the very impacts to which we think Norden and the Community ought to pay particular attention (Part V).

In Part VI we have broadened the operative perspective to present five synopses showing the impact potentials of all the strong impacts which have been identified, described and assessed in Parts III, IV and V. Here we attempt an integration of Nordic sectoral weight in relevant areas with the major policy options of the principal actors, i.e. Nordic governments and the Community.

Part VI also aims to provide a schema to test the robustness of policy options in regard to all potentially strong Nordic impacts.

We still believe that Norden's major impact, regionally and spatially, on Europe will be in the area of transnational region-building around the Baltic and North Seas with vast and beneficial implications in adjacent EC territories (primarily Denmark, Schleswig-Holstein and Mecklenburg-Western Pomerania but with beneficial repercussions even further south and without presenting any disadvantages to southern Europe). In addition, Part V identifies a transnational region with no territory currently belonging to the Community (the greater Barents region), but which we deem to have potentially great implications for the Community's general future orientation.

However, it is a near certainty that other strong Nordic impact factors (i.e. Nordic regional policy, Norden as a growth area and impacts from important Nordic economic sectors), as cross-analysed in the synopses, will be important to Europe and not least to a Norden in Europe (which is evidenced in the current membership negotiations between the Community and Norway, Sweden and Finland).

2. General overview of relevant Nordic characteristics

2.1. A definition of Norden

When we talk of 'Norden' and 'the Nordic area' in this study, we shall be referring to four Nordic countries: Iceland, Sweden, Norway and Finland. We shall also use the terms 'the Nordic countries' and 'the Nordic Four' to identify these four countries, none of which is, as yet, a member of the European Community.

As it is an EC member, Denmark has from the outset been excluded from Norden in line with the provisions stated by the European Commission in its tender No 90/16 which outlines the procedural rules for the study.

Limited attention has been paid to the two self-governing areas within the Danish realm, the Faeroe Islands and Greenland, both of whom have chosen to remain outside the Community. However, being very much part of Norden, their impact contribution has been considered in two important fields: (i) Norden's geographical extension and by amplification its problems of maintaining territorial cohesion, and (ii) their significant contributions to Nordic fisheries.

2.2. Norden's main geographical patterns

What characterizes the geography of the Nordic Four?

(a) Compared with the surface area of the Community (2 367 000 km^2), the area of the Nordic Four is large (1 215 000 km^2). If it happens, the integration of the Nordic Four into the Community will increase the EC land area by 50 %.

Much of Norden is high-lying or mountainous terrain. Only a little over half the total area (690 000 km^2) lies at an altitude below 300 m.

A combination of these facts indicates that the vast Nordic area is characterized by long distances and difficult terrain which land transport has to overcome.

Climatically, Norden is on average colder than the rest of the Community, and the northernmost regions are classified as Arctic. This again affects transport because of the hazards of ice and snow, but it also limits other human activities, for example, agriculture.

(b) Because of its very low population, 18 million people, Nordic integration into the Community would only add 5 % to the total EC population.

In spite of Norden's vast territory, implying generally low population density, settlements are widely dispersed.

All the same, it is still possible to identify core regions where settlement and economic activity are concentrated.

The general low-density population problem is partly offset as the Nordic population tends to be concentrated in a belt whose northern extension stretches from south-western Norway, through the capital city region of Oslo, continuing on to the Swedish capital city region of Stockholm, before ending in the Finnish capital city region of Helsinki and the Finnish south-eastern border region adjacent to Russia.

This relatively densely populated area continues southwards into the northern part of the Community, to Denmark and the Baltic Sea regions of Germany. It also continues eastwards to the eastern Baltic rim regions of the St Petersburg city region in Russia, the Baltic coun-

tries, and south-eastwards to the Baltic Sea coastal stretch from Kaliningrad/Königsberg to Poland. It is in this belt that the densest population area in the greater Nordic area is found.

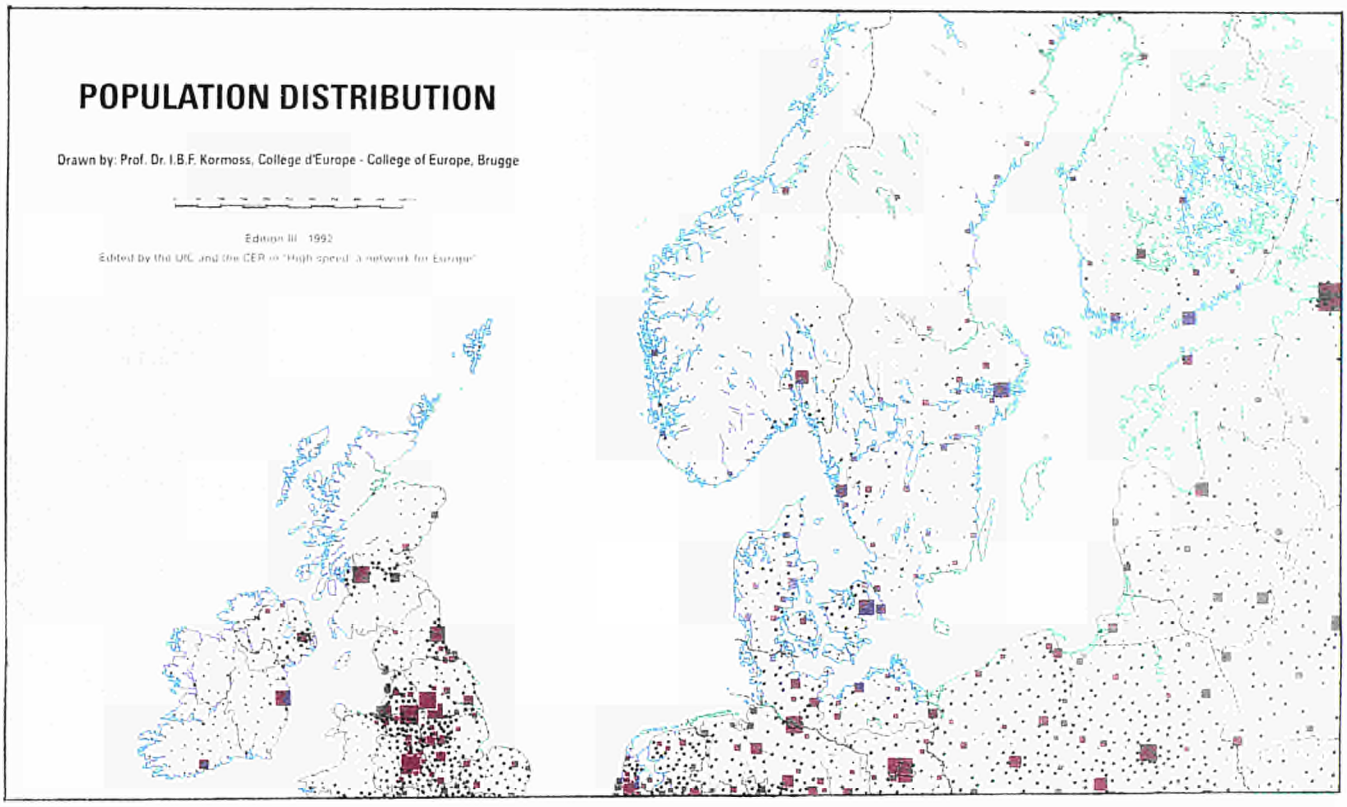
The most important Nordic urban agglomerations are situated in this belt. The capital cities act as central nodes in a settlement system which includes the European border region cities in the south and south-east.

The same geographical belt also offers the best conditions for intensive agriculture in Norden. Production yields and quality equal or surpass European standards and averages.

North of this belt of higher population density and greater economic activity lies the coniferous forest belt, and further north — beyond the Arctic Circle — lies the Arctic belt consisting of tundra and mixed forest.

In these two distinct northern belts lying north of the Oslo-Helsinki axis, industrial clusters are raw-material based and consist mainly of primary industries: extraction of minerals, oil and gas forestry, fishing, etc. These industrial communities are often located in remote areas, being tied to their resource base or energy source, for example, hydroelectric power.

Map 1



However, what is remarkable about these northern regions is their very advanced level of services, which includes universities, advanced professional training services, research institutes and consultancy services. The northernmost university centres are located in the towns of Tromsø in Norway, Luleå in Sweden and Rovaniemi in Finland. The University of Iceland is located in Reykjavik.

The most important clusters of manufacturing and service industries are also located here.

2.3. Institutional patterns as a product of Nordic regional policies

Historically, the Nordic countries are conceived of as being rather homogeneous nation States. Yet there are exceptions to every rule. The Samic people (Lapps) represent an indigenous ethnic group in the northern parts of Norway, Sweden and Finland.

Furthermore, the archipelago of Åland, lying between Sweden and Finland, is self-governing in important respects though constituting a part of Finland. In accordance with a number of international agreements, the first dating back to the middle of the 19th century, Åland has obtained a status as a demilitarized, neutral and culturally self-governing area. In addition, a number of economic and administrative rights have been conferred upon the Åland Government.

Likewise, Greenland and the Faeroe Islands have obtained even more extended political and economic rights through time, even though they are part of the Kingdom of Denmark (Norden's EC neighbour). Neither Greenland nor the Faeroe Islands is an EC member. In Greenland, the majority of the population are indigenous, non-Nordic-speaking people, the Inuit, with close cultural and linguistic links to the Inuit in Canada, Russia and Alaska.

Nordic regional policy has traditionally been compensatory, aimed at reducing inequalities in development across Norden's vast geographical expanses which are caused by long distances, remoteness, cold climate and the low-density population. The main objective has been to preserve the current settlement pattern across the vast territory and create greater geographical cohesion.

The successful result of this regional policy has given the Nordic countries a mature, socioeconomic cohesion which is characterized by an evenly distributed high standard of living throughout the whole territory irrespective of geographical locality.

However, cohesion is inadequately developed in relation to communication infrastructure. There is a great need to develop the infrastructure in order to connect peripheral Nordic areas to Nordic core areas. This involves the extension and modernization of roads, railways, ferries and telecommunications and is essential if economic growth is to be achieved through the establishment of new businesses and necessary if people are to have a chance to live where they prefer.

Development is also required in the field of soft infrastructure, such as producer services, education, training, research and cultural activities. This is of fundamental importance to economic growth and maintaining cohesion.

A further characteristic of Nordic regional policies is the vital role played by agriculture. The reason is agriculture's direct or indirect role in stabilizing settlement patterns, particularly in the remoter peripheral regions where rural depopulation might be considered devastating.

Decentralization is another mainstay of Nordic regional policy and administration. Since the Second World War, the debate on the division of power between the State and regional/local authorities has resulted in the latter being favoured and much institutional power is exerted at this lower tier level. One might say that the principle of subsidiarity — as it has come to be discussed after the Danish 'no' to Maastricht in June 1992 — owes its origin to the Nordic model whereby the regions control both planning and resources and have their own revenue base.

This means that in Norden, power is not merely delegated to the regional and local authorities by central powers under the threat of removal if the latter so desire. On the contrary, the delegation of power is real and based on the higher authorities' acceptance of total competence on the part of the lower-tier authorities. OECD figures for 1989 reveal that in Norden as much as 40 to 50% of public expenditure was undertaken by the lower-tier authorities, with Denmark leading the way with well over 50%. (It should be pointed out, however, that a substantial part of lower-tier level expenditures is mandated by the State). The European average falls well below this level, ranging from 10 to 30% depending on the country concerned.

3. Institutional scenarios for Norden/European Community in the year 2000

Our contemplation of future Norden-EC arrangements is based on scenarios of an institutional nature whose heuristic value, spatially and regionally, will become apparent in the synopses (Part VI), where they are employed in cross-analyses with the strong geographical and sectoral impact factors identified in this study.

Two institutional scenarios have been constructed:

(i) A trend-based scenario implies that the Norden-EC integration process is continued to the effect that by the year 2000 the Community's 'Nordic extension' will have been accomplished.

However, for some Nordic countries one must assume that integration will be EEA-like, while being Maastricht-like for others. As of this reporting, it is impossible to identify the exact outcome of such integrationist endeavours as Nordic EC-membership negotiations are still under way. Furthermore, despite Denmark's 'yes' to the Treaties of Maastricht and Edinburgh on 18 May 1993, the future status of the European Union in EUR 12 appears far from determined.

(ii) Scenario-writing necessitates the construction of a contrast scenario. In our context this is particularly prudent as the contrast scenario illuminates what might happen if lack of integration or even disintegration rather than integration occurs. To throw light on this eventuality we have deliberately chosen a fragmentation scenario.

As becomes apparent in Part VI, the fragmentation scenario entails largely negative regional and spatial effects for the Community particularly as far as the new 'regionalization' is concerned (negative in the sense that the outcome would appear decidedly undesirable to the Community as a whole and to its northern areas in particular compared to the advantages that could have been reaped from a continuation of the integrationist process).

In this executive summary we shall refrain from describing the undesirable — and to some extent intuitively obvious — effects of the fragmentation scenario. We refer to Part VI.

4. Nordic regional and spatial impacts in the Community on the assumption of continued institutional integration (the trend scenario)

4.1. Relative quantitative factors

Any assessment of potential Nordic regionally and spatially relevant impacts on Community territory must take into account Norden's relative quantitative weight within societally relevant sectors *vis-à-vis* the corresponding weight of the Community.

In sectors where Norden has little or no relative power, one must — as a point of departure — assume that there could be little or no impact regardless of future institutional arrangement.

A very basic statistical analysis shows how Norden relates to the Community when comparing quantifiable factors and patterns of interaction (we refer to the conclusion of Part I and Table IV.1). To their considerable comparative advantage, the Nordic Four possess the following assets:

(i) vast, untouched natural areas with extensive ecosystems;
(ii) vast, unused, unpopulated or sparsely populated areas;
(iii) vast reserves of oil and natural gas;
(iv) vast renewable forest reserves;
(v) vast renewable fish resources;
(vi) high potential as a European tourist goal.

In addition, the Nordic Four are in possession of vast and significant specialized production and expertise in the following industries:

(i) energy (based on hydroelectric power, thermal power or the enormous reserves of oil and natural gas);
(ii) electro-chemicals and electro-metallurgy (based on the availability of localized high energy consumption), timber, paper and pulp (based on the vast forest reserves), fishing (based on the vast fish resources), electronics and metals (based on advanced technological know-how). Important industrial clusters may result from the activities of these industries;
(iii) offshore (based on oil and natural gas extraction).

However, relative quantitative preponderance does not necessarily translate into identifiable regionally and spatially relevant impacts, as we have argued in this synthesis report. For example, one would be hard pressed to operationalize the fact of Norden's strong energy position into anything regionally and spatially meaningful. Consequently, this strong Nordic sector has not been considered in the cross-analyses in Part VI.

On the other hand, a decidedly weak Nordic sector like agriculture may — precisely due to its weakness and lack of international competitiveness — create strong regional impacts on neighbouring EC territories, especially in Denmark, on the assumption of continued institutional integration. Therefore the potential impact contribution of Nordic agriculture has been considered in the synopses of Part VI.

On balance — pursuant to the identification of potentially strong impact factors in Parts III, IV and V and their cross-analyses with the integrationist institutional scenario in Part VI — we predict the following Nordic impacts on regional development and spatial organization in the Community.

4.2. Impacts based on Nordic regional policies

Assumptions: It is unlikely that far-reaching institutional integration between Norden and the Community can

take place unless the eligibility criteria of the EC Structural Funds are in some measure changed to make allowances for such particularly Nordic concerns as sparse population, long distances, cold climate and the predicaments of Arctic agriculture.

Norden does have one very strong argument in favour of such claims — an argument which would undoubtedly make a certain impression on a Community that has made European coherence a primary political goal: the fact that through determined regional policies the Nordic countries have succeeded in reducing the differences in living standards between peripheral and core areas to no more than 13%, implying that in important respects Nordic cohesion has been practically achieved. Due to the current fiscal crises of Nordic States, there is no certainty that such standards can be maintained in the future. Nevertheless, Europe could learn from the Nordic experience.

Impacts: If Nordic integration becomes EEA-like there will be no impact. If a Maastricht-like integration is achieved, there will be relatively strong and geographically well-defined regional and spatial impacts in EC areas with geographical or climatic characteristics corresponding to those of Norden, the reason being that such areas would become eligible for (additional) structural support. (In Figure IV.10, Part IV, we have identified a number of such potential regional beneficiaries: areas in central Spain, southern Portugal and northern Scotland.)

A variant of the outcome of the Maastricht-like scenario is that the current EC members would accept only Arctic agriculture as deserving of Structural Fund support. In that case there would be no further impacts in EC territories as there are no Arctic (agricultural) zones within EUR 12.

4.3. Impacts based on the emergence of a Nordic growth area

Assumptions: A 'third European core area' develops in Norden as a consequence of the enormous economic potentials inherent in a Nordic-Russian/East European commercial and resource-management partnership, a general European and international integration and a 'new deal' in the pan-European division of labour as a result of transport congestion and the high environmental and economic costs of further agglomeration in the European 'banana' areas.

Impacts: There would be a marked tendency towards an additional EC preoccupation of the Nordic growth area.

In the Community's northern border areas with Norden (most notably in Denmark and a number of northern German *Länder*) a closer integration with a new (greater Nordic) European growth area might contribute to sustained economic growth.

In central parts of the Community — which we may roughly define as what is popularly referred to as 'the blue banana' — the growing burdens of congestion (delays, pollution, rising costs of location) eloquently described in a number of recent Commission documents might be alleviated.

In southern parts of the Community the impacts would be small or negligible due to the remoteness of the greater Nordic area. A greater EC absorption in northern affairs might easily be compensated for through a greater pan-European revenue base.

Consequently, the institutional integration into Europe of a Nordic growth area should not be considered a zero-sum game but more likely as a plus-sum game for the entire Community.

4.4. Impacts based on the development of Nordic agriculture, fisheries, tourism and transportation

Assumptions: Due to institutional integration and the resulting abolition of a number of national protective regulations in the Nordic countries, competition within the above sectors is intensified. Iceland and Norway increase their European market shares in fish. Physical transport barriers in Europe south of Hamburg, accentuated by new 'green' taxes on transportation, create changes in market conditions favouring EC northern and southern regions.

Impacts: Strong positive impacts in the agricultural regions, primarily of Denmark and northern Germany (as illustrated by Figure IV.10 in Part IV). Enhanced industrial competitive positions in northern EC regions which are able to expand their trade with less congested areas. 'Sun-tourism' destinations in the western Mediterranean stand to lose due to a Nordic change of taste in the direction of cultural and green tourism (such a change, which is already under way, would benefit, among other areas, parts of Greece, as illustrated by

Figure IV.11 in Part IV). However, this latter effect has little to do with European institutional integration or disintegration. Fisheries-dependent local communities around the North Sea would be heavily impacted by Icelandic and Norwegian decisions to strengthen their positions in the European market.

4.5. Impacts based on the emergence of Nordic transnational region-building

Assumptions: A greater Baltic Sea region, a greater Barents region and a North Sea region establish themselves as primarily horizontally integrated areas. The same applies to their subregions: the west Baltic region, the core Baltic region and the core Barents region. (The extensions of the various regions are indicated in Figures V.4 and V.12 in Part V).

Two of these regions are important enough to merit a brief discussion in this summary: the greater Baltic Sea region and the greater Barents region. The third major region identified above, the North Sea region, is the subject of an independent regional impact study commissioned by the European Community and has been dealt with only summarily in the present report.

4.5.1. The greater Baltic Sea region

The nation States that form the greater Baltic Sea region comprise Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland, Sweden and Norway.

This grouping now has a representative body, the Council of the Baltic Sea States, which was established in Copenhagen in March 1992. The agreement was signed by the foreign ministers of the affiliated countries. Moreover, the European Commission was represented at the founding meeting.

Documents issued from the founding conference include an agreement to tackle a series of tasks through regional cooperation: the development of the infrastructure, economic development, securing of human rights, improving the environment, strengthening democratic institutions and the eventual incorporation of all the Baltic Sea States into the Community.

The Baltic Sea region integrates both the northern regions of the existing Community and border regions of Russia, the Baltic nations and Poland. Finland has a common border with Russia which is 1000 km long. Norway also has a common border with Russia in the strategically important northernmost part of the Barents region.

Stressing a bottom-up approach, the present study has identified two Baltic Sea subregions: the western Baltic Sea region and the core Baltic Sea region.

The western Baltic Sea region has an infrastructural basis which links a network of towns, forming a relatively compact urban agglomeration. Growth occurs along an axis starting at the Norwegian town of Lillehammer, passing through the Norwegian capital city of Oslo to the Swedish town of Gothenburg, southwards to Malmø, on to the Danish capital of Copenhagen, before ending at the three German seaports on the Baltic Sea coast — Kiel, Lubeck, Rostock and their hinterlands.

The subregion's high urban density gives it a substantial potential for vertical integration. The core agglomeration will presumably be the twin-city hub of Copenhagen/Malmø which boasts a combined population of 2.5 million.

A prerequisite for this development will be the realization of the Øresund bridge or tunnel between Malmø and Copenhagen which will give the two countries their first-ever fixed land-transport link by the turn of the century.

The other Baltic Sea subregion, the core Baltic Sea region, is a scenario anchored in an axis which starts with the greater Stockholm/Uppsala city zone in the west, crosses the Baltic Sea eastwards (to include the city regions along the coasts of the Gulf of Finland — Turku, Helsinki and St Petersburg) and southwards (to include Tallinn in Estonia and the Riga city region in Latvia).

The core Baltic Sea region has a relatively high degree of urbanization: the large towns and cities have a total population of 14 million. Accelerated intra-regional integration will be furthered by planned improvements in road, rail, air and sea-ferry connections. A proposed motorway, the 'Via Baltica', will effectively connect the region to the main continent and the EC countries.

4.5.2. The greater Barents region

The States in the greater Barents region are all the Nordic countries, including Denmark, and Russia. Furthermore, the Community has signed the agreement

on this functional region. The higher political organs are the Barents Council and the Regional Council.

The greater Barents region comprises seven administrative areas: in Norway: Nordland, Troms and Finnmark; in Sweden: Norrbotten; in Finland: Lapland; in Russia: the Murmansk city region and the Archangel city region. The aim is to establish a functional region on a horizontal integration basis.

The regional task ahead demands effective cooperation on the following issues: polar resource utilization, trade, environmental problem-solving and, not least, regional security in light of the transition taking place in post-communist Russia.

The last-mentioned problem area is interesting as it is also a current matter of deep concern in EC regions adjacent to former communist States.

The main characteristics of the greater Barents region may be defined as follows:

(i) a vast territory,
(ii) a harsh climate,
(iii) a dispersed low-density population,
(iv) co-existence of several indigenous peoples,
(v) a legacy of burdens from a totalitarian past, and
(vi) a wealth of untapped resources.

The region-building policy tasks that will form the basis of interregional and transnational cooperation within the greater Barents region are as follows:

(i) how to exploit the natural resources;
(ii) how to develop commerce and trade relations;
(iii) how to solve threatening environmental problems;
(iv) how to maintain peace and security in the wake of the disintegration of the Soviet Union or even a break-up of Russia itself.

Towards the year 2000, there is likely to be an opportunity for greater integration and the development of interregional networks and alliances. A variant of the scenario foresees the crystallization of a subregion, the core Barents region, based on the major towns of Murmansk, Archangel, Kirkenes/Vadsø and Tromsø, as these already sizeable population concentrations will be well placed to act as centres for the management of resource exploitation, processing of raw materials, and as major ports of call along any sea routes which might eventually open up the north-east passage.

Impacts from transnational region-building in the Nordic area: considerable, positive meso-regional impacts would be noticeable northern areas of the Community. Concretely, positive effects would be noticeable throughout the entire area from Jutland and Zealand to Schleswig-Holstein and Mecklenburg-Western Pomerania where intensified economic development and urban agglomeration would occur.

In particular, the northern German regions should benefit from closer linkages with the core Baltic Sea region through the planned Via Baltica (the road connection between the Baltic States and northern Germany), in addition to the advantages they would undoubtedly reap from the planned bridge connection between southern Sweden and the Copenhagen area with further connections to the south (see Figures V.15 and V.16 in Part V).

EC regions all around the North Sea from northern Jutland to Bruges and Aberdeen would benefit from a more integrated North Sea region. Jutland would appear to gain most from the realization of the planned west link from south-eastern Norway through northern Jutland and the Nordic link from the Swedish port of Gothenburg to the Danish port of Frederikshavn.

Regional impacts in the Community of potential developments in the greater Barents region would be difficult to detect. Impacts would undoubtedly be of a macro-spatial character, i.e. they would tend to influence the general orientation and macro-spatial organization throughout the Community.

A few important observations should be emphasized particularly in regard to the greater Barents region: If Norway and/or Finland were to join the Community as full members, the eastern borders of these two nations would constitute the Community's only land border with ex-Soviet territories. The potential macro-spatial implications of such an eventuality can probably be inferred from the fact that although neither the initiating power behind the Barents effort (Norway) nor any of the other States whose territories participate in this cooperative endeavour are as yet members of the Community, the Commission has nevertheless officially decided to join in the effort.

Of course, the general political desirability of stabilizing and normalizing conditions in this potentially volatile area plays an important role not only for the Nordic countries and for the Russian central and local governments but also for the Community. But perhaps equally important is the consideration that the core Barents region — and in particular the Barents Sea and the Kola Peninsula — constitutes Europe's potentially most valuable natural resource area. In other words, it is of

considerable strategic importance, as we have stressed in Part V of the synthesis report.

Nor has it probably gone unnoticed among national and EC analysts and decision-makers that the Barents region-building endeavour constitutes a unique European experiment in direct regional cooperation between countries who might be eligible for EC membership and a country (Russia) that is not at the moment but with whom it is essential to strengthen mutually advantageous ties. Thus the building of a functional region in the Barents area could serve as a pan-European laboratory whose practical results might become instructive for similar endeavours along the EC's eastern and southern rims.

Naturally, some of the above observations also apply to the transnational region-building efforts that are currently undertaken in the greater Baltic Sea region.

5. Conclusion

It is essential to point out that a successful *Norderweiterung* of the Community would come with some strings attached, not only leading to vast opportunities but also to new European commitments that go beyond the mere integration of 18 million northerners. The institutional integration of Norden into the Community would, therefore, entail a growing European macro-spatial emphasis on the European North.

The construction of a 'Europe without frontiers', i.e. the completion of the institutional integration process between Norden and the Community, would undoubtedly give added impetus to this region-building, involving areas of several nation States. On the other hand, as pointed out in the synthesis report, the realization of a European 'fragmentation scenario' would in all likelihood dampen this region-building process, not least due to the fact that increased emphasis would be put on the national centres and on their power to effectively regulate and/or monopolize activities within the national territory.

Document de synthèse

Question clé: impact du développement des pays nordiques sur le développement régional et sur l'organisation territoriale de la Communauté

1. Structure et logique

Le rapport de synthèse comprend six parties, suivies d'un sommaire des implications politiques.

Du point de vue de sa structure, le rapport de synthèse passe de considérations et d'analyses générales à des questions de plus en plus spécifiques.

Autrement dit, le présent document commence par un tableau général — une comparaison entre le Nord et l'actuelle Communauté européenne (CE) (partie I) — et par des scénarios institutionnels se référant à la relation Nord-Communauté européenne en l'an 2000 (partie II), et se poursuit par un catalogue des impacts potentiels de l'adhésion des pays nordiques sur l'Europe, faibles ou forts (partie III), jusqu'à ce que nous définissons comme des impacts prononcés (partie VI).

Étant donné son caractère général, la partie III constitue aussi une base utile pour approfondir les parties II et IV.

Parmi les impacts potentiels prononcés, nous nous focaliserons sur une catégorie particulière d'impacts que nous considérons comme les plus actifs et les plus importants sur les plans régional, territorial et politique, à savoir la constitution de régions transnationales — en d'autres termes, précisément les impacts auxquels les pays nordiques et la Communauté européenne doivent, à notre avis, accorder une attention particulière (partie V).

Dans la partie VI, nous avons élargi notre perspective pour présenter cinq *tableaux synthétiques* concernant tous les impacts potentiels prononcés qui sont définis dans les études spéciales. Nous essayons d'analyser par recoupements: les impacts potentiels de l'adhésion des pays nordiques; les grandes orientations choisies par les principaux acteurs, c'est-à-dire les gouvernements des pays nordiques et la Communauté européenne; les deux scénarios institutionnels, à savoir le scénario par intégration et le scénario par fragmentation.

La partie VI propose également un schéma permettant de tester la solidité des orientations retenues par rapport à tous les impacts potentiels prononcés de l'adhésion des pays nordiques.

Nous persistons à croire que la grande incidence sur l'Europe de l'adhésion des pays nordiques, tant au niveau régional qu'au niveau territorial, sera la constitution de régions transnationales autour de la mer Baltique et de la mer du Nord, qui auront d'importantes répercussions bénéfiques sur les territoires adjacents de la Communauté européenne (essentiellement le Danemark, le Schleswig-Holstein et le Mecklembourg-Poméranie-Occidentale, mais aussi plus au sud, sans pour autant être préjudiciables à l'Europe méridionale). En outre, la partie V identifie une région transnationale dont aucun territoire n'appartient actuellement à la Communauté européenne (la région du Grand Barents), mais dont nous pensons qu'elle peut avoir d'importantes conséquences sur l'orientation générale future de la Communauté.

Toutefois, il est presque certain que d'autres grands facteurs d'impact de l'adhésion des pays nordiques (à savoir leur politique régionale, le Nord comme zone de croissance et les impacts à attendre d'importants secteurs économiques de ces pays), analysés par recoupements dans les tableaux synthétiques, seront importants pour l'Europe et surtout pour le Nord intégré à l'Europe (ce qui ressort des négociations d'adhésion actuelles entre la Communauté européenne et la Norvège, la Suède et la Finlande).

2. Présentation générale des caractéristiques significatives des pays nordiques

2.1. Une définition du Nord

Lorsqu'il est question du «Nord» ou de la «zone nordique» dans la présente étude, il s'agit des quatre pays nordiques que sont la Finlande, la Norvège, la Suède et l'Islande. Nous utilisons également les termes «pays nordiques» pour identifier ces quatre pays dont aucun, à ce jour, n'est encore membre de la Communauté européenne.

En tant que membre de la Communauté européenne, le Danemark a été exclu dès le départ des pays nordiques, conformément à la déclaration de la Commission européenne dans son appel d'offres 90/16, qui expose les règles de procédure suivies dans l'étude.

Une attention limitée a été accordée aux deux régions autonomes intérieures au royaume de Danemark: les îles Féroé et le Groenland, qui ont choisi l'une et l'autre de demeurer en dehors de la Communauté. Toutefois, comme ces régions font partie intégrante du Nord, leur impact a été pris en considération dans deux domaines importants: l'extension géographique du Nord, et, partant, les problèmes posés par le maintien de sa cohésion territoriale, et leurs importantes contributions à la pêche des pays nordiques.

2.2. Les principales caractéristiques géographiques du Nord

Qu'est-ce qui caractérise la géographie des quatre pays nordiques?

a) Par rapport à la surface de la Communauté européenne (2 367 000 km^2), les quatre pays nordiques sont très étendus (1 215 000 km^2). Si elle se concrétise, l'intégration de ces quatre pays dans la Communauté européenne augmentera de 50 % la superficie de cette dernière.

Le territoire du Nord est situé essentiellement en altitude, ou bien il est montagneux. À peine plus de la moitié de la superficie totale (690 000 km^2) est à une altitude inférieure à 300 mètres au-dessus du niveau de la mer.

Compte tenu de ces éléments, toute la zone nordique est caractérisée par de longues distances et par un terrain accidenté, ce qui complique le transport terrestre.

Sur le plan climatique, le Nord est plus froid, en moyenne, que le reste de la Communauté européenne, et les régions les plus septentrionales sont classées zones arctiques. De nouveau, cela se répercute sur les transports, pour lesquels la glace et la neige constituent des dangers, mais cela limite aussi d'autres activités humaines comme l'agriculture.

b) En raison de la très faible population des pays nordiques (18 millions d'habitants), leur intégration dans la Communauté européenne n'augmentera que de 5 % la population totale de cette dernière.

En dépit de l'étendue des pays nordiques, où la densité de la population est généralement faible, l'habitat y est très dispersé.

De la même manière, il est possible d'identifier des régions nodales, c'est-à-dire où l'habitat et l'activité économique sont fortement concentrés.

Le problème général de la faible densité démographique est partiellement compensé par le fait que la population des pays nordiques a tendance à se concentrer dans une ceinture qui commence au sud-ouest de la Norvège, passe par l'agglomération d'Oslo, continue par l'agglomération de Stockholm et se termine par l'agglomération de Helsinki et la région frontalière du sud-est de la Finlande, limitrophe de la Russie.

Cette zone relativement peuplée se poursuit vers le sud par la partie septentrionale de la CE, jusqu'au Danemark et aux régions allemandes de la mer Baltique. Elle se poursuit vers l'est par la partie orientale de la mer Baltique, avec la région de l'agglomération de Saint-Pétersbourg en Russie, les pays baltes et, vers le sud-est, la zone côtière de la mer Baltique allant de Kaliningrad (anciennement Königsberg) à la Pologne. C'est dans cette ceinture que l'on trouve la plus forte densité démographique du Grand Nord.

Les principales agglomérations des pays nordiques sont situées dans cette ceinture. Les capitales sont les noyaux d'un système d'habitat qui englobe, au sud et au sud-est, les agglomérations européennes limitrophes.

La même ceinture géographique offre également les meilleures conditions d'une agriculture intensive dans le Nord. Les rendements et la qualité des produits atteignent ou dépassent même les normes et les moyennes européennes.

On y trouve aussi les plus grands regroupements d'industries manufacturières et de services.

Au nord de cette ceinture à forte concentration humaine et économique s'étend la ceinture de forêts de conifères; encore plus au nord — au-delà du cercle arctique — se trouve la ceinture arctique, composée de toundra et de forêts mixtes.

Dans ces deux ceintures septentrionales situées au nord de l'axe Oslo-Helsinki, les regroupements industriels se sont constitués en fonction des matières premières; ils comprennent essentiellement des industries primaires: extraction de minéraux, de pétrole et de gaz, sylviculture, pêche, etc. Les communautés industrielles sont souvent implantées dans des zones reculées, puisqu'elles sont liées aux ressources ou à une source d'énergie, par exemple l'énergie hydroélectrique.

Toutefois, **un élément remarquable de ces régions septentrionales est le haut niveau de développement de leurs services, puisqu'on y trouve des universités, des services de formation professionnelle de pointe, des instituts de recherche et des services de conseil**. Les centres universitaires les plus septentrionaux sont situés dans les villes de Tromso en Norvège, de Luleå en Suède et de Rovaniemi en Finlande. L'université islandaise est à Reykjavík.

2.3. Schémas institutionnels issus des politiques régionales des pays nordiques

Historiquement parlant, les pays nordiques sont conçus comme des États-nations assez homogènes. Cependant, chaque règle a ses exceptions. Les peuples Samits (les Lapons) constituent un groupe ethnique indigène des régions septentrionales de la Norvège, de la Suède et de la Finlande.

De plus, l'archipel d'Ahvenanmaa, situé entre la Suède et la Finlande, est autonome dans des domaines importants, tout en faisant partie de la Finlande. Conformément à un certain nombre d'accords internationaux, dont le premier remonte au milieu du XIXe siècle, Ahvenanmaa a obtenu le statut de zone démilitarisée, neutre et culturellement autonome. De plus, un certain nombre de droits économiques et administratifs ont été accordés au gouvernement d'Ahvenanmaa.

De la même manière, le Groenland et les îles Féroé ont progressivement obtenu des droits politiques et économiques étendus, en dépit de leur appartenance au royaume de Danemark (le voisin communautaire des pays nordiques). Ni le Groenland ni les îles Féroé ne sont membres de la Communauté européenne. Au Groenland, l'essentiel de la population est formé par un peuple indigène de langue non nordique, les Inuits, ayant des liens culturels et linguistiques étroits avec les Inuits du Canada, de la Russie et de l'Alaska.

La politique régionale des pays nordiques est traditionnellement de nature compensatoire, puisqu'elle cherche à réduire les inégalités en matière de développement dont souffrent de vastes étendues géographiques du Nord, dues aux distances, à l'éloignement, au froid et à la faible densité démographique. Son principal objectif a été de préserver l'habitat actuel sur ce vaste territoire et de renforcer la cohésion géographique.

La réussite de cette politique régionale a conféré aux pays nordiques une maturité et une cohésion socio-économique qui se caractérise par un **niveau de vie élevé, uniformément réparti sur l'ensemble du territoire, indépendamment de la situation géographique**.

Toutefois, la cohésion est insuffisante au niveau des infrastructures de communication. Ces infrastructures doivent être considérablement développées, afin de rattacher les zones périphériques du Nord aux régions fortement développées. Cela suppose le développement et la modernisation des routes, des voies ferrées, des services de ferry et des télécommunications, éléments essentiels si l'on veut développer la croissance économique par la création d'entreprises et permettre à la population de vivre où elle le souhaite.

Le développement est également nécessaire dans le domaine des infrastructures légères telles que les services à la production, l'éducation, la formation, la recherche et les activités culturelles. Cela est extrêmement important pour la croissance économique et le maintien de la cohésion.

Une autre caractéristique des politiques régionales des pays nordiques est le rôle fondamental de leur agriculture, qui intervient directement ou indirectement dans la stabilisation des modes d'habitat, notamment dans les régions périphériques les plus éloignées où l'exode rural peut être considéré comme catastrophique.

La décentralisation est une autre constante de la politique régionale des pays nordiques et de leur administration. Depuis la Seconde Guerre mondiale, le débat sur la répartition des pouvoirs entre l'État et les autorités régionales et locales a tourné à l'avantage de ces dernières, et c'est à leur niveau que s'exerce l'essentiel du pouvoir institutionnel. **On pourrait dire que le principe de la subsidiarité — tel qu'il a été discuté après le «non» danois à Maastricht en juin 1992 — tire son origine du modèle nordique,** dans lequel les régions contrôlent à la fois la planification et les ressources et disposent de leurs propres sources de revenu.

Cela signifie que, dans les pays nordiques, le pouvoir n'est pas simplement délégué aux autorités régionales et locales par les autorités centrales, sous réserve, pour ces dernières, de le reprendre si elles le souhaitent. Au contraire, la délégation de pouvoir est réelle et repose sur l'acceptation par les autorités de rang supérieur de la compétence totale du pouvoir subordonné. Les chiffres établis par l'OCDE pour 1989 révèlent que, dans le Nord, 40 à 50 % des dépenses publiques ont été engagées par les autorités subordonnées, le Danemark étant en tête avec un chiffre supérieur à 50 % (il est à noter, cependant, qu'une partie substantielle des dépenses des autorités subordonnées est ordonnée par l'État). La moyenne européenne est très inférieure à ce niveau, puisqu'elle s'échelonne entre 10 et 30 % selon le pays.

3. Scénarios institutionnels des relations Nord-CE en l'an 2000

Notre conception des arrangements entre le Nord et la Communauté européenne repose sur des scénarios d'ordre institutionnel dont la valeur heuristique, sur les plans territorial et régional, apparaîtra dans les tableaux synthétiques (partie VI), où ils sont utilisés dans des analyses par recoupements, avec les facteurs d'impact prononcé, géographiques et sectoriels, identifiés dans la présente étude.

Deux scénarios institutionnels ont été conçus.

Il s'agit, d'abord, d'un scénario de confirmation de la tendance, selon lequel le processus d'intégration entre le Nord et la Communauté européenne sera poursuivi afin que, d'ici à l'an 2000, l'élargissement de la Communauté européenne aux pays nordiques soit achevé.

Cependant, il ne faut pas oublier que, dans certains pays nordiques, l'intégration sera de type «EEE», alors que, dans d'autres, elle sera de type «Maastricht». Au moment de rédiger le présent document, il est impossible de déterminer l'issue exacte de ces efforts d'intégration, puisque les négociations d'adhésion des pays nordiques à la Communauté européenne ne sont pas encore achevées. De plus, malgré le «oui» danois au traité de Maastricht et aux décisions prises à Édimbourg le 18 mai 1993, le statut futur de l'Union européenne semble loin d'être arrêté parmi les Douze.

L'établissement d'un scénario suppose un scénario par contraste. Dans le contexte qui nous intéresse, cela est particulièrement prudent, car le scénario par contraste met en valeur ce qui risque d'arriver en cas d'intégration insuffisante, voire de désintégration. Pour mieux comprendre cette éventualité, nous avons délibérément choisi un scénario par fragmentation.

Comme le montre la partie VI, le scénario par fragmentation entraîne pour la Communauté des scénarios régionaux et territoriaux largement négatifs, notamment en ce qui concerne la nouvelle «régionalisation», négatif en ce sens qu'ils auraient un résultat nettement indésirable pour la Communauté dans son ensemble et pour ses zones septentrionales en particulier, alors que le maintien du processus d'intégration aurait été bénéfique.

Dans le présent rapport de synthèse, nous nous abstiendrons de décrire les effets indésirables — et, dans une certaine mesure, relativement évidents — des effets du scénario par fragmentation. Nous nous référons à la partie VI.

4. Impacts régionaux et territoriaux de l'adhésion des pays nordiques sur la Communauté dans l'hypothèse de la poursuite d'une intégration institutionnelle (scénario de confirmation de la tendance)

4.1. Facteurs quantitatifs relatifs

Toute évaluation des impacts potentiels de l'adhésion des pays nordiques sur la Communauté, aux niveaux régional et territorial, doit tenir compte du poids relatif du Nord dans les secteurs importants pour la société par rapport au poids correspondant de la CE.

Dans les secteurs dans lesquels le Nord a peu de pouvoir, voire aucun, il faut partir de l'hypothèse que l'adhésion pourrait avoir peu d'incidence, voire aucune, indépendamment des dispositions institutionnelles futures.

Une analyse statistique comparative tout à fait élémentaire des facteurs quantifiables et des schémas d'interaction révèle comment le Nord se situe par rapport à la CE (nous nous référons à la conclusion de la partie I, p. 69, et au tableau IV.1, p. 94). Il ressort de cette comparaison que le grand avantage des quatre pays nordiques est la possession des atouts suivants:

— vastes zones naturelles vierges, dotées d'écosystèmes extensifs,

— vastes zones inutilisées, non peuplées ou, en tout cas, peu peuplées,

— vastes réserves de pétrole et de gaz naturel,

— vastes réserves de forêts renouvelables,

— vastes réserves de poissons renouvelables,

— potentiel élevé en tant que destination touristique européenne.

En outre, les quatre pays nordiques possèdent d'importantes productions spécialisées et une réelle compétence dans les secteurs industriels suivants:

— énergie (énergie hydroélectrique, énergie thermique et énormes réserves de pétrole et de gaz naturel);

— électrochimie et électrométallurgie (fondées sur l'existence d'un potentiel énergétique local considérable), bois, papier et pâte (en raison de vastes réserves forestières), pêche (grâce aux importantes ressources en poissons), électronique et métaux (reposant sur des techniques de pointe). Les activités de ces secteurs peuvent donner lieu à d'importants complexes industriels;

— industries *off shore* (reposant sur l'extraction du pétrole et du gaz naturel).

Cependant, cette relative supériorité quantitative ne se traduit pas nécessairement par des impacts prononcés identifiables au niveau régional ou territorial, comme nous l'avons déjà expliqué dans le présent rapport de synthèse. Par exemple, il serait bien difficile de dégager de la position de force qu'occupent les pays nordiques sur le plan de l'énergie quelque conséquence significative aux niveaux régional et territorial. C'est pourquoi ce puissant secteur «nordique» n'a pas été pris en considération dans les analyses par recoupements présentées dans la partie VI.

Par ailleurs, un secteur assurément faible dans les pays nordiques tel que l'agriculture peut très bien — précisément en raison de sa faiblesse et de l'absence de compétitivité au niveau international — avoir d'importants impacts au niveau régional sur les territoires voisins de la CE, notamment sur le Danemark, dans l'hy-

pothèse où l'intégration institutionnelle serait maintenue. C'est pourquoi l'impact potentiel de l'agriculture des pays nordiques a été pris en compte dans les tableaux synthétiques de la partie VI.

Tout compte fait, conformément à l'identification de facteurs d'impact potentiel prononcé dans les parties III à V et à leur analyse par recoupements selon le scénario institutionnel de l'intégration exposé dans la partie VI, **nous prévoyons que l'adhésion des pays nordiques aura les impacts décrits ci-après sur le développement régional et sur l'organisation territoriale de la Communauté**.

4.2. Impacts fondés sur les politiques régionales des pays nordiques

Hypothèses: il est peu probable qu'une étroite intégration institutionnelle puisse avoir lieu entre le Nord et la CE si les critères d'éligibilité à l'aide des fonds structurels communautaires ne sont pas partiellement modifiés pour tenir compte des handicaps particulièrement nordiques que représentent une faible population, de longues distances, un climat froid et les avatars de l'agriculture arctique.

Le Nord dispose d'un argument puissant en faveur de la prise en considération de telles préoccupations, un argument qui ne devrait pas manquer de faire une certaine impression sur une Communauté qui a fait de la cohérence européenne un objectif politique essentiel: le fait que, par leurs politiques régionales, les pays nordiques soient parvenus à réduire à quelque 13 % les différences de niveau de vie entre les zones périphériques et les zones fortement développées prouve qu'à d'importants égards ils ont atteint un niveau élevé de cohésion. En raison de la crise budgétaire que subissent actuellement ces pays, il n'est pas certain que ces normes pourront être maintenues; néanmoins, l'Europe pourrait tirer profit de l'expérience nordique.

Impacts: si l'intégration des pays nordiques est de type «EEE», elle demeurera sans effet sur la CE. S'il s'agit d'une intégration de type «Maastricht», elle aura des effets assez marqués et géographiquement bien définis aux niveaux régional et territorial dans les zones communautaires présentant des caractéristiques géographiques ou climatiques correspondant à celles du Nord, la raison étant que ces zones pourraient alors bénéficier d'aides (supplémentaires) des fonds structurels. (À la figure IV.10 de la partie IV, nous avons identifié un certain nombre de bénéficiaires régionaux potentiels: il s'agit de zones situées au centre de l'Espagne, au sud du Portugal et au nord de l'Écosse.)

Dans une variante du scénario de type «Maastricht», les États membres actuels de la CE n'accepteraient que l'agriculture arctique comme bénéficiaire de l'aide des fonds structurels. Dans ce cas, l'adhésion n'aurait pas d'autres effets sur les territoires de la CE, puisqu'il n'y a pas de zones (agricoles) arctiques dans l'Europe des Douze.

4.3. Impacts reposant sur l'émergence d'une zone de croissance nordique

Hypothèses: une troisième zone européenne à forte concentration se constitue dans le Nord grâce à l'énorme potentiel économique propre à un partenariat entre les pays nordiques, la Russie et l'Europe de l'Est en matière de commerce et de gestion des ressources, à une intégration générale européenne et internationale et à un *New Deal* dans la division paneuropéenne du travail par suite du blocage des transports et des coûts élevés, aux niveaux environnemental et économique, d'une nouvelle extension de la «banane européenne».

Impacts: il y aurait une tendance marquée en faveur d'un plus grand intérêt de la CE pour la zone de croissance nordique.

Dans les zones septentrionales de la CE situées en bordure des pays nordiques (essentiellement au Danemark et dans un certain nombre de Länder du nord de l'Allemagne), une intégration plus étroite, avec une nouvelle zone de croissance européenne (Grand Nord), pourrait favoriser une croissance économique soutenue.

Dans les zones centrales de la Communauté, couvertes, en gros, par l'expression populaire de «banane bleue», les charges croissantes de la congestion (retards, pollution, augmentation des coûts en fonction de l'implantation), longuement décrites dans un certain nombre de documents récents de la Commission, pourraient être atténuées.

Dans les régions du sud de la Communauté, les impacts seraient faibles ou négligeables en raison de l'éloignement par rapport au Grand Nord.

En conséquence, l'intégration institutionnelle d'une zone de croissance nordique dans l'Europe ne doit pas être considérée comme un jeu à somme nulle, mais plutôt comme un jeu à somme positive pour l'ensemble de la CE.

4.4. Impacts reposant sur le développement de l'agriculture, de la pêche, du tourisme et des transports dans les pays nordiques

Hypothèses: par suite de l'intégration institutionnelle et de l'abolition d'un certain nombre de régimes de protection nationaux qui en découlera dans les pays nordiques, la concurrence s'accroîtra dans les secteurs précités. L'Islande et la Norvège augmenteront leurs parts sur le marché européen du poisson. Les barrières physiques aux transports en Europe, au sud de Hambourg, accentuées par de nouvelles taxes «vertes» sur les transports, modifieront les conditions de marché en faveur des régions septentrionales et méridionales de la CE.

Impacts: les impacts seront nettement positifs dans les régions agricoles, essentiellement au Danemark et dans le nord de l'Allemagne (comme l'illustre la figure IV.10 dans la partie IV). La position concurrentielle de l'industrie s'améliorera dans les régions septentrionales de la CE qui sont en mesure de développer leurs échanges avec des zones moins congestionnées. La Méditerranée occidentale, destination recherchée pour son ensoleillement, risque de souffrir de l'évolution du goût des populations nordiques pour un tourisme «culturel» et «vert» (ce changement, déjà constaté, favorisera, notamment, certaines régions de Grèce, comme le montre la figure IV.11 dans la partie IV). (Toutefois, cette dernière conséquence n'a pas grand-chose à voir avec l'intégration institutionnelle ou la désintégration de l'Europe.) Les communautés tributaires de la pêche autour de la mer du Nord seraient touchées de plein fouet si l'Islande et la Norvège décidaient de renforcer leur position sur le marché européen.

4.5. Impacts reposant sur la constitution de régions transnationales nordiques

Hypothèses: la région «mer Baltique élargie», la région du Grand Barents et la région «mer du Nord» se constituent en tant que zones intégrées essentiellement au niveau horizontal. Il en va de même pour leurs sous-régions: la région «mer Baltique occidentale», la région «mer Baltique nodale» et la région du Barents nodal (les extensions de ces différentes régions sont indiquées dans la figure V.12 de la partie V).

Deux de ces régions sont assez importantes pour mériter un bref commentaire dans le présent sommaire: la région «mer Baltique élargie» et la région du Grand Barents. La troisième grande région identifiée ci-dessus, la région «mer du Nord», fait l'objet d'une étude d'impact régional indépendante commandée par la CE, et elle n'est donc traitée que sommairement dans le présent rapport.

4.5.1. La région «mer Baltique élargie»

Les États-nations qui composent la région «mer Baltique élargie» sont le Danemark, l'Allemagne, la Pologne, la Lituanie, la Lettonie, l'Estonie, la Russie, la Finlande, la Suède et la Norvège.

Ce groupe dispose, maintenant, d'un organe représentatif: le «Conseil des États de la mer Baltique», créé à Copenhague en mars 1992. L'accord a été signé par les ministres des Affaires étrangères des pays affiliés. De plus, la Commission européenne était représentée à la réunion constitutive.

Parmi les documents établis lors de la conférence constitutive figure un accord portant sur la réalisation d'une série de tâches dans le cadre de la coopération régionale: le développement des infrastructures, le développement économique, la protection des droits de l'homme, l'amélioration de l'environnement, le renforcement des institutions démocratiques et l'intégration ultérieure de tous les États de la mer Baltique dans la CE.

La région «mer Baltique élargie» englobe à la fois les régions septentrionales de l'actuelle CE et les régions frontalières de la Russie, les États baltes et la Pologne. La Finlande a une frontière commune avec la Russie de 1 000 km de long. La Norvège a également une frontière commune avec la Russie dans la partie hautement stratégique la plus septentrionale de la région du Barents.

Abordant la question du niveau inférieur au niveau supérieur, la présente étude identifie deux sous-régions de la mer Baltique: la région «mer Baltique occidentale» et la région «mer Baltique nodale».

La région «mer Baltique occidentale» dispose d'une infrastructure de base reliant un certain nombre de villes et formant une agglomération relativement dense. La croissance se fait le long d'un axe partant de la ville norvégienne de Lillehammer, passant par la capitale norvégienne d'Oslo pour continuer par la ville suédoise de Göteborg, puis, vers le sud jusqu'à Malmö, elle se poursuit par la capitale danoise, Copenhague, avant de se terminer dans les trois ports de mer allemands situés le long de la mer Baltique: Kiel, Lübeck et Rostock, arrière-pays compris.

La densité urbaine élevée de cette sous-région lui confère un important potentiel d'intégration verticale. Le centre de l'agglomération sera probablement le noyau Copenhague-Malmö, qui peut faire valoir une population totale de 2,5 millions d'habitants.

Une condition préalable à ce développement sera la construction du pont ou du tunnel reliant les deux rives de l'øresund entre Malmö et Copenhague, qui constituera pour les deux pays, vers la fin du siècle, la première liaison de transport terrestre fixe.

L'autre sous-région de la mer Baltique, la région «mer Baltique nodale», est un scénario reposant sur un axe qui commence avec l'agglomération Grand Stockholm-Uppsala à l'ouest, traverse la mer Baltique vers l'est (pour couvrir les agglomérations situées le long des côtes du golfe de Finlande: Turku, Helsinki et Saint-Pétersbourg) et vers le sud (pour couvrir Tallin en Estonie et l'agglomération de Riga en Lettonie).

La région «mer Baltique nodale» présente un degré d'urbanisation relativement élevé: les grandes villes comprennent une population totale de 14 millions d'habitants. L'intégration interrégionale rapide sera encore accélérée par les améliorations qu'il est prévu d'apporter aux liaisons routières, ferroviaires, aériennes et maritimes (ferry). Un projet d'autoroute, la «Via Baltica», reliera cette région au continent et aux pays de la CE.

4.5.2. La région du Grand Barents

Les États qui constituent la région du Grand Barents sont tous les pays nordiques, y compris le Danemark, et la Russie. En outre, la CE a signé l'accord relatif à cette région. Les organes politiques supérieurs sont le conseil du Barents et le conseil régional.

La région du Grand Barents comprend sept zones administratives. En Norvège: Norland, Tromsø et Finnmark; en Suède: Norrbotten; en Finlande: la Laponie; en Russie: l'agglomération de Mourmansk et celle d'Arkhangelsk. L'objectif est la création d'une région fonctionnelle sur la base d'une intégration horizontale.

Les tâches que la région doit mener à bien supposent une coopération efficace dans les domaines suivants: utilisation des ressources du pôle, commerce, résolution des problèmes posés par l'environnement et, surtout, sécurité de la région compte tenu de la transition en cours dans la Russie postcommuniste.

Cette dernière question est intéressante dans la mesure où c'est aussi un grand sujet de préoccupation dans les régions communautaires limitrophes des anciens États communistes.

Les principales caractéristiques de la région du Grand Barents peuvent être définies de la manière suivante:

— un vaste territoire,

— un climat rude,

— une population dispersée et une faible densité démographique,

— la coexistence de plusieurs peuples indigènes,

— les fardeaux hérités d'un passé totalitaire,

— la richesse de ressources inexploitées.

Les tâches à assumer pour constituer ces régions, qui seront à la base de la coopération interrégionale et transnationale à l'intérieur de la région du Grand Barents, sont les suivantes:

— exploiter les ressources naturelles,

— développer le commerce et les relations commerciales,

— résoudre les problèmes qui menacent l'environnement,

— maintenir la paix et la sécurité après la désintégration de l'ancienne Union soviétique, voire un éventuel effondrement de la Russie.

Vers l'an 2000, l'intégration pourrait se renforcer et les alliances et réseaux interrégionaux se développer. Une variante de ce scénario est la cristallisation d'une sous-région, la région du Barents nodal, constituée autour des grandes villes de Mourmansk, d'Arkhangelsk, de Kirkenes-Vadsø et de Tromsø, car ces zones à forte concentration humaine seront bien placées pour constituer des centres d'exploitation des ressources et de transformation des matières premières ainsi que de grandes escales le long des voies maritimes qui pourraient alors s'ouvrir vers le Nord-Est.

Impacts de la constitution transnationale de régions dans la zone nordique

La constitution de régions dans la zone nordique aura des effets positifs considérables dans les zones septentrionales de la CE. Concrètement, ces effets positifs se feront sentir dans toute la région allant du Jütland et de la Zélande au Schleswig-Holstein et au Mecklembourg-Poméranie-Occidentale, où le développement économique et la concentration urbaine seront accrus.

En particulier, les régions du nord de l'Allemagne devraient tirer parti du projet «Via Baltica» (la liaison routière entre les États baltes et l'Allemagne du Nord), qui leur permettra d'avoir des liens plus étroits avec la région «mer Baltique nodale», en plus des avantages que leur procurera sans aucun doute le projet de construction d'un pont entre le sud de la Suède et la région de Copenhague, qui ouvrira d'autres accès vers le sud (voir les figures V.15 et V.16 dans la partie V).

Les régions communautaires situées tout autour de la mer du Nord, du nord du Jütland à Bruges et à Aberdeen, bénéficieront d'une région «mer du Nord» plus intégrée. Le Jütland devrait surtout tirer profit de la réalisation du projet «West Link» entre le sud-est de la Norvège et le nord du Jütland ainsi que de la réalisation du projet «Nordic Link» entre le port suédois de Göteborg et le port danois de Frederikshavn.

Les impacts régionaux dans la CE des développements potentiels à prévoir dans la région du Grand Barents sont difficiles à prévoir. Ils seront sans aucun doute d'ordre macroterritorial, c'est-à-dire qu'ils porteront plutôt sur l'orientation générale et sur l'organisation macroterritoriale de l'ensemble de la Communauté.

Quelques observations importantes doivent être faites au sujet de la région du Grand Barents: si la Norvège et/ou la Finlande devenaient membres de la CE à part entière, les frontières orientales de ces deux nations constitueraient la seule frontière terrestre de la Communauté avec les territoires de l'ancienne Union soviétique. Le fait que, bien que ni l'autorité qui a pris l'initiative du Grand Barents (la Norvège) ni aucun des autres États dont le territoire participe à ce travail de collaboration ne soient encore membres de la CE, la Commission a, néanmoins, officiellement décidé de s'y joindre donne une idée des conséquences macroterritoriales potentielles d'une telle éventualité.

Bien entendu, le souhait politique général de stabiliser et de normaliser la situation de cette région potentiellement explosive est important non seulement pour les pays nordiques et les gouvernements centraux et locaux de la Russie, mais aussi pour la CE. Mais, ce qui est peut-être tout aussi important, c'est que la région du Barents nodal — et notamment la mer de Barents et la presqu'île de Kola — est la région européenne potentiellement la plus riche en ressources naturelles. En d'autres termes, **elle présente une importance stratégique considérable,** comme nous l'avons souligné dans la partie V du présent rapport de synthèse.

Les analystes et les décideurs nationaux et communautaires ne sont probablement pas sans avoir remarqué que la tentative de constitution d'une région du Barents est une **expérience européenne unique de coopération régionale directe** entre des pays qui pourraient prétendre adhérer à l'UE et un pays (la Russie) qui ne le peut pas pour le moment, mais avec lequel il est essentiel de renforcer des liens mutuellement bénéfiques. C'est ainsi que la constitution d'une région fonctionnelle dans la zone du Barents pourrait servir de laboratoire paneuropéen et aboutir à des résultats pratiques susceptibles d'être utilisés dans des tentatives semblables le long des frontières orientales et méridionales de la CE.

Naturellement, certaines des observations qui viennent d'être faites s'appliquent aussi aux tentatives de constitution de régions transnationales actuellement effectuées dans la région «mer Baltique élargie».

5. Conclusion

Pour être plus clair, il importe de souligner qu'en dépit de certaines contraintes un élargissement réussi de la CE vers le Nord ouvrira d'immenses possibilités, mais conduira aussi à de nouveaux engagements européens allant au-delà de la simple intégration de 18 millions de Nordiques. L'intégration institutionnelle du Nord dans la CE aura donc tendance à accentuer l'orientation macroterritoriale de l'Europe sur l'Europe du Nord.

La construction d'une «Europe sans frontières», c'est-à-dire l'achèvement du processus d'intégration institutionnelle entre le Nord et la CE, stimulera sans aucun doute la constitution de régions à cheval sur plusieurs États-nations. Par ailleurs, comme le souligne le rapport de synthèse, la réalisation d'un «scénario européen par fragmentation» ralentira très probablement ce processus de constitution des régions, ce qui s'explique, surtout, par le fait que, de plus en plus, l'accent sera mis sur les centres nationaux et sur leur efficacité pour régler et/ou monopoliser les activités sur le territoire national.

Part I

A comparison between the Nordic countries and the European Community

1.1. Introduction

Although they share a common European culture and economic system, there are many differences between the Nordic countries and the present European Community of 12 nations. The purpose of Part I is to highlight those differences which are relevant to regional problems and regional policies. It should be noted that statistical data on Denmark do not include the autonomous areas of Greenland and the Faeroe Islands which are not members of the Community.

1.2. Nature and environment

Table I.1
Population: area and density, 1990

	Population (1 000)	Area (1 000 km²)	Inhabitants (per km²)
Belgium	9 948	30.5	326
Denmark	5 135	43.1	119
Germany (W + E)	79 070	356.9	222
Greece	10 046	132.0	76
Spain	38 925	504.8	77
France	56 612	544.0	104
Ireland	3 499	68.9	51
Italy	57 576	301.3	191
Luxembourg	378	2.6	146
Netherlands	14 891	41.9	356
Portugal	10 337	92.0	112
United Kingdom	57 297	244.1	235
Finland	4 969	338.1	16
Iceland	254	103.0	3
Norway	4 233	323.9	14
Sweden	8 527	450.0	21

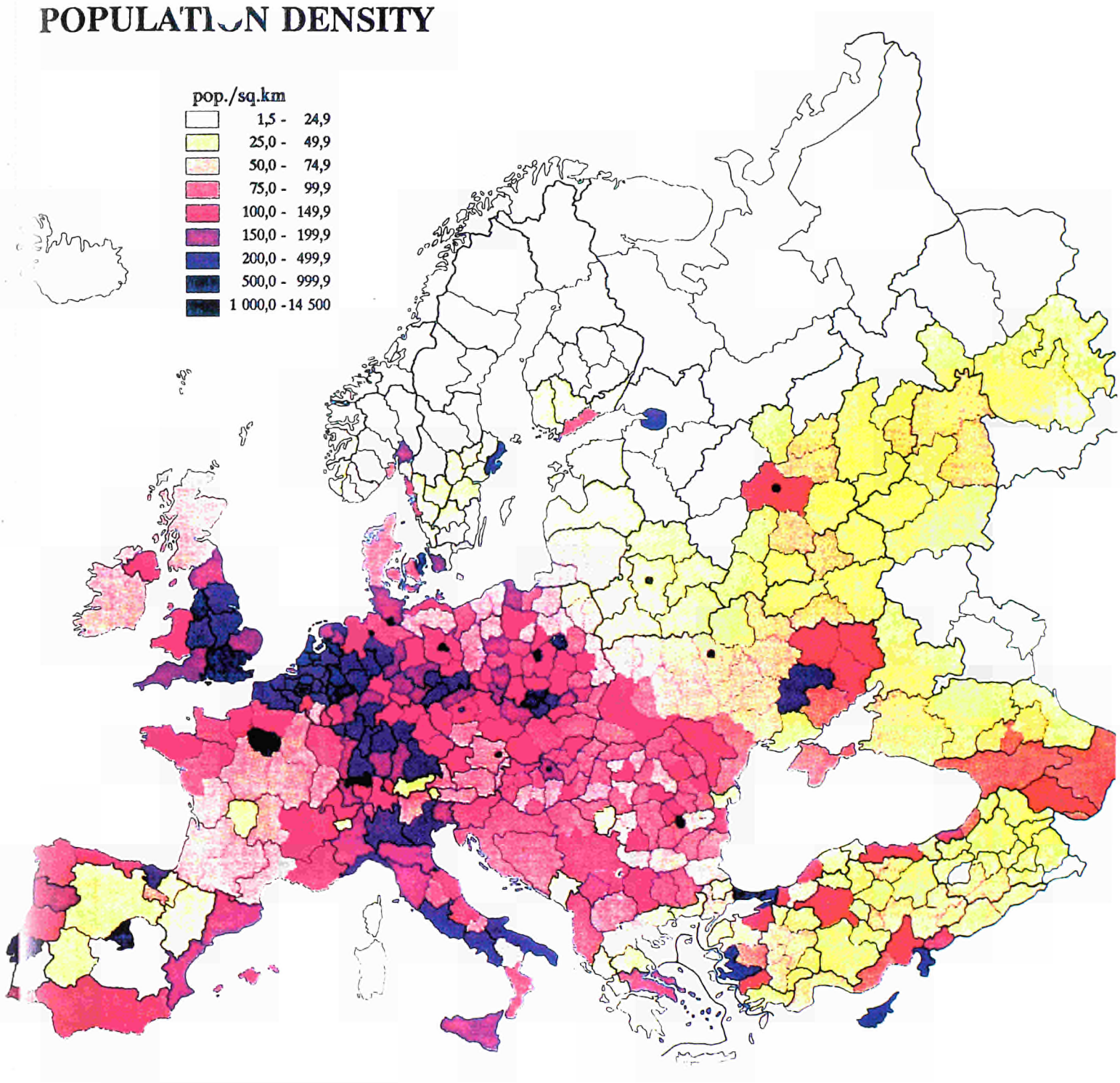
Source: Eurostat.

FIGURE I.1: The Greater Norden superimposed on Europe

Source: Nord Revy.

Norden's territorial predicament is amply illustrated if one superimposes these vast areas on a map of Europe. It becomes immediately apparent why infrastructural links and regional cohesion are primary Nordic concerns.

FIGURE I.2: Population density, 1991



Source: Statistics Finland, Tietoaika, 1991.

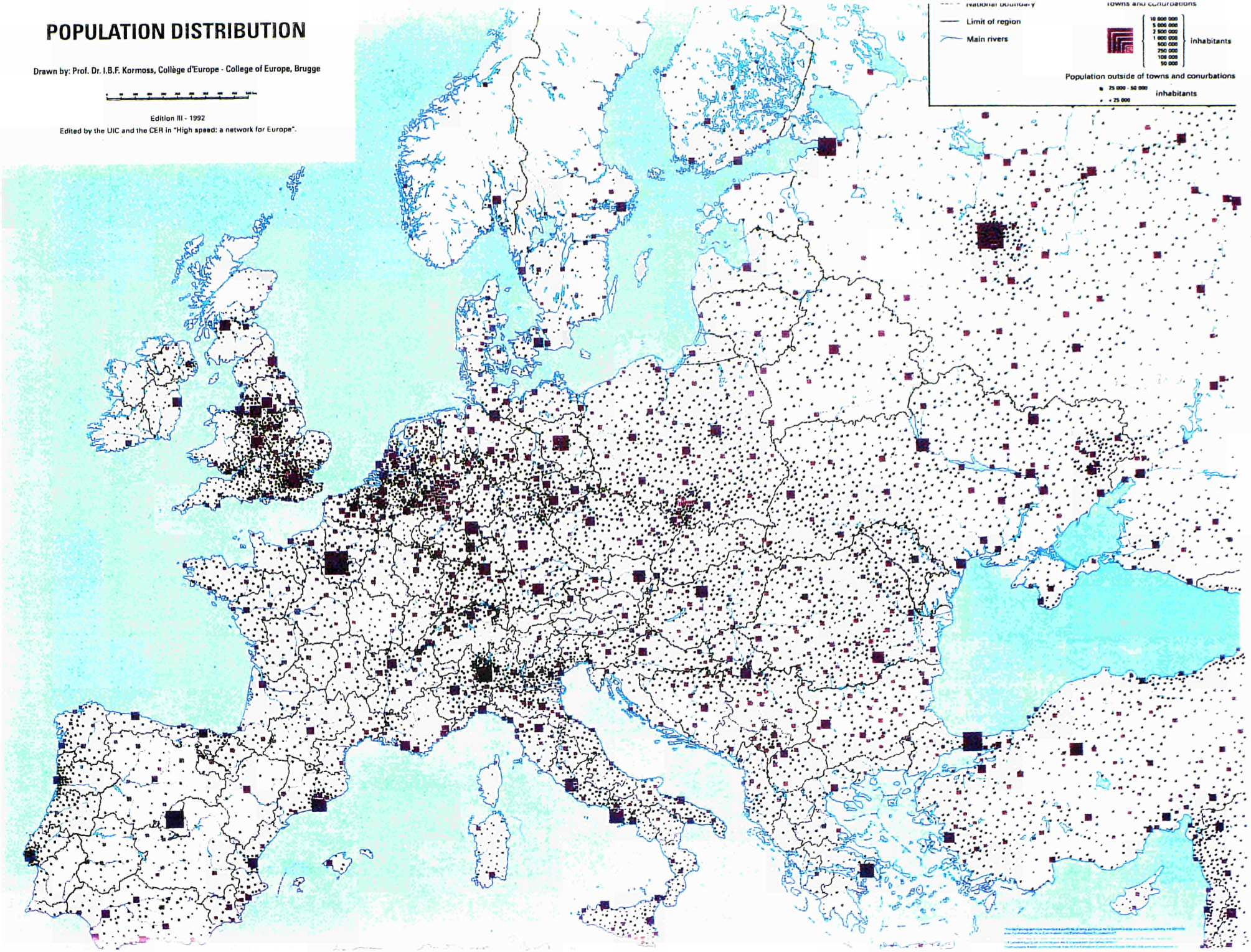


FIGURE I.3: Population distribution, 1992

As illustrated by Table I.1 and Figure I.1, Finland, Iceland, Norway (except Svalbard) and Sweden comprise a large surface, 1 215 000 km^2 against the 2 367 000 km^2 of the European Community. Due to mountains, stony soils and hard climates, most of this surface is not suited for economic activities. Hence the population is only 18 million against the 344 million of the Community, and the average density is only 15 persons per km^2 against the 145 in the Community.

As shown in Figure I.2, the majority (70 %) of the Nordic population is concentrated to the south of a line from Bergen to Tampere. But even in this southern part of the Nordic countries, the population density is low by European standards, 44 persons per km^2, comparable only to the interior of the Iberian peninsula. To the north of this line, the average density is only six per km^2, in the Community matched only by the Scottish Highlands and Islands. Also shown in Figure I.3 is the close connection between population density and urban development.

Most of Iceland and Norway consists of mountainous uplands. In Finland and Sweden, most of the surface lies lower and is more even, but rocky or stony. Good agricultural soils are found only in valleys and coastal plains, especially in southern Sweden.

The summer climate is cool compared to most of the Community, but sufficiently warm for agriculture, except in the mountains and in the northernmost regions.

The winter climate is even more different from that of the Community. While mean winter temperatures in the Community lowlands are over 0° (and in the Mediterranean and Atlantic regions over 5°), they are under 0° in most parts of the Nordic countries and below −10° in substantial areas. Western Norway and southern Iceland are milder, but are among the world's most wet and stormy areas.

Due to topography, soil and climate, the use of land in the Community is very different from that of Nordic countries, as shown in Table I.2.

Table I.2
Land use, 1987

(1 000 km^2)

	Agriculture	Permanent grass	Forest	Other uses	Total
Belgium	8	6	6	11	31
Denmark	26	2	5	10	43
Germany (W + E)	124	57	103	72	357
Greece	39	53	26	14	132
Spain	204	103	157	40	505
France	194	119	147	91	552
Ireland	10	47	3	10	70
Italy	122	49	67	62	301
Luxembourg	1	1	1	0	3
Netherlands	9	11	3	14	37
Portugal	28	5	36	23	92
United Kingdom	70	116	23	36	244
Finland	24	1	232	81	338
Iceland	0	23	1	79	103
Norway	9	1	83	231	324
Sweden	30	6	280	135	450

Source: FAO production yearbook.

While 35 % of the Community's surface is devoted to agriculture and 24 % to permanent grass, this is the case only for 5 and 3 % of the area of the Nordic countries. As a contrast, 49 % of the latter — most of Finland and Sweden — is forest-covered, against 24 % of the Community area. Finally, 43 % of the Nordic area is in the 'other uses' category — mainly tundra, barren mountain land and glaciers. Only 16 % of the Community area is in this category, and here it is mainly urban land.

The Nordic countries have several natural resources which will be described in more detail below in Section 1.5 on 'Economic structure'. The North Atlantic is rich

in fish, although over-fishing is a constant threat. Norway has a large share of North Sea oil and natural gas, and there are several deposits of ores. All Nordic countries and especially Norway are able to produce considerable amounts of hydroelectric power. Due to its volcanic geology, Iceland can supplement by geothermal electricity production and heating by hot springs.

Air pollution is modest in the Nordic countries, compared to most of the Community. This is due to the low density of population and industry, as well as to the prevailing westerly winds which bring in relatively clean air from the North Atlantic.

However, the Nordic countries do have some environmental problems. Acid rain has extinguished fish life in many lakes and rivers, as well as caused considerable damage in forests. Due to the low temperatures, vegetation is not able to recover if spoiled by sheep or tourists, which is a severe problem in Iceland. The disastrous pollution in the Kola peninsula is a serious danger to north-eastern Finland and Norway.

As an environment for human beings, the Nordic countries have both positive and negative sides when compared to the European Community. The climate is severe, and in mid-winter nights are long (24 hours to the north of the polar circle), but the air is clean, and there are large areas of unspoilt nature.

1.3. Human resources

As already mentioned, the population of the Nordic countries amounts to only 18 million, or 5% of the 1990 Community population.

The share of the population which participates in the labour force varies between the countries. There are minor variations in the participation rates of men, but the main differences are found between the female participation rates, which are shown in Table I.3.

Table I.3 shows that the labour participation rate of women is higher in the Nordic countries than in all EC countries except Denmark. The rate is still quite low in the Mediterranean countries and Ireland. The differences in GDP per capita, which will be discussed later, are partly due to these differences in female participation rates. Work which in the Mediterranean countries is done by women inside the households and thus not counted in the GDP (e.g. child care), is in the Nordic countries often done in the 'formal economy' (e.g. in kindergartens) and hence included in the GDP.

Table I.3
Participation rates among women 15 to 64 years old, 1990

Belgium	52.4
Denmark	78.4
Germany (W) (1989)	55.8
Spain	40.9
Greece (1988)	43.5
France	56.6
Ireland	38.9
Italy	44.5
Luxembourg (1988)	47.2
Netherlands	53.0
Portugal	61.3
United Kingdom	65.1
Finland	72.9
Norway	71.2
Sweden	81.1

Source: OECD labour force statistics.

The educational level is illustrated by Table I.4, which shows the composition of the population in the 20 to 64 age bracket, according to the highest level attained.

Another way to measure the educational level is to look at the school enrolment ratio at the 'third school level', as mapped in the Unesco statistical yearbook. It shows that in 1989, 31 to 43% of the young people were enrolled in Finland, Norway and Sweden as well as in most Community countries, whereas school attendance was only 18 to 28% in Greece, Ireland, Italy, Portugal and the United Kingdom.

Table I.4
Educational level, 1989 *(%)*

	Primary school	Secondary school plus short further education	University (3 years)
Belgium	63	30	7
Denmark	43	47	10
Germany (W)	22	68	10
Spain	80	10	9
France	50	40	7
Ireland	62	30	7
Italy	74	20	6
Netherlands	45	49	6
Portugal	93	4	4
United Kingdom	35	54	9
Finland	42	48	10
Norway	35	52	11
Sweden	33	55	12

Source: Special report on producer services.

The Nordic educational level equals that of the best Community countries, and is clearly higher than in the lower end of the Community (Table I.4).

Culturally, the Nordic countries are closely related to one another. This is largely due to the fact that the three Scandinavian languages (Danish, Norwegian and Swedish — the latter also the mother tongue of 6% of the Finns) are so similar that they are mutually understandable. Icelandic and Faeroese have the same Norse origin but are today rather distant from the three Scandinavian languages. Finnish is totally different, being related to the Samic (Lapponian) minority language in northern Norway, Sweden and Finland, to Estonian, and very remotely to Hungarian. Greenlandic is another totally different language, virtually the same as the north Canadian and Alaskan Inuit language. While not very religious today, the Nordic countries have all been heavily influenced by Lutheranism.

1.4. Production and employment

Table I.5
GDP per capita, 1990, by purchasing power parities

Index EUR 12 = 100	
Belgium	107
Denmark	111
Germany	118
Greece	55
Spain	82
France	113
Ireland	72
Italy	107
Luxembourg	136
Netherlands	107
Portugal	58
United Kingdom	110
Finland	104[1]
Iceland	122
Norway	104[1]
Sweden	110[1]

[1] New Eurostat figures published November 1993. Full comparability, however, cannot be guaranteed.
Source: Eurostat, 1992. Special report, 'Norden as periphery'.

The Nordic countries have a high GDP per capita, compared to many EC countries. This is especially the case when GDPs are compared by exchange rates, but — due to the high Nordic price level before the 1992 devaluation — less pronounced when compared by purchasing power, as in Table I.5.

The regional differences in GDP per capita are shown in Figure I.6. It should of course be remembered that regional GDP estimates are rather questionable, and that Danish and Norwegian statistical authorities now refuse to make them. In the Nordic countries as well as in the Community, the per capita GDP is highest in the major cities and lower in rural regions.

Another indicator of the economic level is unemployment which, however, varies much from year to year. Although international comparisons of unemployment are subject to criticism, there is no doubt that for long periods unemployment rates have been lower in the Nordic countries than in the Community. Nordic economic policies have given high priorities to employment, partly by very active retraining of redundant workers (Sweden), partly by expansionist policies which, in the Norwegian case, could be financed by income from North Sea oil. However, in recent years, these policies ran into an impasse which made dramatic braking necessary — in the Finnish case due to the collapse of the important Soviet export market. Hence, unemployment has increased to levels comparable to those of the Community countries (Table I.6 and Figure I.7). The most serious aspect of Nordic unemployment is that it continues to grow. Seasonally adjusted unemployment rates for February 1993 were as follows: Finland 18%, Norway 5.8%. For Sweden there are at present no seasonally corrected figures for 1993. For the entire Community Eurostat estimates the seasonally adjusted figure for March 1993 to be 10.2%.

Table I.6
Unemployment rates (% of labour force)

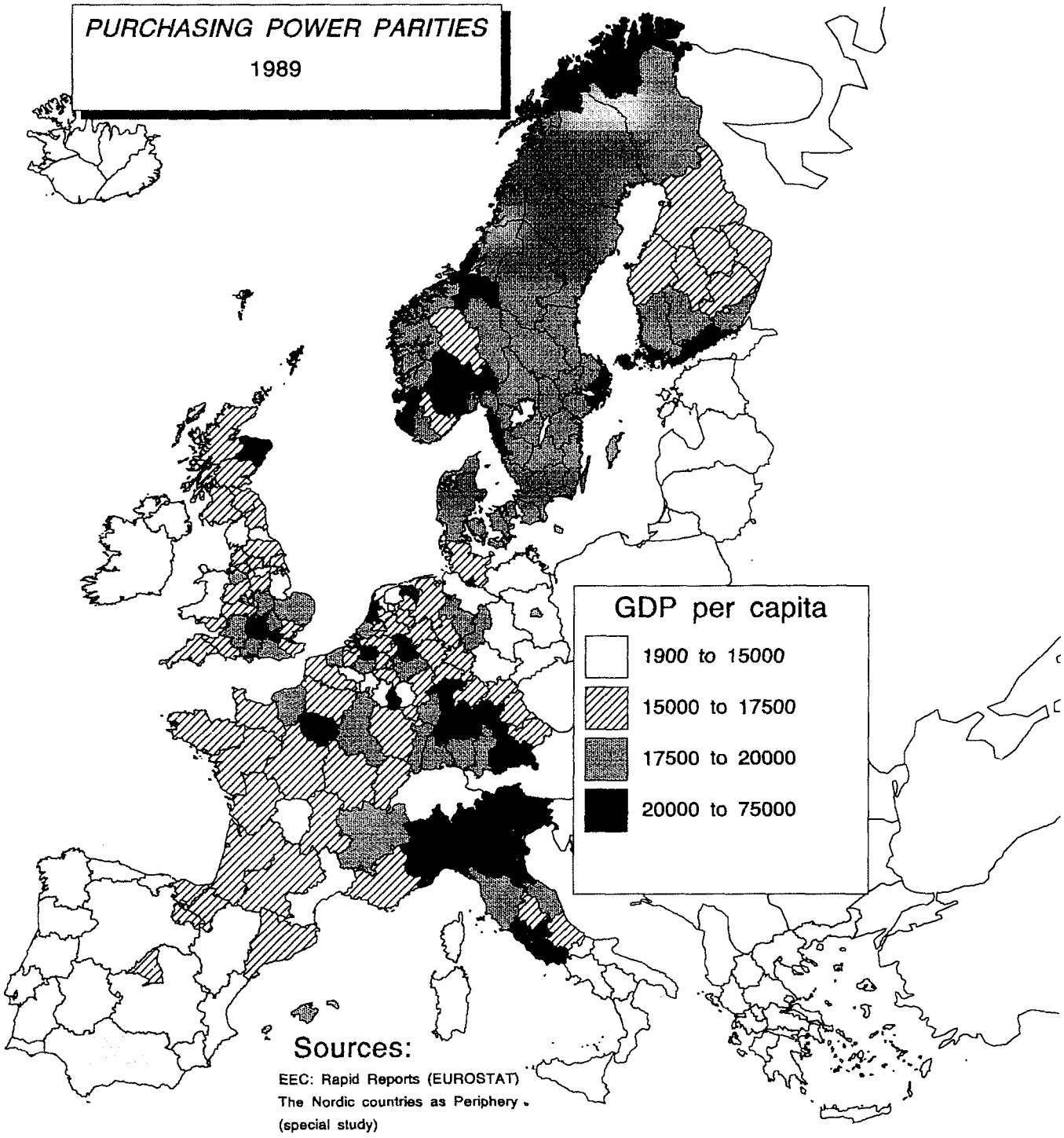
	1991	1992
Belgium	7.5	8.2
Denmark	8.9	9.5
Germany (W)	4.2	4.5
Greece	7.7	n. a.
Spain	16.3	18.0
France	9.5	10.0
Ireland	16.2	18.8
Italy	10.0	10.2
Luxembourg	1.6	1.9
Netherlands	7.0	6.7
Portugal	4.1	4.8
United Kingdom	9.1	10.8
Finland	7.6	13.1
Norway	4.7	5.4
Sweden	2.6	4.8

NB: The East European countries SU, AU and CIS are not included.

*New figures from Eurostat, published November 1993, indicate another pattern of the Nordic regional PPS adjusted to new country standards, see Table I.5. Full comparability, however, cannot be guaranteed.

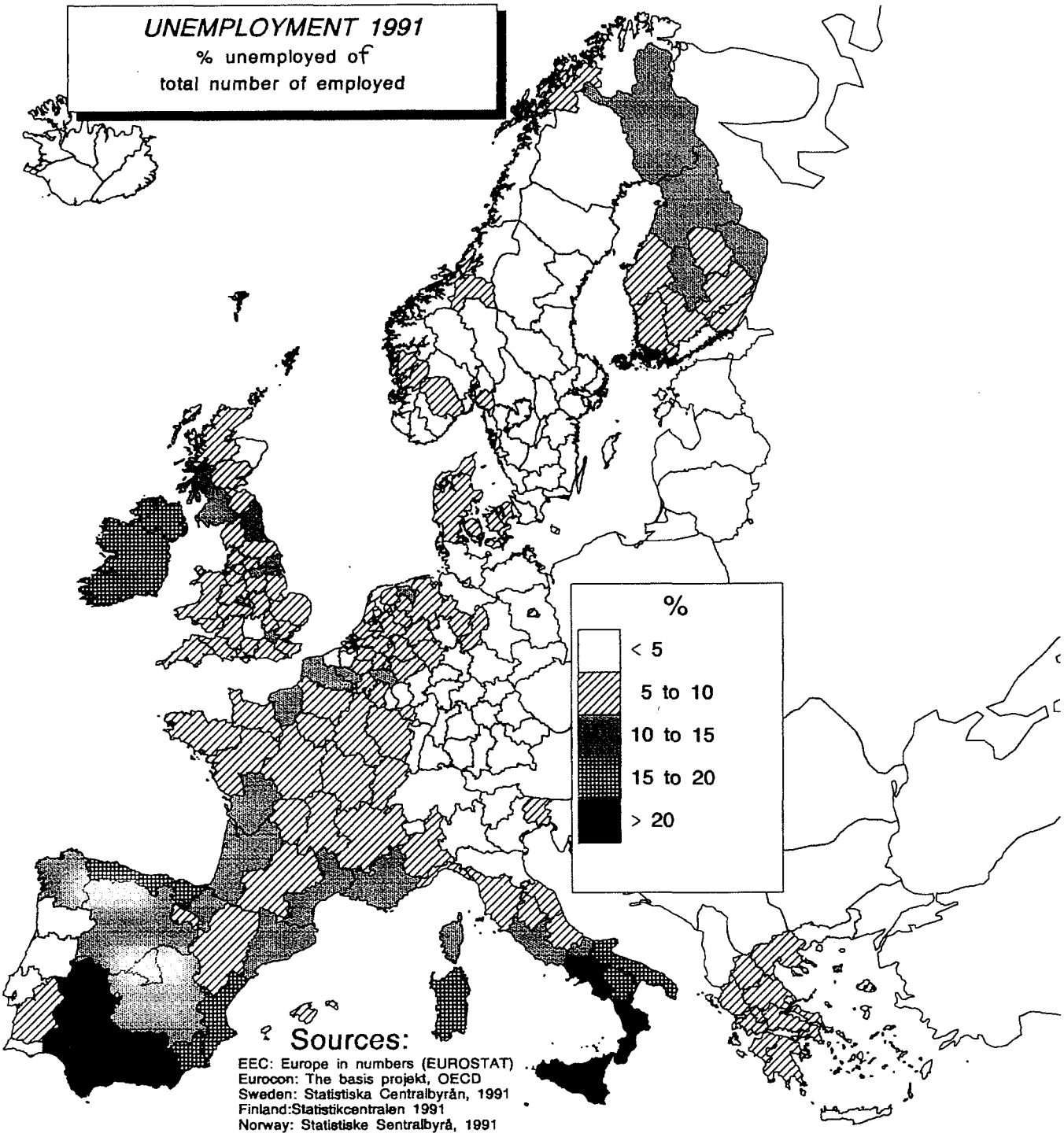
Source: Eurostat 1992. Special report, 'Norden as periphery', own calculation.

FIGURE I.6: Purchasing power parities, 1989



The Eastern European Countries, SU, AU and CIS are not included

FIGURE I.7: Unemployment, 1991



The Eastern European Countries, SU, AU and CIS are not included

1.5. Economic structure

The overall composition of the economy in the Nordic and the EC countries may be illustrated by Table I.7.

The overall structure of the economies of Norden is roughly similar to that of the northern and central Community countries, though all Nordic countries except Sweden tend to have slightly larger primary sectors in terms of employment. This is partly due to the large fishing sectors in Iceland and Norway, partly to the low productivity in Finnish and Norwegian agriculture.

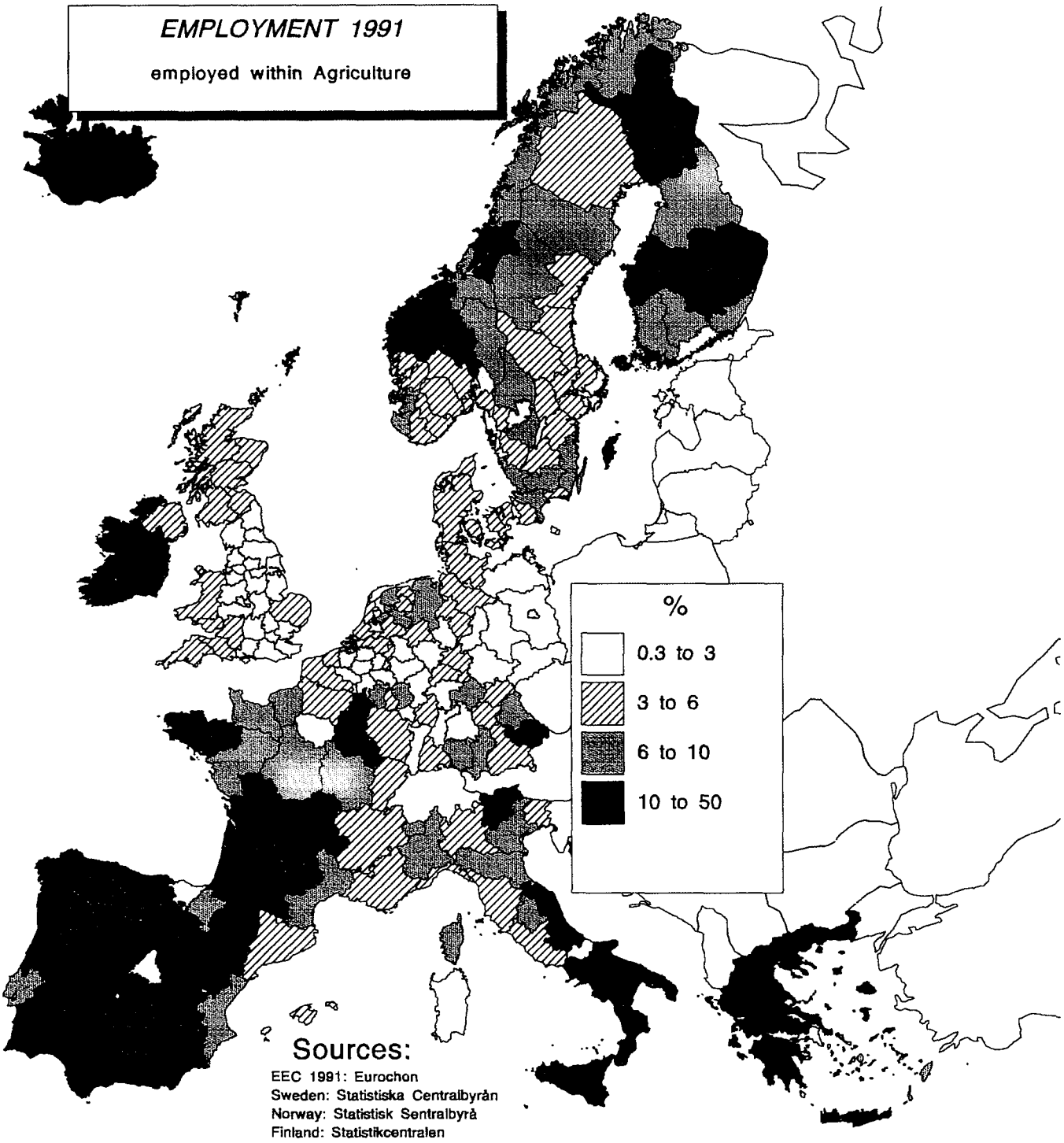
If we go into more details, there are, of course, several differences as regards the economic structure. In a number of sectors, one or more Nordic countries are relatively important producers, compared to the Community. We shall first focus on these sectors.

Table I.7
Employment shares in main sectors *(% of total employment)*

		Primary	Secondary	Tertiary
Belgium	1991	3	30	67
Denmark	1990	5	28	67
Germany (W+E)	1990	4	40	56
Greece	1990	24	26	50
Spain	1991	11	33	56
France	1991	6	30	64
Ireland	1990	15	29	56
Italy	1991	9	32	59
Luxembourg	1991	3	29	68
Netherlands	1991	4	25	70
Portugal	1991	17	34	49
United Kingdom	1991	2	31	67
Finland	1990	8	31	61
Iceland	1988	10	30	60
Norway	1990	6	24	69
Sweden	1990	3	29	68

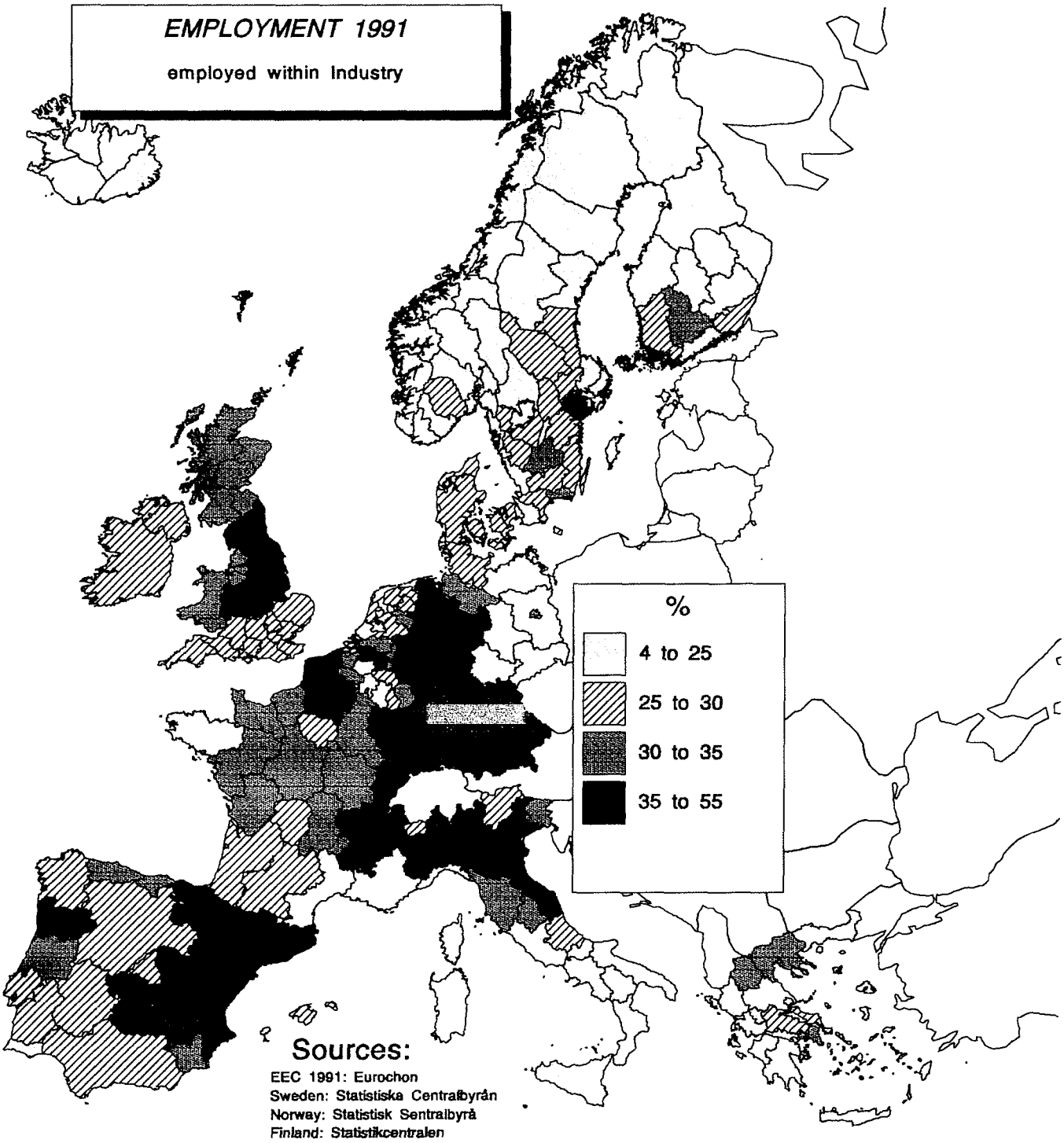
Sources: Eurostat and Nordic statistical offices.

FIGURE I.8: Employment, 1991, employed within agriculture



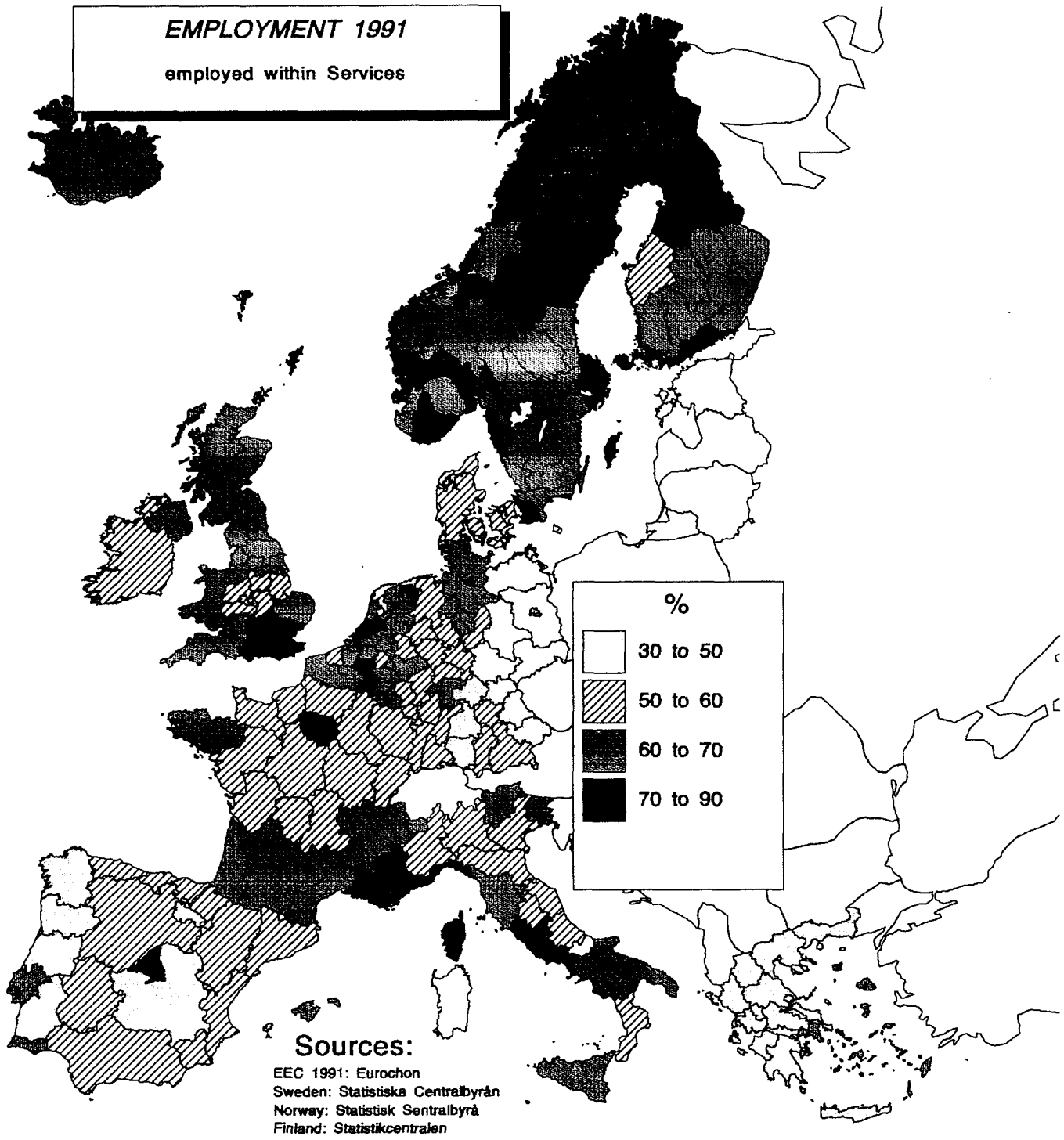
The Eastern European Countries, SU, AU and CIS are not included

FIGURE I.9:



The Eastern European Countries, SU, AU and CIS are not included

FIGURE I.10:



The Eastern European Countries, SU, AU and CIS are not included

Table I.8
Fishery and fish products

	Fish catches average 1986-88[1] (1 000 t)	Employees[1] (100)	Fish products, 1988[2] (1 000 t)
Belgium	41	13	18.5
Denmark	1 842	73	210.9
Germany (W)	205	19	76.4
Greece	128	402	14.8
Spain	1 419	891	360.6
France	876	180	211.5
Ireland	246	79	138.2
Italy	563	n.a.	174.7
Netherlands	433	33	69.7
Portugal	381	389	80.1
United Kingdom	919	224	214.0
Faeroe Islands	366	23	60.6
Finland	127	n.a.	29.7
Greenland	107	80	30.7
Iceland	1 684	62	270.4
Norway	1 897	200	388.5
Sweden	227	n.a.	44.0

Sources: [1]Special report, 'The interaction between the development of Nordic and European fishing regions'; [2]UN, *Yearbook of industrial statistics.* Includes frozen, salted, dried, smoked, and tinned fish.

Fisheries is one of them, as will be seen from Table I.8.

The fish catches of the Nordic countries correspond to 62% of those of the Community. Iceland and Norway are among the most important European fishing nations, alongside Denmark (which has particularly large catches of fish for non-food uses), France, Spain, and the United Kingdom. As a comparison of the first two columns hints, productivity is high in Nordic fishing, compared to the Mediterranean. It should be noted that for Iceland, the Faeroe Islands, and Greenland, fish and fish products are by far the most important export goods and thus absolutely vital for their economies. In many regions, it is virtually the only economic activity. A good deal of the Nordic catches are treated in the Danish fish industry.

The forestry and wood industry is another important sector in several Nordic countries, as illustrated by Table I.9.

Table I.9
Wood and wood products, 1989

	Roundwood (million m^3)[1]	Wood products (1 000 m^3)[2]	Wood pulp (1 000 t)[2]	Paper (1 000 t)[2]
Belgium-Luxembourg	4.8	3 265	482	1 500
Denmark	2.1	1 170	70	462
Germany (W)	35.3	18 979	2 418	15 275
Greece	3.3	715	18	367
Spain	17.2	4 521	1 667	5 254
France	43.7	13 040	2 135	9 858
Ireland	1.5	366	n.a.	63
Italy	8.8	5 419	709	8 066
Netherlands	1.3	520	164	3 895
Portugal	10.3	2 424	1 482	1 175
United Kingdom	6.5	3 643	594	6 296
Finland	46.3	9 024	9 118	11 186
Norway	11.0	2 915	2 224	2 165
Sweden	55.7	12 393	10 052	12 343

Sources: [1]UN, *Statistical yearbook.* [2]UN, *Yearbook of industrial statistics.*

The production of wood in the Nordic countries roughly equals that of the Community, and Sweden and Finland are among the leading European nations as regards wood products and paper production. In many regions, it is the most important economic activity.

The production of hydroelectric power as well as of oil and natural gas is an extremely important sector in Norway, which has a significant share of the North Sea oil field and prospects of further production in the North Atlantic and Barents Sea (see Table I.10).

Table I.10
Production of hydroelectricity, oil and natural gas

	Hydroelectricity, 1990 (1 000 GWh)[1]	Crude oil, 1991 (1 000 barrels/day)[2]	Crude oil, 1989 (1 000 t)[3]	Natural gas, 1989 (petajoules)[3]
Belgium	1	n.a.	0	0
Denmark	0	150	5.5	105
Germany (W)	18	n.a.	5.4	493
Greece	2	n.a.	0.9	6
Spain	26	n.a.	1.0	61
France	57	n.a.	3.2	121
Ireland	1	n.a.	0	85
Italy	35	n.a.	4.7	594
Netherlands	0	n.a.	3.4	2 264
United Kingdom	7	1 895	87.4	1 724
Finland	11	n.a.	0	0
Iceland	4	n.a.	0	0
Norway	121	1 905	72.6	1 292
Sweden	73	n.a.	0	0

Sources: [1]International Energy Agency, *Energy statistics of OECD countries.* [2]Special report, 'Nordic energy and European integration'. [3]UN, *Yearbook of industrial statistics.*

Nordic production of hydroelectric power is bigger than that of the Community. The Norwegian production of oil is now — with further increases since 1991 — almost as large as that of the Community as a whole. It tends to be exported in the crude state. Its main shore base is Stavanger on the south-west coast, but the administration and R&D functions tend to locate in Oslo.

The Nordic countries have, when compared to the Community, some strongholds in the ore mining and metallurgical sector, as shown in Figure I.11 and Table I.11. They have two origins: partly local ores, in particular iron ores in central and northern Sweden and partly aluminium production from imported raw materials, using the hydroelectric energy in Norway and Iceland.

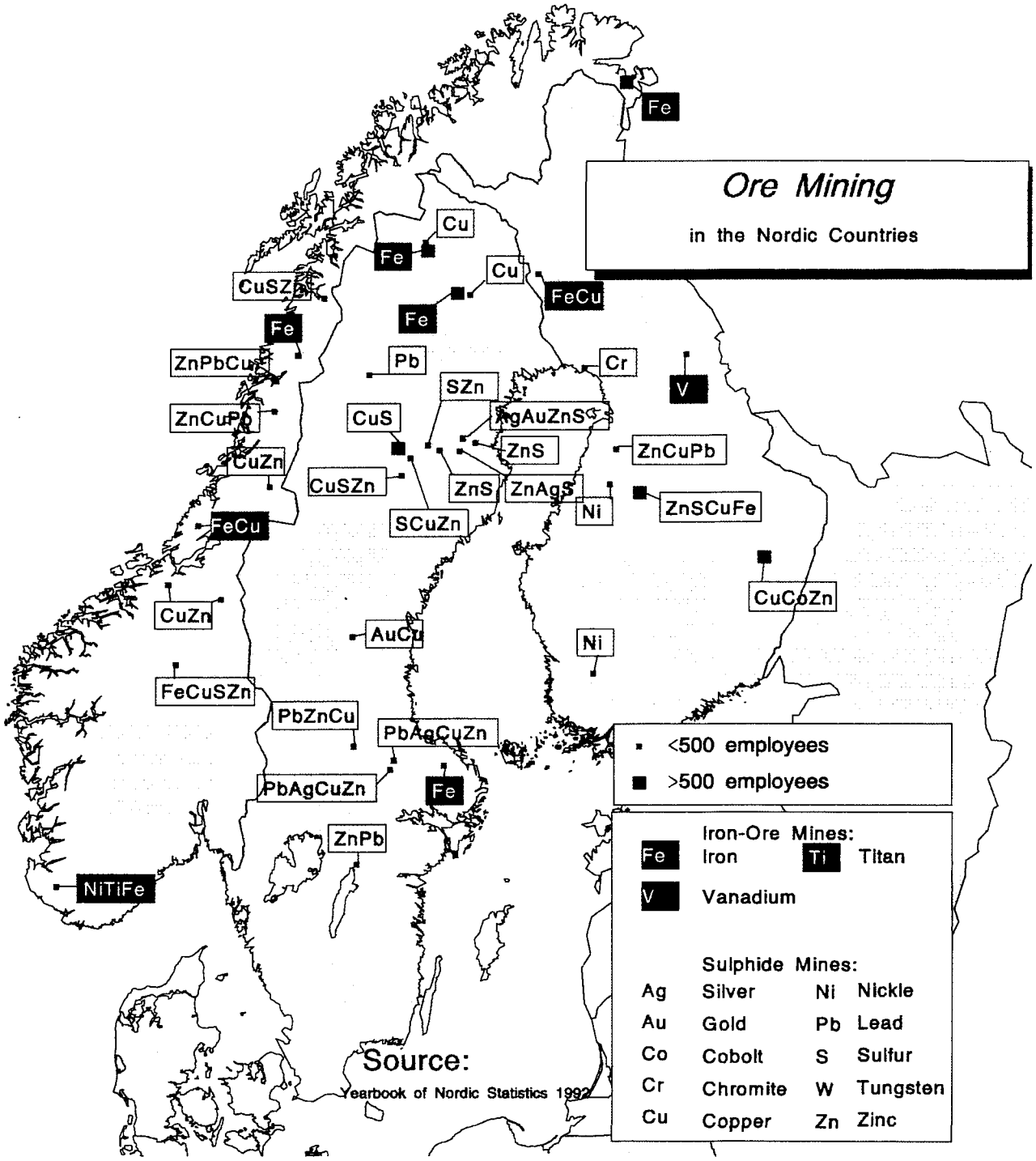
Table I.11
Ore mining and metal production (per 1 000 employees)

	Iron ore 1988 (1 000 t)[1]	Crude steel 1989 (million t)[1]	Aluminium 1989 (1 000 t)[1]	Nickel unwrought 1989[1] (1 000 t)
Belgium	0	11.0	0	54
Denmark	0	0.6	0	0
Germany (W)	n.a.	41.1	0	272
Greece	460	1.0	16	n.a.
Spain	1 925	12.6	0	55
France	3 225	19.3	9	129
Ireland	0	0.3	0	n.a.
Italy	0	25.6	0	158
Luxembourg	0	3.7	0	14
Netherlands	0	5.7	0	30
Portugal	8	0.7	0	13
United Kingdom	60	18.7	26	114
Finland	405	2.9	13	17
Iceland	0	0	0	1
Norway	1 681	0.7	55	21
Sweden	12 670	4.7	0	49

Source: [1] UN, *Yearbook of industrial statistics.*

Sweden has been a major producer of iron ore and steel. However, in the Nordic countries iron mining and steel production have been reduced even more than in the European Community.

FIGURE I. 11:


Ore Mining
in the Nordic Countries
Fe
Cu
Fe
Cu
FeCu
CuSZn
Fe
Fe
ZnPbCu
Pb
Cr
V
SZn
ZnCuPb
CuS
AgAuZnS
ZnS
ZnCuPb
CuZn
CuSZn
ZnS
ZnAgS
Ni
ZnSCuFe
FeCu
SCuZn
CuCoZn
CuZn
AuCu
Ni
FeCuSZn
PbZnCu
PbAgCuZn
PbAgCuZn
Fe
ZnPb
NiTiFe
<500 employees
>500 employees
Iron-Ore Mines:
Fe Iron
Ti Titan
V Vanadium
Sulphide Mines:
Ag Silver
Ni Nickle
Au Gold
Pb Lead
Co Cobolt
S Sulfur
Cr Chromite
W Tungsten
Cu Copper
Zn Zinc
Source:
Yearbook of Nordic Statistics 1992

The manufacturing sector is of course extremely heterogeneous, and all countries have a number of subsectors where they are competitive. For instance, the Nordic countries have strong 'design' branches in furniture, textiles and glassware. Statistically, they are spread over various sectors. However, if one looks at the main sectors, the following are strong in the Nordic countries.

Metal products and machines (including means of transport and electronics) are major manufacturing sectors everywhere, not least in the Nordic countries. Data from selected sectors are shown in Table I.12.

Table I.12
Metal products and machines

	Passenger cars, 1989 (1 000)[1]	Lorries, 1989 (1 000)[1]	Electric heaters, 1988 (million)[1]	Television receivers, 1988 (million)[1]	Employees in metal production and machine industries, 1988[2] (1 000)
Belgium	0	0	0	0.9	252
Denmark	0	0	0	0.1	195
Germany (W)	4 536	274	2.3	3.7	4 246
Greece	0	0	0.1	0	n.a.
Spain	1 696	407	2.0	1.6	826
France	3 415	577	3.7	2.0	1 837
Ireland	0	0	0	0	n.a.
Italy	1 971	240	0	0	1 578
Luxembourg	0	0	0	0	8
Netherlands	110	12	0	0	361
Portugal	0	0	0.1	0.4	205
United Kingdom	1 308	327	0	3.0	2 372
Finland	37	1	0.4	0.5	153
Iceland	0	0	0	0	3
Norway	0	0	1.2	0	144
Sweden	384	82	0	0.4	431

Sources: [1]UN, *Yearbook of industrial production.* [2]Eurostat, *Enterprises in Europe.*

Sweden in particular, with a number of large firms, has a leading position in mechanical industries, mainly located in the central part of the country: SKF, L. M. Ericsson, Volvo, Saab, Electrolux, ABB, Alfa-Laval, etc. Shipyards used to be a strong Nordic sector, too, but, as in the Community, a substantial reduction has taken place.

The shipping sector has traditionally been strong in Norway. After a weak period, new regulations have persuaded the companies to return from convenience flag countries, see Table I.13.

The Norwegian shipping activity was earlier spread along the coast, but is now largely concentrated in Oslo.

Table I.13
Merchant fleets, 1989

(1 000 grt)

Belgium	2 044
Denmark	4 963
Germany (W+E)	4 467
Greece	21 324
Spain	3 962
France	4 413
Ireland	167
Italy	7 602
Netherlands	3 655
Portugal	726
United Kingdom	7 646
Finland	944
Iceland	183
Norway	15 597
Sweden	2 167

Source: UN, *Statistical yearbook.*

Public services (mainly education, health and social welfare services) should finally be mentioned as a sector where the Nordic countries are strong compared to most Community countries. If the tax burden is high in the Nordic countries, this is not so much due to income transfers, but mainly to the amount and quality of services provided to the citizens. In recent years, the 'crisis of the welfare state' has meant a stop to the general increase of these services, in some subsectors even a reduction, but they remain on a high level, see Table I.14 (it should be noticed that these data include private personal services).

Table I.14
Employment in community and personal services

	Employment in public administration, education, R&D, health, social welfare, organizations, personal services *(% of total employment)*	
Belgium	1989	36.9
Denmark	1990	35.7
Germany (W)	1989	27.8
Greece	1988	18.7
Spain	1990	23.5
France	1990	31.2
Ireland	1989	28.7
Italy	1990	28.6
Luxembourg	1990	29.5
Netherlands	1990	35.1
Portugal	1990	23.3
United Kingdom	1990	30.4
Finland	1990	29.9
Iceland	1988	29.1
Norway	1990	36.2
Sweden	1990	37.4

Source: ILO, *Yearbook of labour statistics.*

In some Nordic as well as in some EC countries, the public sector percentage of the local economy is higher in some peripheral regions than elsewhere, in spite of the concentration of central government administration, major research institutions, etc. in the largest cities. This geographical distribution reflects the use of public services as a tool of regional policy.

In some sectors the Nordic countries are weak compared to the Community countries. This is the case in

agriculture and the food industry. The high primary employment in the Nordic countries, shown by Table I.7, does not reflect this weakness, partly because it includes fishery employment, partly because labour productivity is rather low in Finland and Norway, as shown in Table I.15.

Table I.15
Productivity and employment in agriculture and the food industry

	Relative labour productivity in primary sector[1]	1 000 employees in food and beverage industry, 1988
Belgium	0.71	95
Denmark	0.62	97
Germany (W)	0.62	768
Greece	0.46	n.a.
Spain	0.33	321
France	0.47	579
Ireland	0.58	n.a.
Italy	0.34	354
Luxembourg	0.67	4
Netherlands	0.83	152
Portugal	0.31	120
United Kingdom	0.52	494
Finland	0.54	67
Norway	0.45	52
Sweden	0.70	73

[1] Rest of the economy in each country = 100.
Sources: Special report, 'The Nordic countries and the agriculture and the agro-industry in the EC'; Eurostat, *Enterprises in Europe.*

Southern Sweden forms an exception in the Nordic countries, with a relatively stronger agricultural and agro-industrial sector. It should be observed, however, that in some regions in Iceland, Norway, the Faeroe Islands and Greenland, fish processing is the only manufacturing industry.

The textile, clothing and leather industry is another sector where the Nordic countries are generally weak, as shown in Table I.16.

Table I.16
Employment in the textile, clothing and leather industry, 1988 *(1 000 employees)*

Belgium	97
Denmark	31
Germany (W)	535
Greece	n.a.
Spain	352
France	445
Ireland	n.a.
Italy	997
Luxembourg	1
Netherlands	n.a.
Portugal	375
United Kingdom	657
Finland	41
Iceland	2
Norway	10
Sweden	23

Source: Eurostat, *Enterprises in Europe.*

This sector is relatively strongest in southern Europe. Competition may be expected from Eastern Europe, for example, Poland, if and when import barriers are reduced.

Table I.17
Employment in the chemical industry, 1988

	(1 000 employees)
Belgium	73
Denmark	22
Germany (W)	614
Greece	n.a.
Spain	190
France	308
Ireland	n.a.
Italy	262
Luxembourg	1
Netherlands	91
Portugal	40
United Kingdom	341
Finland	24
Iceland	1
Norway	15
Sweden	n.a.

Source: Eurostat, *Enterprises in Europe.*

In the chemical industry as a whole, Germany dominantes Europe.

Turning away from manufacturing industries, construction, trade, transport, and personal services are less interesting in this connection, because they mainly serve domestic markets in more or less efficient ways. (Of course there are exceptions, such as the above-mentioned shipping sector). However, a couple of interesting sectors remain to be scrutinized.

Tourism is generally weak in the Nordic countries (though locally it may be important), as well as in the northern Community countries, compared to the Mediterranean countries, as illustrated by Figure I.12.

The chemical industry may also be mentioned as a weak Nordic sector compared to the Community, as illustrated by Table I.17.

In recent years, the dominance of mass tourism to the Mediterranean coast seems to have diminished in favour of more varied and individualized types of tourism, among which the cultural attractions of Central European countries is noted. It is possible that the relatively unspoilt environments of the Nordic countries may cause an increase there, but will hardly turn them into centres of massive tourism.

Finally, producer services, including finance, multinational head offices and international organizations is a sector where the position of the Nordic countries is slightly weaker than the countries in the core of Western Europe (the 'blue banana'), but stronger than that of the south European countries see Table I.18.

FIGURE I.12: International tourist receipts and expenditures, 1989 (USD million)

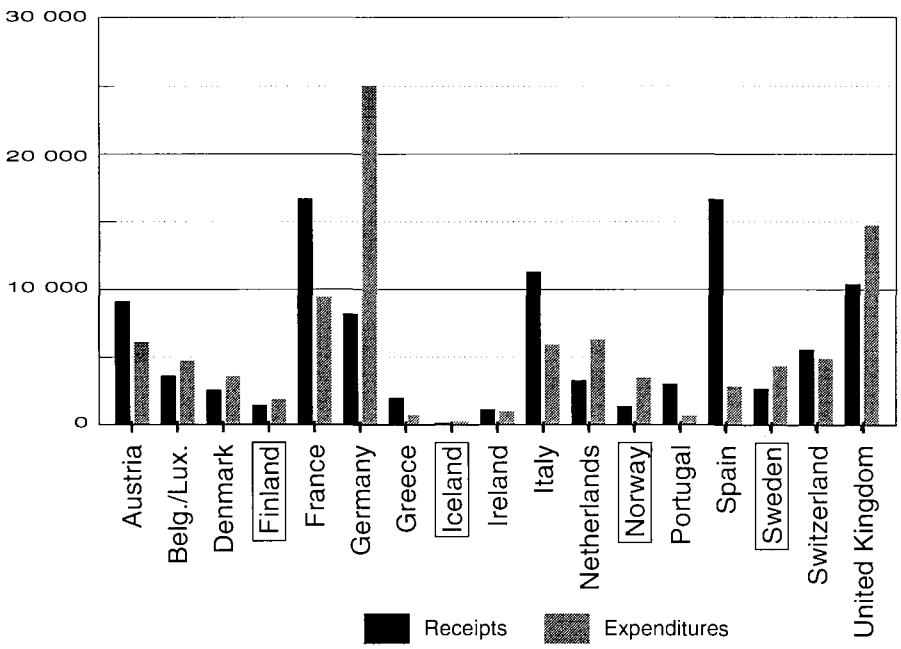


Table I.18
Employment in finance and business services (% of total employment)

Belgium	1989	8.5
Denmark	1990	9.2
Germany (W)	1989	7.9
Greece	1988	4.4
Spain	1990	5.4
France	1990	9.9
Ireland	1989	4.8
Italy	1990	4.2
Luxembourg	1990	8.9
Netherlands	1990	10.2
Portugal	1990	4.4
United Kingdom	1990	11.7
Finland	1990	8.2
Iceland	1988	7.9
Norway	1990	7.4
Sweden	1990	8.6

Source: ILO, *Yearbook of labour statistics.*

1.6. Transport and telecommunications

The low population densities in the Nordic countries, compared to the Community, imply of course that internal distances are long. The peripheral position of the Nordic countries also implies long distances to the European centre of gravity. These facts, combined with the hard climate and topography explain why economic development in the Nordic countries has lagged behind the most advanced European countries. In the 19th century, the Nordic countries were still a poor part of Europe.

Inevitably, accessibility is still less easy than in the centre of Europe. But the difference is far less pronounced than one or two centuries ago, due to modern means of transport and telecommunications. Undoubtedly, this fact is part of the explanation for the present relative prosperity in Norden.

Of course, low population densities mean that the per capita investments in transport infrastructure must be high if one wishes to reach a certain standard. Per 1 000 km^2, there are fewer motorways, railways and airports in the Nordic countries than in the Community — see Table I.19 and Figures I.13 and I.14. Still, per million inhabitants, the transport infrastructure of the Nordic countries is good. In particular, the network of international and domestic airlines — well suited to overcome long distances — is dense. And Sweden is constructing an ambitious system of high-speed railways.

FIGURE I.13:

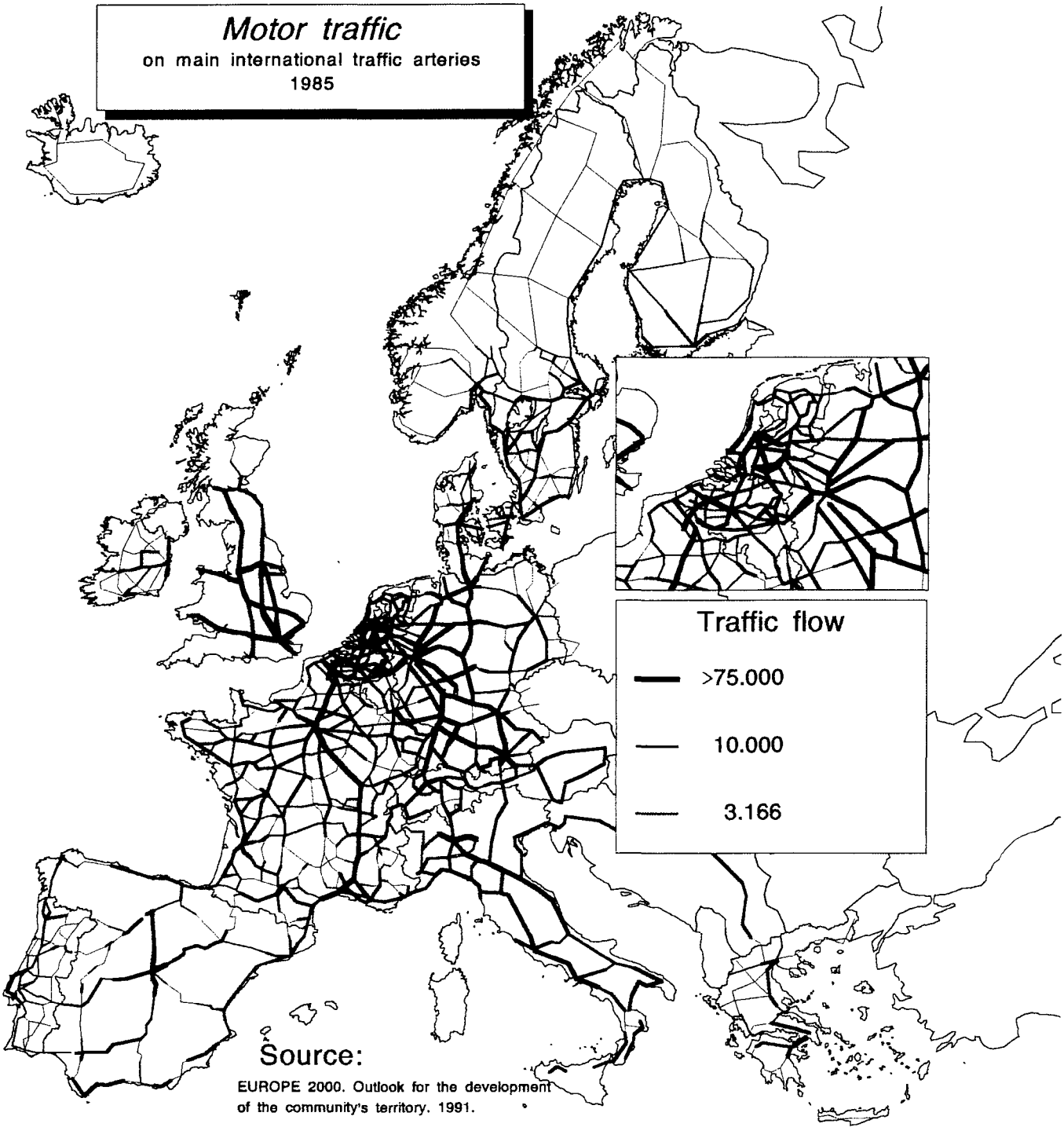

Motor traffic
on main international traffic arteries
1985
Traffic flow
>75.000
10.000
3.166
Source:
EUROPE 2000. Outlook for the development
of the community's territory. 1991.

FIGURE I.14:

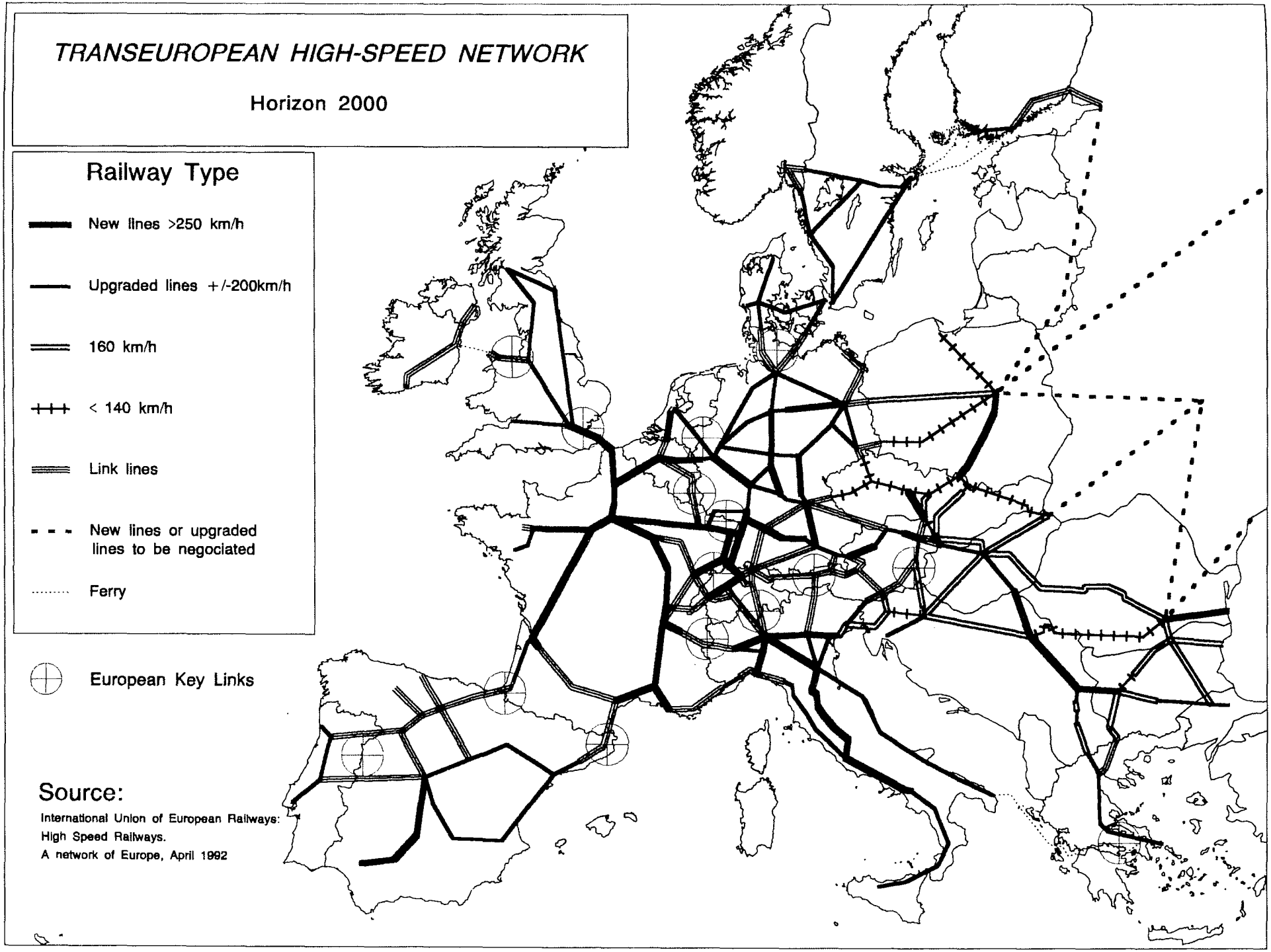

TRANSEUROPEAN HIGH-SPEED NETWORK
Horizon 2000
Railway Type
New lines >250 km/h
Upgraded lines +/-200km/h
160 km/h
< 140 km/h
Link lines
New lines or upgraded lines to be negociated
Ferry
European Key Links
Source:
International Union of European Railways:
High Speed Railways.
A network of Europe, April 1992

Table I.19
Transport, 1990

	Motorways[1]			Operated railways[1]			Scheduled airlines 1989	
	100 km per 1000 km²		per million inhabitants	100 km per 1000 km²		per million inhabitants	million km flown[2]	km per inhabitant
Belgium	16	52	161	35	113	352	69	6.9
Denmark	7	16	136	23	53	448	54	10.5
Germany (W+E)	88	25	111	440	123	556(W)	339	5.4
Greece	1	1	9	25	19	249	54	5.4
Spain	24	5	62	143	28	367	188	4.8
France	53	10	94	341	62	602	386	6.8
Ireland	0.3	0.4	9	19	27	54	42	12.0
Italy	62	21	108	196	65	340	175	3.0
Luxembourg	1	0	206	3	104	714	4	10.6
Netherlands	21	57	141	28	76	188	158	10.6
Portugal	3	3	29	31	34	300	52	5.0
United Kingdom	32	13	56	169	69	295	578	10.1
Finland	2	1	45	59	17	1187	55	11.1
Iceland	0	0	0	0	0	0	17	66.9
Norway	4	1	94	40	12	945	82	19.4
Sweden	9	2	106	113	25	1325	114	13.5

[1] *Source:* UN annual bulletin of transport statistics.
[2] National and international flights. SAS flights have been allocated to Denmark (2/7), Norway (2/7) and Sweden (3/7). *Source:* UN statistical yearbook.

It should be added that shipping and ferries form an important mode of transport in the Nordic countries which may help circumvent the north German bottleneck for road transport between northern and central Europe.

Telecommunications provide another means of overcoming distances, being well suited to low density countries (see Table I.20).

Table I.20
Telephones and telefax, 1990

	Telephone main lines per 1000 inhabitants	Telefax per 1000 inhabitants
Belgium	401	15
Denmark	566	20
Germany (W)	432	11
Greece	385	1
Spain	324	4
France	482	4
Ireland	279	10
Italy	387	3
Luxembourg	483	n.a.
Netherlands	462	n.a.
Portugal	226	1
United Kingdom	444	13
Finland	534	15
Iceland	496	n.a.
Norway	502	20
Sweden	681	20

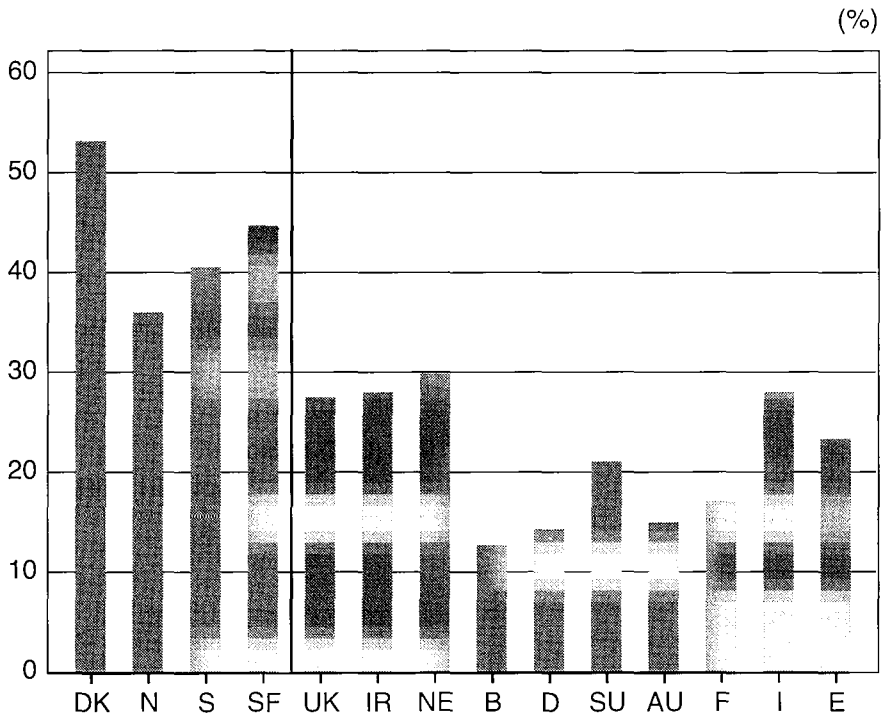
The Nordic countries are generally as well equipped with telephones and faxes per inhabitant as the best Community countries — Sweden even better.

1.7. Political system and subsidiarity

In broad terms, the political systems in the Community and the Nordic countries are similar, both being based on democratic principles. As already mentioned, the public sectors are relatively large in the Nordic welfare model, but fundamentally the economies are market based.

A special characteristic of the Nordic countries is the high degree of devolution of power to regional and local governments. One might say that the subsidiarity principle is carried very far — most decisions are delegated to the lowest possible level. The distribution of real power is of course difficult to measure, but the relative size of regional and local government expenditure (Figure I.15) may serve as an indicator. Its share of total public expenditure is clearly higher in the Nordic countries than in the Community countries (except Denmark).

FIGURE I.15: Municipal spending as a percentage of total public expenditure, 1989



Source: OECD.

Regarding Norden's realization of the subsidiarity principle, it should also be pointed out that the Nordic countries have a long-standing tradition of self-governing areas. In some respects the Åland Islands form an autonomous part of Finland. Similarly, the Faeroe Islands and Greenland have high degrees of autonomy from Denmark, even including some foreign-policy matters, for example, the two home rule areas have chosen to remain outside the Community.

It may be concluded that economically and politically the Nordic countries are similar to the most advanced Community countries. Peripherality does not in this case imply economic backwardness. However, the low population densities, long distances and hard climate create regional problems which are different from the problems of low per capita production characteristic of the Objective 1 regions of the Community of Twelve.

1.8. Flows between Norden and the European Community

In what regions will the impact of increased integration between the Nordic countries and the European Community be heavy, in what regions will it be insignificant? That depends on the amount of trade and other

kinds of interaction between the regions. Only regions which have much to do with one another are likely to exert and to be subjected to significant impacts. Hence, in this section we shall examine the trade flows and other types of interaction between the Nordic and the Community countries.

Unfortunately, statistical data on flows and interactions are — except for trade — much scarcer than data on static characteristics. In particular, almost no regional data are available on international flows. Hence, we shall mainly discuss trade and other interactions between nations, and only in a few cases focus on individual regions.

International trade in goods

Figures I.16, I.17, I.19, and I.21 illustrate the trade in goods between the Nordic and the EC countries in 1990, in million US dollars.

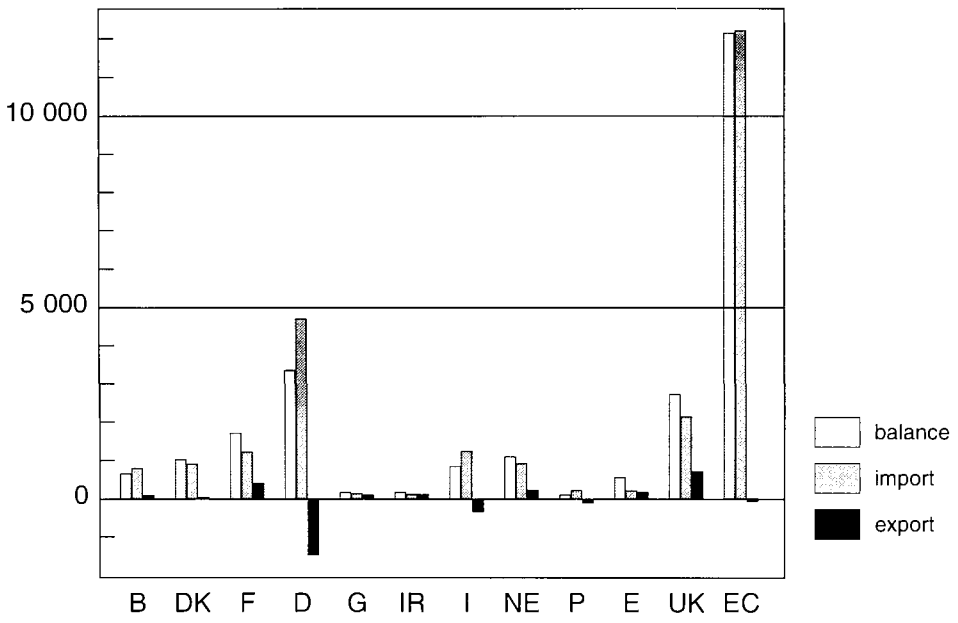
Finland's main trading partner in the Community is (western) Germany, followed by the United Kingdom, France, Italy, the Netherlands and Denmark.

Iceland's main trading partner in the Community is the United Kingdom, followed by (western) Germany, Denmark, the Netherlands and France. Icelandic exports mainly consist of fish, and the EC importers are shown in Figure I.18. A special feature are the rather large Icelandic exports to Spain and Portugal.

Norway's main trading partner in the Community is the United Kingdom, followed by (Western) Germany, the Netherlands, France and Denmark. The export of fish to the Community is shown in Figure I.20. The Danish import is primarily destined for processing from the fish industry.

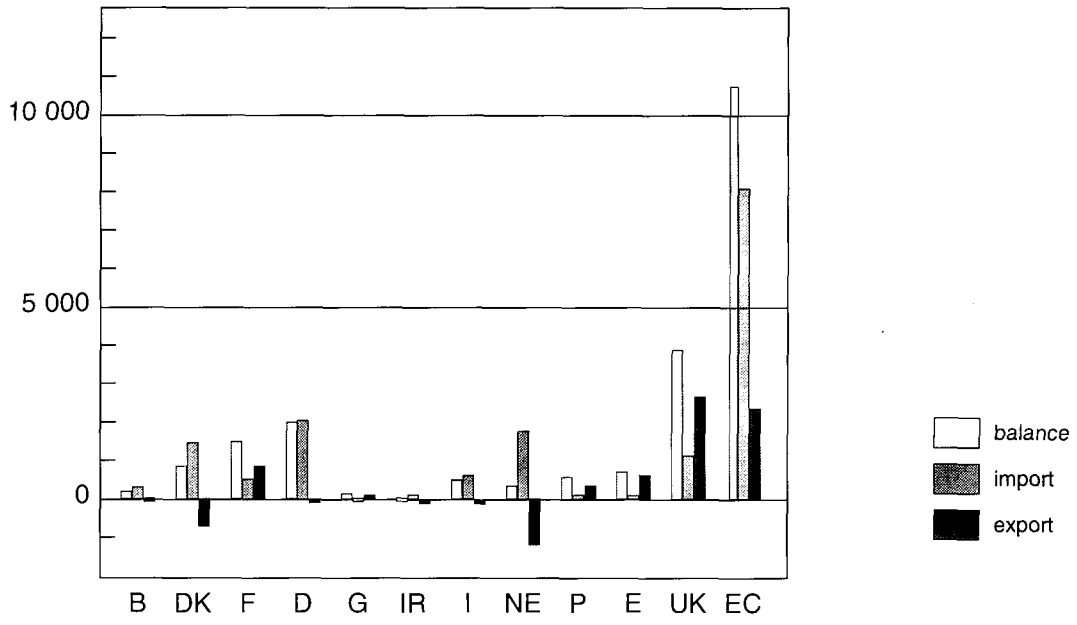
Sweden's main trading partner in the Community is (Western) Germany, followed by the United Kingdom, Denmark, France, the Netherlands and Italy.

FIGURE I.16: Finland's trade with the European Community in 1990 (USD million)



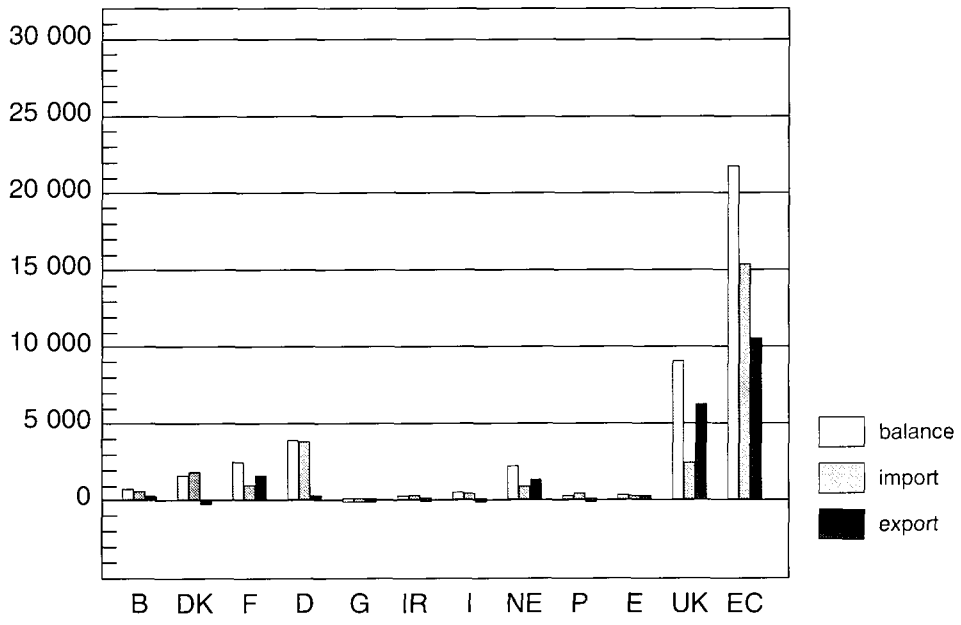
Source: Nordic statistical yearbook.

FIGURE I.17: Iceland's trade with the European Community in 1990 (USD million)



Source: Nordic statistical yearbook.

FIGURE I.19: Norway's trade with the European Community in 1990 (USD million)



Source: Nordic statistical yearbook.

FIGURE I.18:

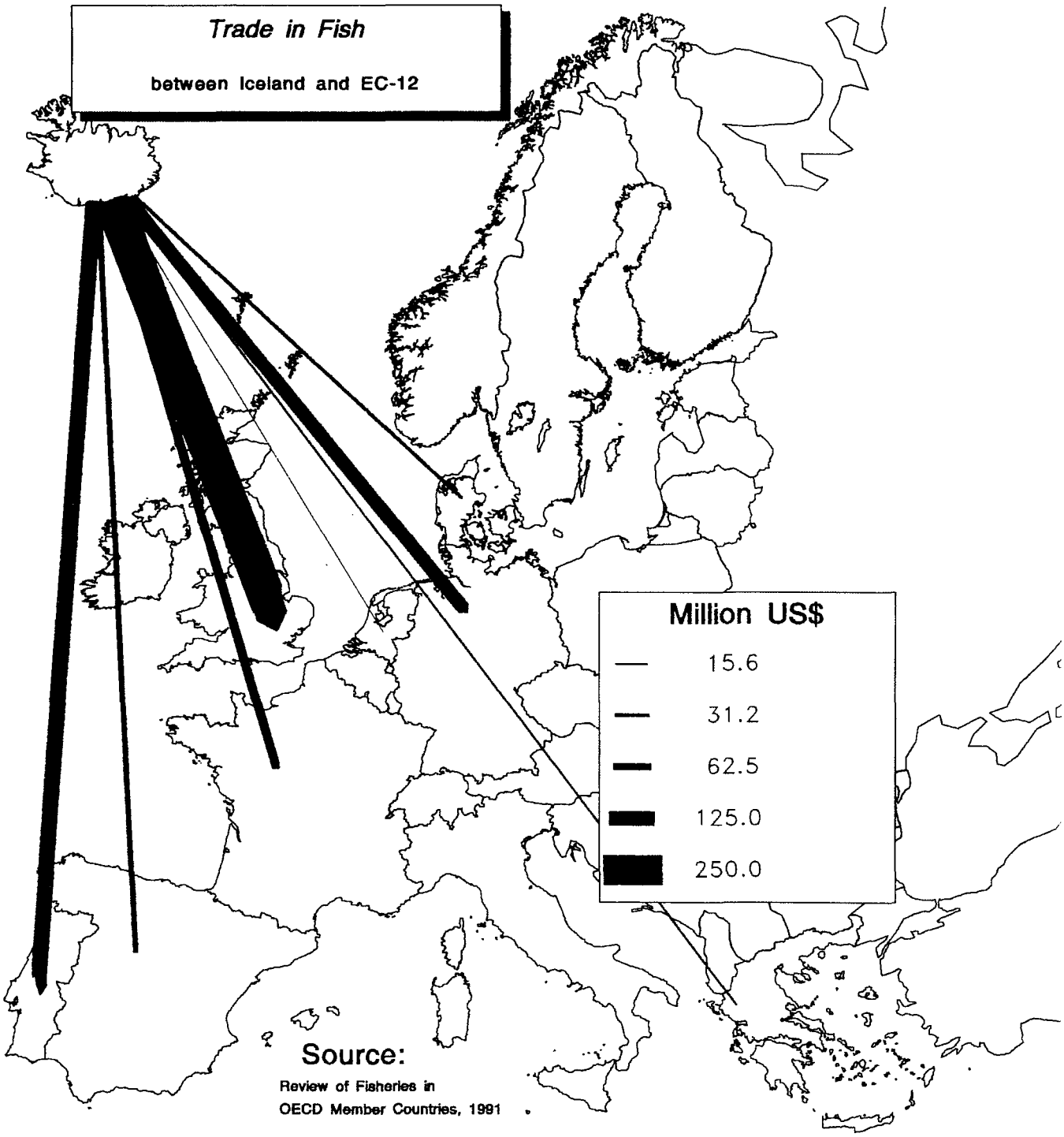

Trade in Fish
between Iceland and EC-12
Million US$
15.6
31.2
62.5
125.0
250.0
Source:
Review of Fisheries in
OECD Member Countries, 1991

FIGURE I.20:

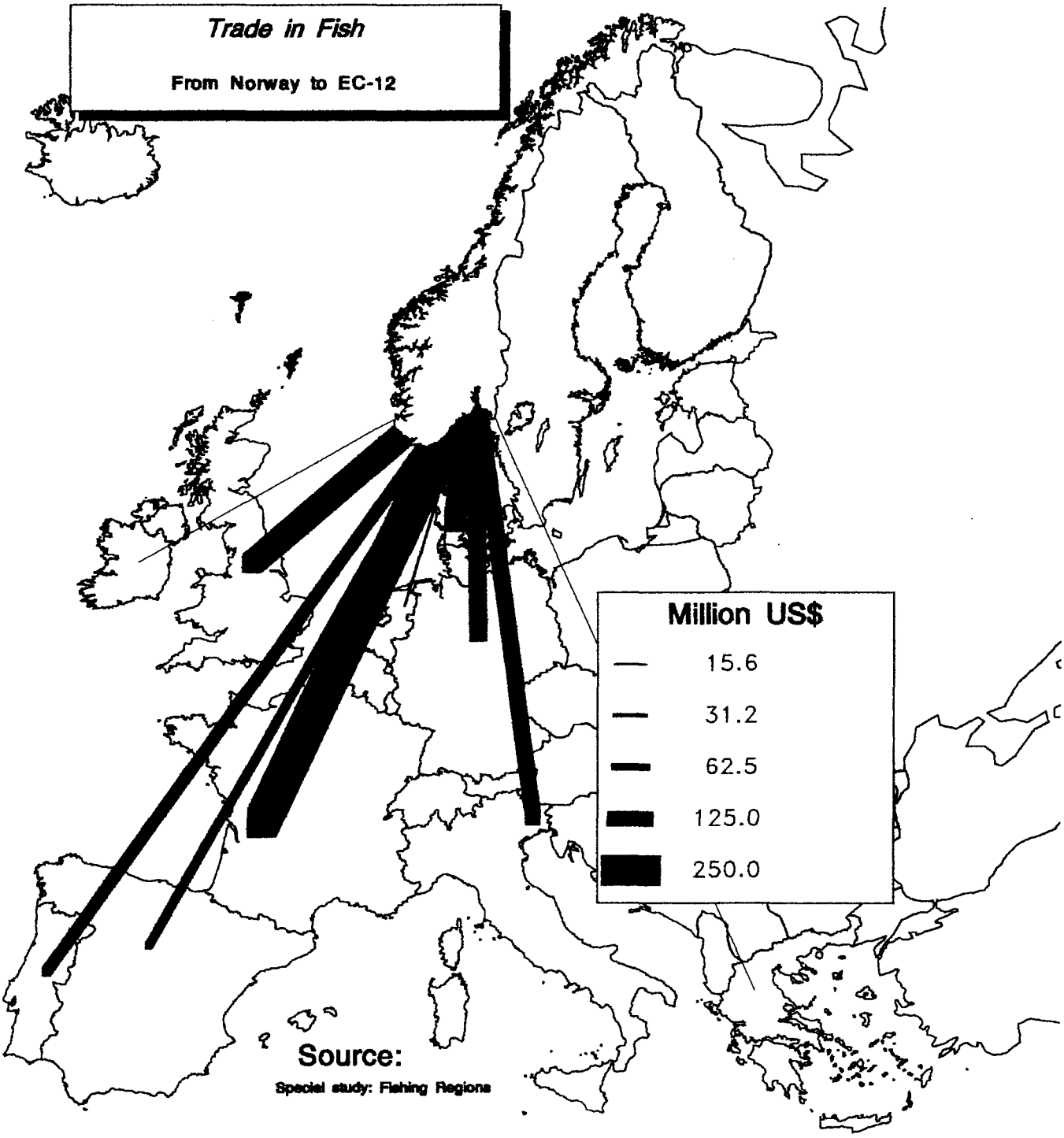
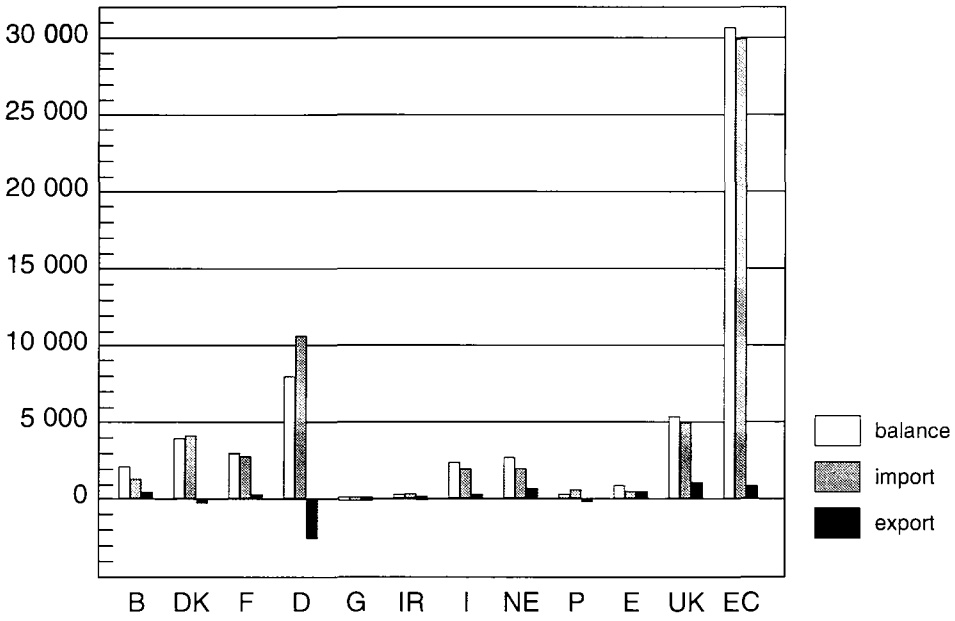

Trade in Fish
From Norway to EC-12
Million US$
15.6
31.2
62.5
125.0
250.0
Source:
Special study: Fishing Regions

FIGURE I.21: Sweden's trade with the European Community in 1990 (USD million)



Source: Nordic statistical yearbook.

Altogether Germany has the largest trade exchange with the Nordic countries (with a surplus of German exports), followed by the United Kingdom (with a surplus of British imports), Denmark, France and the Netherlands. Clearly, it is the northern EC countries, situated nearest to the Nordic countries, who account for the largest trading flows to and from Norden, and among the northern EC countries especially the two biggest economies, Germany and the United Kingdom.

Table I.21
Trade with Nordic countries as a share of total international trade, 1990 *(%)*

	Exports to Norden	Imports from Norden	Total
Belgium-Luxembourg	2.5	3.7	3.1
Denmark	20.8	19.5	20.2
Germany (W)	4.6	4.9	4.8
Greece	2.8	2.7	2.7
Spain	2.0	3.0	2.6
France	2.2	3.7	3.0
Ireland	3.3	3.2	3.2
Italy	2.3	2.5	2.4
Netherlands	3.0	4.6	3.8
Portugal	7.1	3.6	5.0
United Kingdom	4.9	7.8	6.5

Source: UN, *International trade statistics yearbook.*

For Denmark, the Nordic countries are important trading partners, accounting for one fifth of its international trade. For other EC countries, the Nordic countries are trading partners of secondary importance, accounting for 4 to 7% of the total international trade of the United Kingdom, Germany, the Netherlands and — rather surprisingly — Portugal, and 2 to 3% in the rest of the Community.

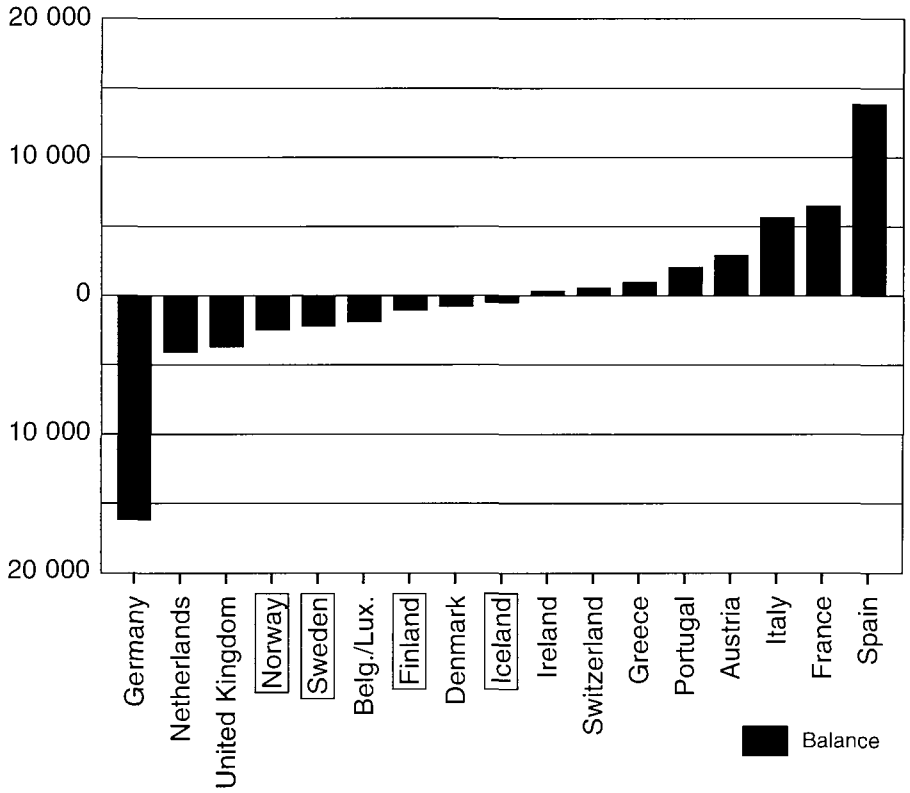
Tourism

The tourist flows, as measured by guest nights in hotels and thus including business travel represent a kind of trade with services. In some regions, tourism is economically very important. As already mentioned, the Nordic countries as well as most northern Community countries have a negative balance. They send more

tourists to other countries than they receive. The Mediterranean countries, on the contrary, have positive balances (Figure I.22).

Figure I.23 shows that the most important EC receiver of Nordic tourists in 1989 was Greece, followed by Germany, Denmark, Italy, the United Kingdom, Spain and Portugal. Thus, the Mediterranean countries are much more important as Nordic tourist destinations than as trading partners. But there are also many Nordic guest nights in the hotels of northern Community countries — most of them undoubtedly due to business travel.

FIGURE I.22: Balance in international tourism, 1990 (USD million)



The share of the Nordic countries in the total ingoing and outgoing tourism of the EC countries is shown in Table I.22.

Table I.22
Nordic countries as origins and destinations of EC tourism, 1989

	Nordic guest nights in EC hotels % international guest nights	EC guest nights in Nordic hotels % EC guest nights in Europe
Belgium	2.7[1]	n.a.
Denmark	42.1	14.0
Germany (W)	8.0	1.2
Greece	11.2	n.a.
Spain	1.9[1]	n.a.
France	n.a.	1.2
Ireland	n.a.	n.a.
Italy	2.7	1.0[2]
Luxembourg	3.0	n.a.
Netherlands	5.5	1.1
Portugal	7.6	n.a.
United Kingdom	5.5	1.1

[1] Excluding Finland.
[2] Excluding Norway.
Source: Special report, 'Nordic tourism in Europe and European tourism in Nordic countries'.

FIGURE I.23:

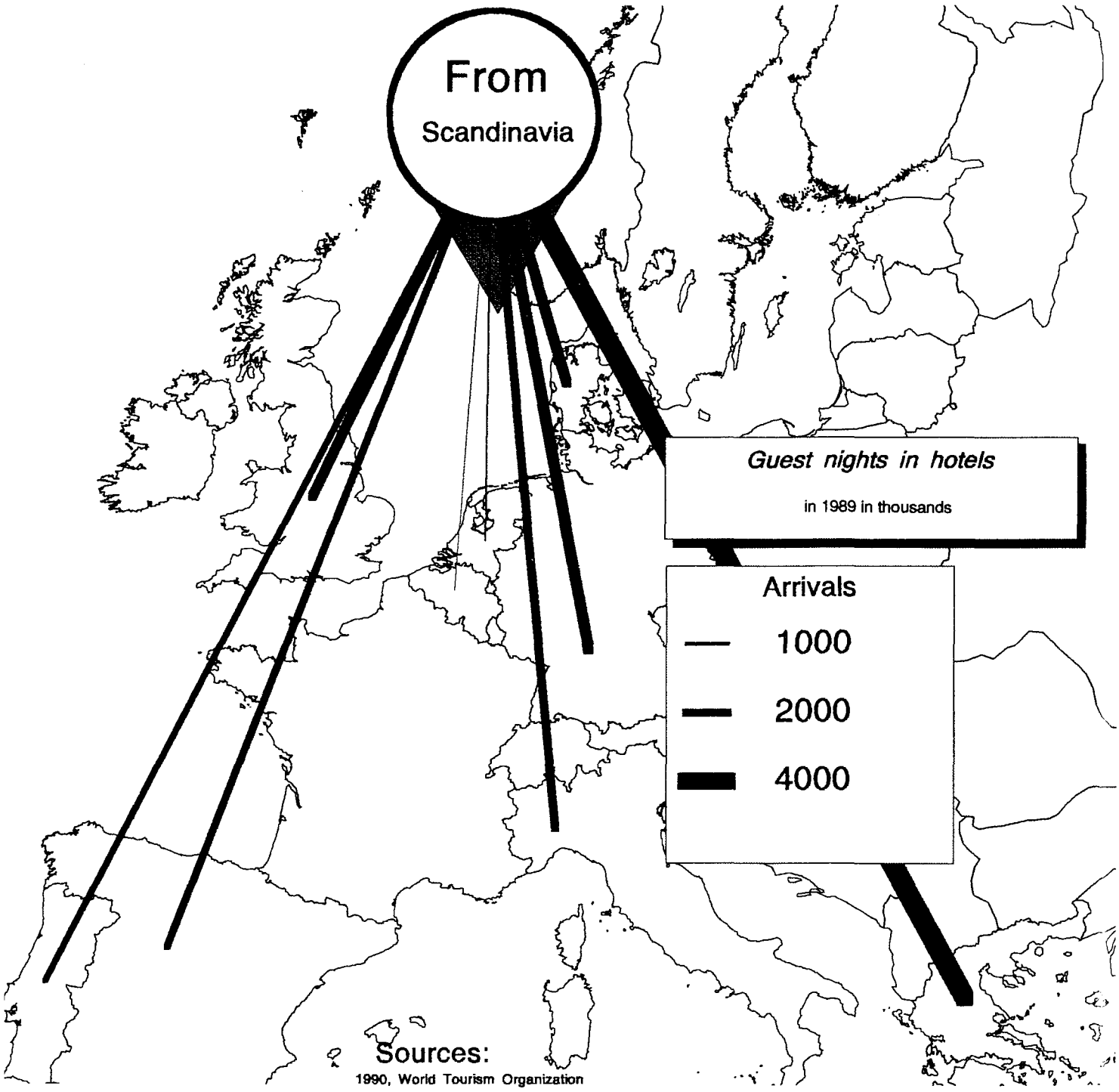

From
Scandinavia
Guest nights in hotels
in 1989 in thousands
Arrivals
1000
2000
4000
Sources:
1990, World Tourism Organization

FIGURE I.24:

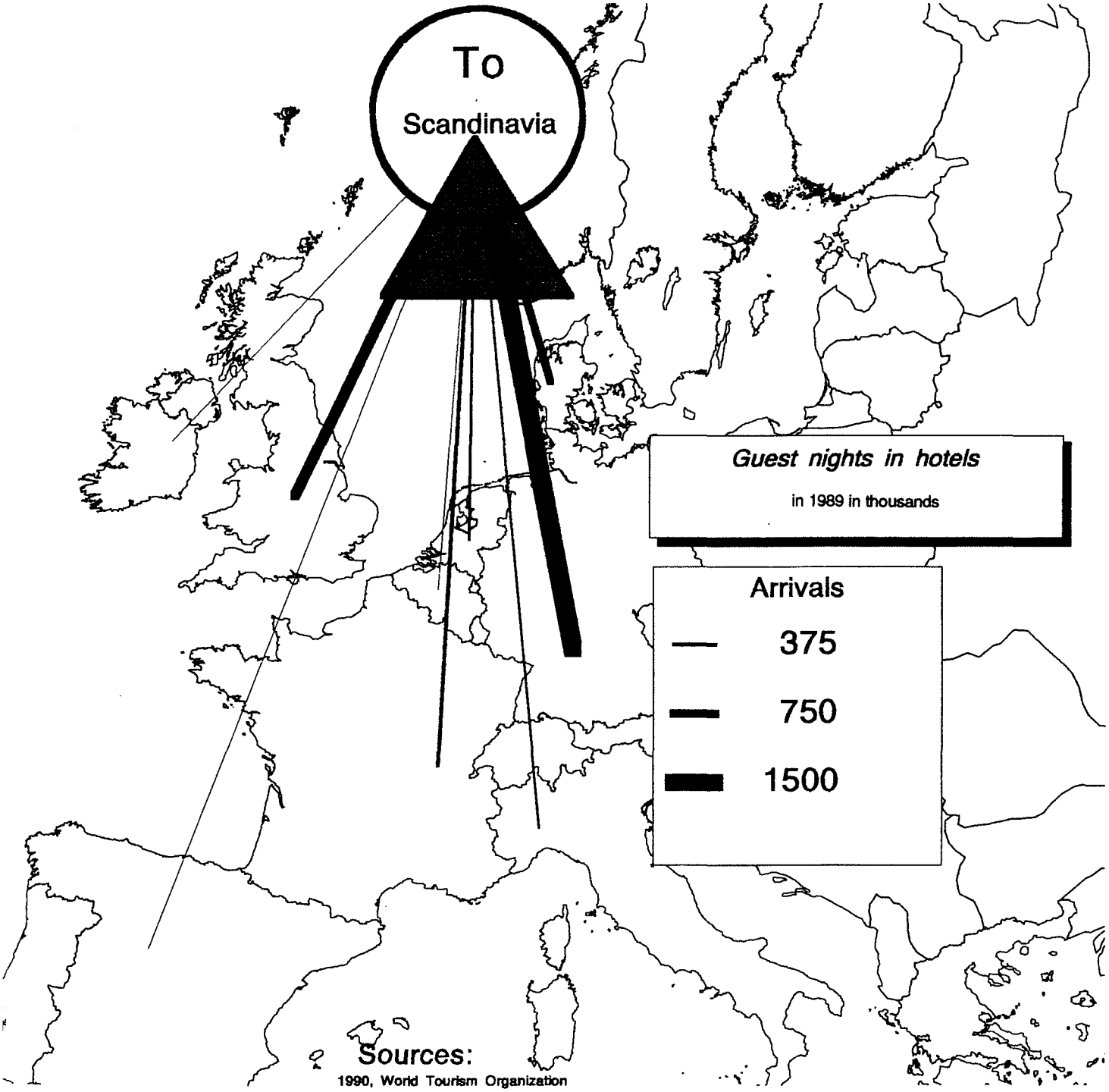

To
Scandinavia
Guest nights in hotels
in 1989 in thousands
Arrivals
375
750
1500
Sources:
1990, World Tourism Organization

Table I.22 shows that Nordic tourists are responsible for almost half of all international guest nights in Denmark. They also form a significant share of tourism in Greece and Portugal, but in 1989 a surprisingly small share of tourism in Spain. In these countries, the well-known seaside destinations of charter tours dominate. In other Community countries, Nordic tourists account for 5 to 8% of international guest nights in Germany, the United Kingdom and the Netherlands, 2 to 3% elsewhere. The big cities are the most important destinations in non-Mediterranean areas of the European Community.

EC tourism to the Nordic countries is much more modest. Danish tourists spend 14% of their guest nights abroad in the Nordic countries, other EC tourists only about 1%.

The special study on 'Nordic tourism in Europe and European tourism in Nordic countries' expects that Nordic tourism to (especially west) Mediterranean countries may stagnate and decrease, but to other Community countries increase. If a clean environment and space become important factors in tourism, more EC tourists may visit the Nordic countries, but the latter will never turn into destinations of mass tourism.

Unfortunately, statistical data on other types of service trade, including transport, finance and producer services, etc., are insufficient for closer analysis.

Direct investments abroad

Data on net direct investments (excluding reinvested profits) vary considerably from year to year. For the five-year period 1987-91, the Nordic countries showed the following flows:

Finnish direct investments in EC countries formed 44% of all Finnish direct investments abroad. The most important target was the United Kingdom, followed by the Netherlands, France, Germany, Belgium and Denmark. Data on EC direct investments in Finland are not available.

Norwegian direct investments in EC countries (only 1990 and 1991) primarily went to Denmark and the United Kingdom. EC direct investments in Norway in this period were negative, due to substantial UK disinvestments.

Swedish direct investments in EC countries accounted for 73% of the very substantial Swedish direct investments abroad in this period. The most important target was the United Kingdom, followed by the Netherlands, France, Germany, Ireland and Denmark. EC direct investments in Sweden primarily came from France, the Netherlands and Germany.

As regards direct investments, EC interaction with the Nordic countries is clearly concentrated in Germany, the United Kingdom, France, the Netherlands and Denmark.

Migration

We now turn to other types of flows, one being migration. While data on migration flows vary considerably from year to year, data on the number of foreign residents show the integrated results of such flows (see Figure I.25). Unfortunately, the data on Nordic residents in the individual EC countries and vice versa are far from complete.

In Finland, the number of foreign residents is very modest. Germans form the most important EC group, followed by UK citizens. Data on Finnish residents in EC countries are very incomplete.

Iceland has an important number of Danish residents, indicating the close links in earlier, colonial times. Data on Icelandic residents in EC countries are very incomplete.

In Norway, most EC residents are Danish, followed by UK citizens, Germans and Dutch. Norwegians in EC countries are most numerous in Denmark, followed by Germany and the United Kingdom.

In Sweden, Danes followed by Germans, UK citizens and Greeks are the most important EC groups. Swedes in EC countries are primarily found in Germany and the United Kingdom, followed by Denmark.

Altogether, the main exchange of people between the Nordic countries and the Community has touched Denmark, Germany and the United Kingdom. These migration flows tend to be rather stable. There are more Danes in Norway and Sweden than vice versa, and more UK citizens in Norway. Finland and Iceland, on the other hand, tend to send more citizens to the EC countries than they receive from them.

The migrational exchange of the EC countries with Norden is illustrated in Table I.23.

Table I.23
Nordic residents in the European Community, and EC residents in the Nordic countries, 1988

	Residents in Nordic countries as % of all residents in other EC[1] and Nordic countries	Residents from Nordic countries as % of all residents from other EC and Nordic countries
Belgium	1.5	n.a.
Denmark	64.4	46.2
Germany (W)	12.5	2.0
Greece	2.5	6.5[2]
Spain	1.7	2.4
France	2.3	n.a.
Ireland	5.8	n.a.
Italy	0.6	n.a.
Netherlands	2.7	1.8[2]
Portugal	1.4	n.a.
United Kingdom	9.0	n.a.

[1] Except residents in France, Ireland, Italy and the United Kingdom.
[2] Except residents from Finland.
Source: N. Ploug, *Befolkningsvandringer mellem Norden og EF. Socialforskningsinstituttet,* Copenhagen, 1990.

Table I.23 shows that roughly half of the Danish population exchange with Nordic and EC countries is with the Nordic ones. A considerable number of German, UK and Irish citizens live in the Nordic countries, whereas few emigrants from other EC countries have moved to Norden. In the Mediterranean countries, the Nordic share of immigrants is generally very modest. A small Nordic retirement migration into the Mediterranean countries can be traced, however.

1.9. Conclusions

An examination of the data in Part I indicates that, in general, the northern EC countries have the most interaction among themselves: Denmark, Germany, the United Kingdom, the Netherlands. The exceptions are rather special cases, for example, the Iberian market for Icelandic fish, or the Mediterranean tourist and retirement resorts. Hence it is in the northern Community that the positive and negative impacts of closer integration between the Nordic countries and the Community are likely to be most important.

Clearly, one reason for the strong interaction between the Nordic countries and the northern Community is the short distances and hence the relatively low transport costs between them.

Indeed, the very reason why the Nordic countries are now a rather prosperous and well-developed part of Europe (as shown earlier in this part) has been low transport costs to the main European markets and centres of innovation. Earlier, and even as late as the 19th century, the Nordic countries formed a poor and backward periphery, due to slow and expensive transport to and from the economic and cultural core regions.

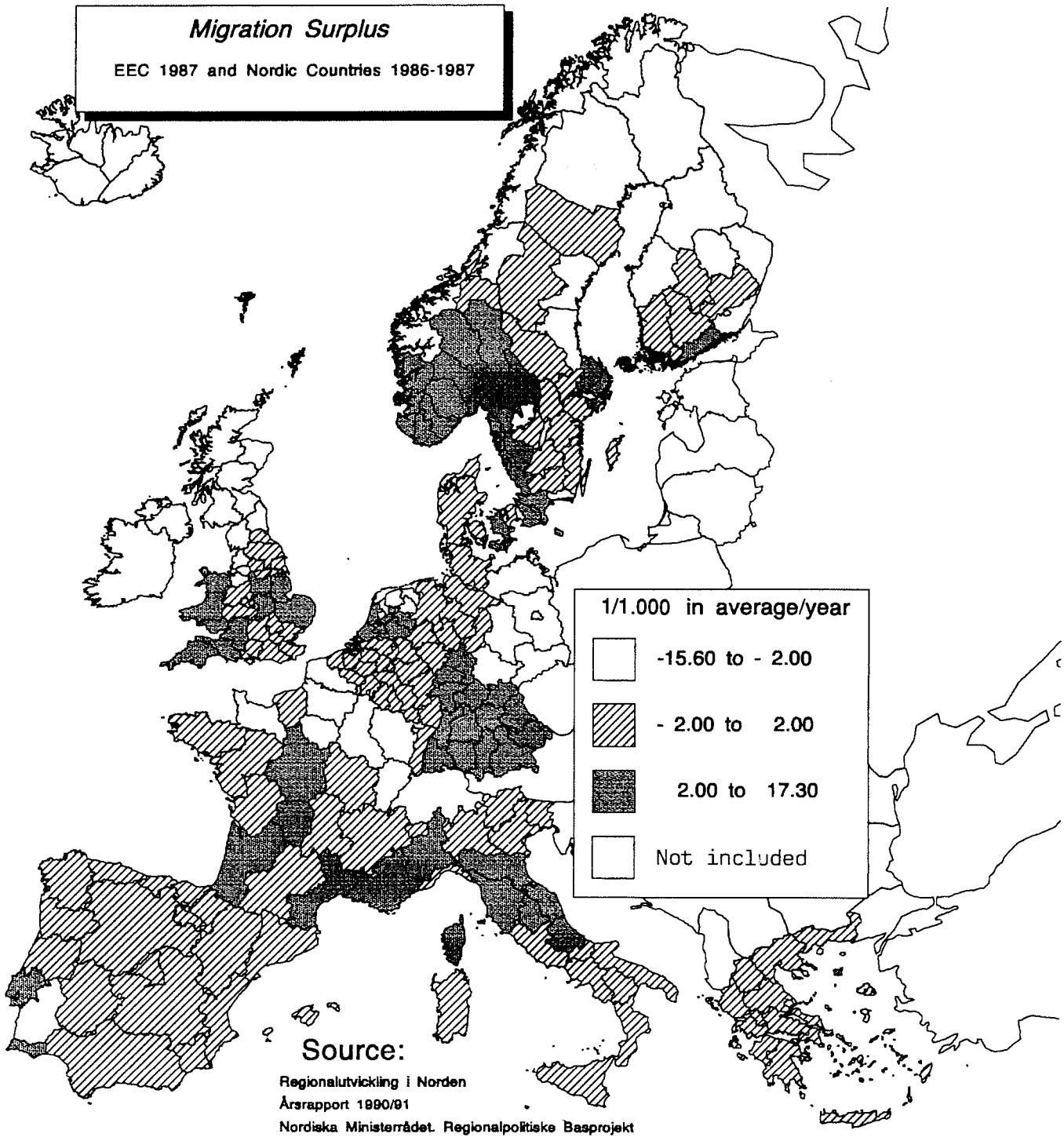
However, distances and transport costs cannot alone explain the pattern of trade flows and interaction. For instance, distances between Belgium and the Nordic countries are only marginally longer than distances between the Netherlands and the Nordic countries. Yet the Netherlands has considerably more exchange with the Nordic countries than has Belgium. Beside distances, at least two more factors may play a role.

Firstly, the Netherlands has 50% more people than Belgium, and a GDP that is also 50% higher. Clearly, the more people and the more economic activity, the more exchange there must be.

Secondly, a number of cultural factors may play a role. Attitudes, language, religion, etc. may make communication and interaction easier or more difficult. The high volume of Danish trade with the Nordic countries, even after 20 years of EC membership, is evidence of this fact. It is well known that when Danish firms start exporting, they almost invariably make their first attempts in Norway and Sweden, though the transport costs to Germany may be lower, because it is easier to communicate with the Scandinavian trading partners.

Thus, an analysis of the pattern of interaction must take into account the factors of magnitude of population and economic activity, of distances and of cultural proximity. Traditional theories of international trade do not do that.

FIGURE I.25:


Migration Surplus
EEC 1987 and Nordic Countries 1986-1987
1/1.000 in average/year
-15.60 to - 2.00
- 2.00 to 2.00
2.00 to 17.30
Not included
Source:
Regionalutvickling i Norden
Årsrapport 1990/91
Nordiska Ministerrådet. Regionalpolitiske Basprojekt

Part II

Institutional scenarios for Norden/EC in the year 2000

2.1. Methodology

The scenarios to be presented will be seed 'scenarios'. According to accepted professional tradition, the scenarios will be successful if they create a debate on the future development within Europe in which Norden and the Community are actors. However, they will fail if used to justify particular choices.

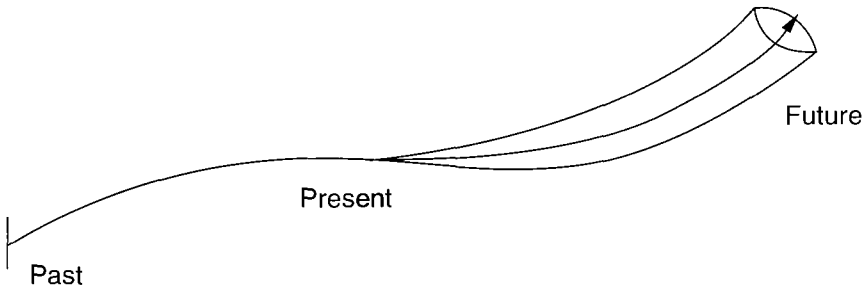
Scenarios may be considered more or less likely, they may be more or less well-constructed from a professional point of view, but they cannot by their very nature be considered true or false.

In the course of our working process we have distinguished between naive and complex trend scenarios. Naive trend scenarios are based on somewhat rough extrapolations of quantifiable or otherwise demonstrable developmental tendencies, whilst complex scenarios are built on a mixture of statistics, sociopolitical facts and qualified, visionary opinions.

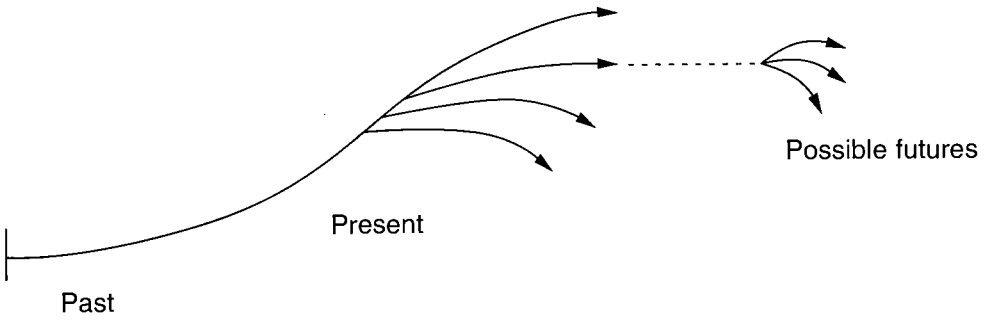
One obvious example of a naive scenario would be to conclude that the mere fact that the governments of Norway, Sweden and Finland have declared their intention of joining the European Union (i.e. accepting Maastricht) constitutes a certainty that they will join. One look at the consistent results of public opinion polls conducted in Norway and Sweden is enough to raise doubts as to whether the governments and the parliamentary majorities of at least some Nordic countries may not in fact be heading for trouble on the issue of institutional integration. Accordingly, we have opted for a broader and more differentiated integration scenario, as will become plain later in this section.

The difference between naive and complex scenarios might be better illustrated in the following two figures:

FIGURE II.1: Two diagrams of the naive and complex trend scenarios



(a) Naive trend scenario: the future is unilinear and certain.



(b) Complex trend scenario: the future is multilinear and uncertain.

A multiple and complex view of the future will be applied throughout this study. Both quantitative and qualitative methods will be applied to demonstrate impacts and explain scenarios more thoroughly.

A further distinction will be made between trend-based scenarios and contrast-based scenarios.

A trend-based scenario corresponds to a likely course of events at any decision-making point in time, taking into account the tendencies implicit in a starting situation. Thus, the trend-based scenario, contrary to what is suggested by its name, does not necessarily correspond to a pure and simple extrapolation of trends. A measure of likelihood is involved. Certainly, in the recent past, when the world changed less rapidly than today, the most likely development was a more or less mechanical continuation of current trends. However, the situation is very different today.

A contrast-based scenario is the exploration of a deliberately different course of future events. Whereas the trend-based scenario corresponds to an exploratory approach from a development to a situation scenario, the contrast-based scenario is derived from a normative approach, i.e. the fixation of some future, imaginative situation. This method is in trend with accepted professional tradition. As our point of departure we have chosen European political and institutional fragmentation. Thus the contrast scenario strongly differs from the trend-based integration scenario.

On reflection it is evident that there need be no logical contradiction between the two scenarios. Norden may well become institutionally integrated with EC-Europe, and Europe may still lose its political, ideological and indeed institutional cohesion, i.e. become fragmented, for reasons having little or nothing to do with Norden. This eventuality would correspond to a situation where Norden seeks European integration with no less determination than, say, Germany or France, but where the European centre cannot hold due to centrifugal forces at play.

2.2. Scenarios

2.2.1. Norden in the era of spontaneous internationalization

One would have to go far back into Nordic history to encounter 'national economies' with a reasonable degree of correspondence between economy and territory. In spite of its peripheral position in relation to Europe's innovative, trading and cultural centres, the fact remains that from early times the Nordic economies have been open and highly dependent on international trade and innovative impulses from the outside.

The sort of spontaneous internationalization of economic relations that we are dealing with in the present report (and which is outlined in detail in,for example, the special study on Nordic industry, see Volume III of this report) bears no resemblance to conscious, politically initiated or regulated actions, but is primarily due to the emergence of the world market during the 19th century. Since World War II this internationalization has received a new decisive impetus from pioneer, technical innovations, primarily within the fields of information, communication and transport. Briefly, this technological revolution has entailed the following changes:

After the genesis of the world market, the way was paved for the internationalization and globalization of production.

In a physical sense this globalization has resulted in an explosive growth of transportation. Commodities are now being assembled from components produced in all

corners of the world. Consumer taste is becoming increasingly cosmopolitan, etc.

Economically, internationalization has increased the costs of maintaining 'nationally defined' economic areas (protectionism) *ad absurdum*. This fact greatly contributed to the downfall of Eastern Europe's centralized economies.

Spontaneous internationalization leads to irresistible pressures against national currencies which are based on economically irrational internal production systems or overburdened with too many social or regional transfers.

Politically, spontaneous, economic internationalization makes it nigh-on-impossible to sustain national public sectors whose relative size exceeds the sources of taxation generated by commercially efficient economic activities. It makes no difference whether the public sector mainly covers traditional areas such as administration, health, social services, education, hard infrastructures, etc., or, in addition, burdens itself with sheltering certain economic sectors from open competition.

One further outcome of spontaneous internationalization ought to be mentioned: spontaneous regionalization — spontaneous in the sense that, in the majority of cases, the region building is initiated from 'below' in direct response to challenges and opportunities generated by the other effects of internationalization enumerated above. One may point to numerous examples of 'bottom-up' regionalization all over Western Europe and Norden.

2.2.2. The effects of spontaneous internationalization in Norden

Needless to say, spontaneous internationalization presents serious challenges to a 'Nordic model' which has for decades (until the 1980s and 1990s) been characterized by: (i) 'demand-incited' welfare entitlements; and (ii) vast regional policy and settlement stabilizing transfers intended to compensate disadvantaged areas and shelter internationally uncompetitive economic sectors.

Norden's experience over recent years and months indicates that the policy of upholding a traditional Nordic model which cannot be paid for through the taxation of commercially viable industrial sectors seems unsustainable.

The deeper 'systemic' causes of Norden's current economic difficulties may still not be completely understood. On the other hand, the effects are amply clear: devaluations and floating currencies in Finland, Sweden and Norway, general cuts in State transfers for social welfare and the maintenance of territorial cohesion in Finland, Sweden and Denmark, dramatic falls in living standards in the Faeroe Islands, as well as caustic criticism of Norway's massive transfers to sheltered economic sectors. In addition, recent months have witnessed severe increases in unemployment in Norway and Sweden, bordering on catastrophic increases in Finland (see Table I.6).

Following the demise of socialism in the former Soviet Union, it has moreover become obvious that the affluence enjoyed in parts of Norden was not based on competitive, productive strength, but on advantageous Eastern political ties. To a large extent, Finland's current economic difficulties may be explained by the Soviet downfall.

2.2.3. Spontaneous barriers against spontaneous internationalization

Spontaneous internationalization is modified or counteracted by a number of equally spontaneous barriers of a non-economic and non-political nature.

Two of these barriers emanate wholly, or in part, from economic internationalization itself. These are first and foremost physical and spatial barriers, and secondly ecological barriers.

A third barrier is cultural in origin.

As clarified in several of the special studies which are part of this final report, internationalization leads to an increasing demand for transport. (Theoretically one might well argue that, in reality, modern communication and information technology ought to allow for the smooth functioning of international production systems without the need for vast increases in physical transport. However, from an empirical point of view, this potential has not been utilized.) The result is traffic congestion to a degree which makes it in fact either physically impossible or prohibitively expensive to carry out the amount of goods transport that might be desirable seen from a purely economic point of view.

The special study 'Infrastructure' in Volume IV refers to one such barrier across Germany just north of Hamburg. Severe traffic congestion may well lead to changes in regional competitiveness throughout the whole of Europe. The otherwise 'ideal' European division of labour will have to adapt itself to the laws of physics (see the impact maps in Volume I, Part V of this report).

In the same vein, nature itself imposes barriers. Ecology sets limits to the conduct of economic activities. Recent European Commission documents insist that a free European single market and the resulting intensification of the international division of labour must not lead to an

unlimited growth in physical transport and energy use. As indicated in, for example, the Commission's Green Paper on sustainable mobility, transport is among the main culprits when it comes to threatening the environment.

If we assume that Europe keeps its promise to add the external (environmentally related) costs of production and transport to the final price of goods and services (as it will indeed some day be forced to do unless the environmental problems related to physical transport are solved through technical breakthroughs and their actual implementation), the relevant, regional consequences will be analogous to those presented by the abovementioned congestion problem.

Cultural barriers (the third principal barrier area enumerated above) are among the hardest to overcome. In many respects, the culturally informed person is the very antithesis of the 'economic man' lauded by economic science. A common historical and cultural inheritance intensified by a common language impels nations to nurture rationally uneconomical, anachronistic 'heirlooms' such as sheltered economic sectors that could not survive free competition.

Furthermore, one must never forget that culture is quintessentially subtle and complex, an unspoken metalanguage beyond the reach of mundane semantics and syntax, which is why few foreign salesmen ever succeed in completely unravelling its mysteries and in marketing their wares at the local, microregional level.

2.3. The construction of the institutional scenarios

In principle, several methods might be used to construct main scenarios on which to base suppositions about the likely regional and spatial impacts of Norden upon EC territories.

Our construction of institutional scenarios takes as its point of departure the spontaneous internationalization and regionalization processes and the spontaneous barriers just described. Furthermore our train of thought draws on the previously indicated distinction that exists between 'naive' and 'complex' scenarios, which naturally leads to two fundamentally different concepts of the future. As indicated in the beginning of this report, we have based our report on the complex scenario concept.

In addition to this fundamental scenario assumption, it has already been stated as our ambition to present two consciously contrasting main scenarios: on the one hand, this involves a 'trend-based' scenario which, to be sure, is in no way based on simple extrapolations from trends recorded up till now. On the other hand, we wish to present a deliberately contrasting scenario.

The institutional scenarios have been labelled the 'integration scenario' and the 'fragmentation scenario' respectively.

It must be emphasized that we have deliberately refrained from ascribing degrees of likelihood to the two contrasting scenarios. Thus we have made no attempt to evaluate whether one main scenario is more likely than the other. Given the current uncertainty, not to say turmoil, in European affairs, such an exercise would appear futile.

Both scenarios are constructed from the same basic elements.

The common point of departure has been fixed and defined as the current process of spontaneous internationalization and regionalization, accompanied by the spontaneous barriers, namely the physical/spatial, ecological and cultural barriers described briefly above. That is to say that the spontaneous developments constitute the back-cloth to the scenarios to be performed.

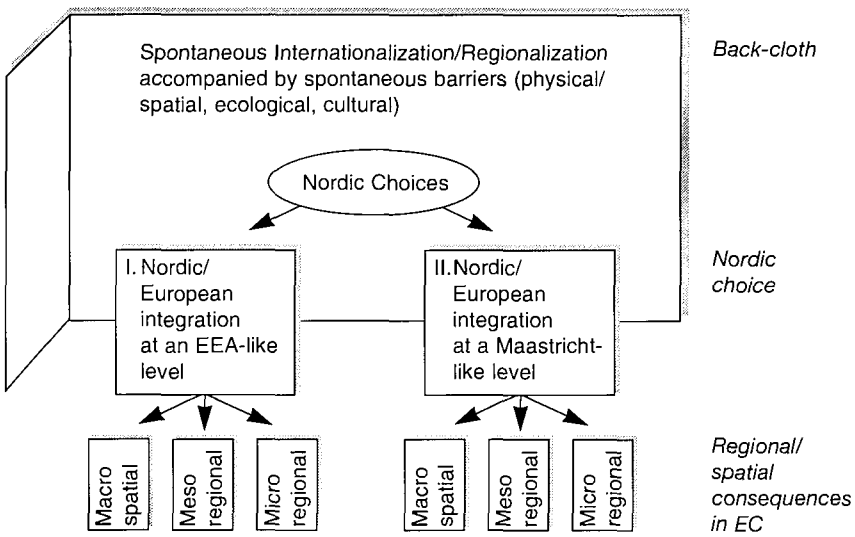
The actors are Nordic political and institutional bodies, whose behaviour, through their capability of making choices, is able to point to distinctly different sets of Nordic impacts within the Community.

Within the confines of the integration scenario the total scene may be depicted as follows:

Variant I (Nordic/European integration at an EEA-like level) is understood to follow the line intended by the EEA Treaty between the European Community and EFTA, irrespective of whether the actual treaty is ratified or not.

Variant II (Nordic/European integration at a Maastricht-like level) is understood to follow the intentions laid down in the Maastricht Treaty.

FIGURE II.2: Integration scenario



There are important differences between the two variants.

Variant I: Norden (i. e. Norway, Sweden, Finland and Iceland) is integrated into Europe without gaining much political or institutional influence on the authoritative future development of the Community. Norden only partially opens its internal markets and societies to European penetration. This means, among other things, that the Nordic countries are still able, in principle, to maintain certain economic sectors, such as agriculture or fishing, which are wholly or partly unexposed to international competition.

In addition, in Variant I the Nordic nation States can be kept relatively intact. There will be no significant surrender or delegation of sovereignty to supranational institutions.

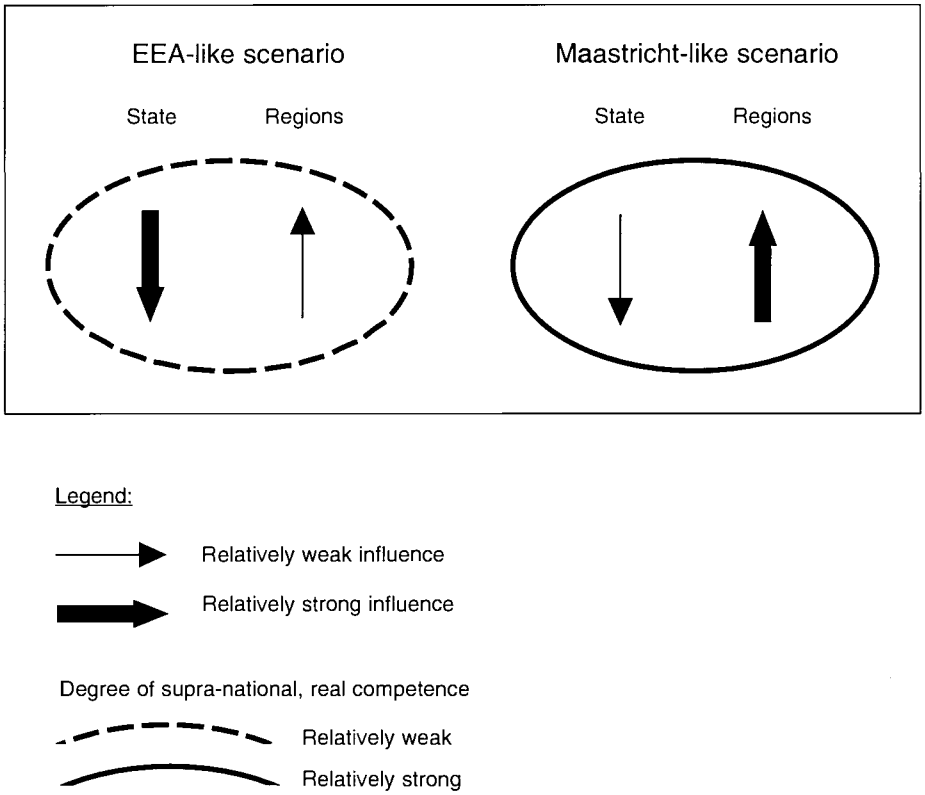
Variant II is very different in its effects. The Maastricht document advocates the building of a pan-European identity — politically, institutionally, legally, monetarily and in other respects. Once integrated, Norden would be in a position to bring its influence to bear on the decision-making processes. However, in doing so, it would probably have to sacrifice its current right to shelter certain economic sectors, at least to some extent.

In the event of a Maastricht-like Europe, we would experience a spread of real authority at several levels, depending on the nature of issues (the subsidiarity principle) versus the old order of territorial prerogatives in all spheres of life.

Consequently, in a Maastricht-like Europe we would most likely encounter a strengthening of two levels at the expense of the old territorial States — the pan-European level, and, on the other hand, the sub-national, or transnational, regional level. Nation States would, of course, still exist as powerful European actors, but tendentially their influence and operational scope would decrease.

Variants I and II of the integration scenario thus have different implications for the balance of power and initiative which is endemic to the 'nation State versus the regions' dichotomy. This is illustrated in the figure below.

FIGURE II.3:Tendencies in shifts of power and initiative among State, regional and pan-European levels



Concerning the overall integration scenario we shall again refrain from venturing any opinion on which integrationist variant (I or II in Figure II.2 above) would appear more likely. Suffice it to mention that in all Nordic countries, possibly with the exception of Iceland (who has not applied for EC membership and where no strong pro-Maastricht sentiment is evident), powerful and influential political and socioeconomic forces can be found in support of either variant. It must count heavily in the overall picture that the governments and the parliamentary majorities in Norway, Sweden and Finland — as already mentioned — favour a full EC membership, i.e. the Maastricht solution. But it is equally impossible to neglect the consistent outcomes of opinion polls showing strong doubts in Sweden and Finland and outright popular opposition to EC membership in Norway.

The fundamental uncertainty and complexity of the entire Norden-EC relationship is further accentuated by the current economic difficulties in the Nordic countries. There is simply no commonly acceptable scientific method of determining how prolonged economic and, by amplification, socioeconomic and political difficulties may influence the behaviour of key decision-makers, such as the inclination of the voters who must in the final analysis determine the matter. (In all three countries — Norway, Sweden and Finland — an eventual decision to join the Community will be contingent upon popular referendums as already acknowledged by the governments.)

In order to construct our institutional scenarios, however, we have been forced to make some fundamental assumptions regardless of the complexity and uncertainty inherent in the current situation.

One such fundamental assumption is that some measure of institutionalized Nordic integration with Europe will take place. In particular, it seems a certainty at the moment that the integration of all Nordic countries — including Iceland — at an EEA level will be realized. (Theoretically one might argue that the institutionally driven integrationist process might collapse, but this very dim possibility has been discounted in the present report. Nor would an institutional breakdown in the long run obliterate the effects of spontaneous internationalization.)

A third variant of the main integration scenario has been considered — and rejected as a realistic assumption. This would involve integration at the level of the single market, without any Nordic institutional commitments or obligations to the EC integration process. This variant would entail a greater degree of Nordic economic and trade commitment than an EEA-like solution. There would be little room for sheltered economic sectors in Norden.

From the 'Europe 16' point of view, this single market integrationist variant might be described as an economic Europe without inner borders.

Politically, however, such a Europe would be ill-balanced. Twelve members of this single market would enter into extra-economic, supranational political and institutional agreements, whereas the four remaining members would take no part. A two-speed Europe would be created.

From a Nordic point of view, however, such an arrangement would entail some undesirable effects. The Nordic countries would have to open their borders without any reciprocal political or institutional influence. Therefore, it appears highly unlikely that this variant could ever be accepted by any Nordic country.

To complete the discussion of the overall integration scenario it bears stressing that Norden does not necessarily constitute a coherent unit *vis-à-vis* the rest of Europe.

Apart from Denmark, Norden must be divided into several areas: western Norden, Norway, Sweden, and Finland.

Western Norden (comprising Iceland and the two self-governing areas within the Danish realm Greenland and the Faeroe Islands) is likely to base its European decisions on the perceived need to protect its predominant source of income, i.e. fisheries. As it is a widely spread assumption in all three societies — among governments, political parties and public opinion alike — that the Community is unwilling to allow local control over this crucial sector, it is a near certainty that western Norden cannot join the Community unless its fisheries policies are substantially changed. This western Nordic position has been made plain through repeated public statements by leading politicians as well as by researchers working on this NordREFO report. Should a revaluation be under way, we have been unable to detect any trace of it. (Concerning the weight of fisheries in the west Nordic economies we refer to the special study on fisheries in Volume III of this report.)

As already mentioned, Greenland and the Faeroe Islands, though not sovereign States have been accorded extensive *de facto* authority over their foreign relations and there is no indication that this state of affairs within the Danish realm is about to be changed.

In Norway, Sweden and Finland, the governments, together with certain opposition parties and spokesmen responsible for important industrial organizations, have indicated their wish to join the Community but, as already indicated, powerful sectors of society remain adamantly opposed.

The anti-EC opposition appears especially well entrenched in Norway, particularly among farmers, fishermen and inhabitants of the northern counties *(fylker)*. Due to its substantial earnings from the oil and gas industries (see the special study on energy in Volume IV) there is little doubt that the Norwegian nation possesses broader options of remaining aloof from an institutional integration into the Community beyond the EEA arrangement than do perhaps other parts of Norden. (Obviously, one should not discount the possibility that a favourable outcome of Norwegian-EC membership negotiations might lead to a more pro-EC public opinion in Norway.)

The situation is somewhat more complex in Sweden and Finland who appear especially hard-hit by the current crisis of the Nordic model in conjunction with the general international economic downturn and the break-up of the former Soviet Union (particularly a problem in Finland).

Especially in the case of Sweden and Finland, a lot will depend on the public perception of EC integration as a potentially attractive solution to economic difficulties and on the extent to which it is generally believed that EC membership would be compatible with a continuation of traditional welfare and regional equalization policies.

2.3.1. The contrast scenario

The contrast scenario is based on European political and institutional fragmentation.

To avoid any danger of being misunderstood, let us repeat that we have chosen a deliberately different scenario from that of the trend-based integration scenario just presented. Otherwise it would not be a contrast scenario. Thus the contrast scenario is deliberately extreme and not based upon any extrapolation of current trends. In addition, it hardly needs mentioning that no measure of the perceived desirability or undesirability of any future development has influenced our choice of contrast scenario.

The backcloth is unchanged. Spontaneous internationalization accompanied by spontaneous barriers still represents the long-term agenda. But in this case

Europe reacts differently — some might say irrationally — to the challenges and opportunities of the trend. Politically atavistic impulses gain the upper hand. Europe's quest for unity is lost, at least for a while. Maastricht cannot be implemented and the Community must return to the drawing board. Old EC institutions and regulations may remain on the books but fall into disuse, as did the Treaty of the League of Nations after the great depression and events in Germany in 1933.

Norden is thus faced with having to make its choice against a double back-cloth of spontaneous internationalization and European political and institutional fragmentation — at least compared to the visions of European unity and cohesion laid down in many recent EC documents.

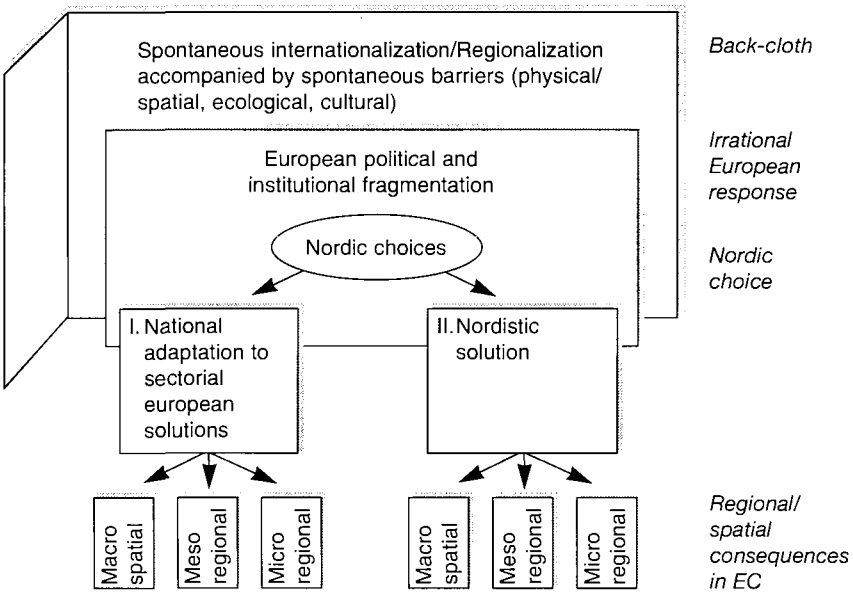
In this case we would assume that the Nordic countries would carefully consider not only the immediate political and institutional crisis, but equally the fundamental back-cloth of spontaneous trends already described.

Consequently it appears most likely that the individual Nordic countries would opt for choice No I in the illustration below, which means that they would strive to secure sectoral integration with Europe as a substitute for the kind of comprehensive political and institutional arrangement which is no longer workable.

Therefore, national adaptations to European sectoral solutions, which might be labelled a sort of sectoral confederation, would seem the most likely contrast-based scenario.

Possible sectoral areas of cooperation between Norden and the Community might be asylum policy, free trade, environmental protection, human rights protection, law enforcement and infrastructure. Some of these potential areas of sectoral cooperation, of course, emanate directly from the back-cloth of spontaneous internationalization.

FIGURE II.4: Fragmentation scenario



As indicated in the overall fragmentation scenario, another Nordic option has been considered, i.e. a 'Nordic solution' as an alternative to European integration.

This possibility has already been introduced into the Nordic public debate. A Nordic solution could mean anything ranging from the creation of a Nordic federation of States to an economic union, or even to a Nordic military and security policy union.

Plans of this nature have been discussed at regular intervals ever since the mid-19th century when the Danish realm came under pressure from nationalists who wished to split the Danish-German-speaking monarchy along national lines. But every time such Nordic

or Scandinavian solutions were suggested, it turned out that the Nordic countries were too different in terms of economic and military interests or foreign obligations for the scheme to be realistic.

Even today the Nordic picture is far from uniform. Norway, Denmark and Iceland are members of NATO, whereas Finland and Sweden are not. Denmark is a member of the Community, whereas the self-governing areas within the realm, i.e. Greenland and the Faeroe Islands are not. Nor are the other countries within Norden. Norway and Finland have hinted that they may wish to join the Western European Union. Denmark is opposed, and so on.

Nor can it be said that Norden is absolutely uniform in terms of political culture. Characteristically, in spite of several decades of Nordic institutionalized cooperation through the Nordic Council of Ministers (governmental cooperation) and the Nordic Council (parliamentary cooperation), which, let it be said, have achieved some most excellent results such as the Nordic passport union and a free inner labour market, it is a fact that whatever free trade exists among the Nordic countries is due not to the results of Nordic cooperation but to the achievements of EFTA. Free trade among all Nordic countries (including Denmark) will only come about as a result of the Nordic countries' ratification of the EEA Agreement, i.e. as a result of a 'European' impulse.

In spite of the shortcomings of Nordic cooperation it would be wrong to assume, however, that it is on its way out. Irrespective of any Norden-EC settlement and of how many Nordic countries or self-governing areas decide to join or stay outside the Community, Nordic cooperation will continue — rooted as it is in strong popular sentiments and backed by governments and parliaments who wish to see it carried on.

One indication of the strength of Nordic commonalty is the combined membership of the various Norden Associations (Foreningerne Norden) in all Nordic countries and self-governing areas, which exceeds 100 000.

As a recent declaration by the five Nordic prime ministers (the so-called Bornholm Declaration of 17 August 1992) makes clear, the specific aims and modalities of Nordic cooperation are to be adjusted to the new reality of greater Nordic integration with Europe. This might entail a stronger emphasis on Nordic cultural cooperation and a greater degree of thematically oriented priorities, but the prime ministers made it plain that there is no question of downgrading inter-Nordic endeavours nor of cutting financial allocations for inter-Nordic governmental cooperation (currently approximately ECU 90 million per annum).

The fundamental commitment to a specific Nordic dimension in Europe was underlined by the current chairman of the Nordic Council, Sweden's Prime Minister Carl Bildt in his address to the 42nd session of the Nordic Council on 1 March 1993. In particular, Mr Bildt stressed the need for a Nordic dimension in the Community's regional policies in order that the Nordic countries may get their fair share of the Structural Funds with reference to the particular geographical, physical and climatic characteristics in Norden. (We refer to this point in Part III, Volume I of this report.)

Mr Bildt further referred to the stipulation in the EEA Agreement that Nordic cooperation shall be allowed to continue and to Sweden's expressed desire that an eventual Swedish membership of the EC shall constitute no impediment to its further development.

Part III

Overview of impacts of Nordic developments on EC territory

3.1. Introduction

The aim of Part III is first of all to define three specific impact dimensions on EC territories which will enable us to classify potential Nordic impacts. The nomenclature developed below will be employed throughout this study.

We then proceed to enumerate a great number of potential Nordic impact factors derived from the 11 special studies presented in Volumes II to IV and to order these impacts according to the three dimensions just developed. What is intended is a catalogue of potential impacts regardless of whether these must be considered potentially weak or strong.

In this sense Part III also serves the purpose of providing an initial key to a further immersion in the special studies.

3.2. Impact dimensions

It is important to note that Nordic impacts upon EC territories may unfold within distinctly different dimensions. For the purpose of this study we have identified three such dimensions:

Dimension I: The micro-regional dimension

Some special studies point to measurable impacts on reasonably definable geographical micro-regions within the Community. In terms of size, a micro-region would be the equivalent of perhaps a large English county, a German *Land*, a city region such as the greater Paris region, or an island such as Zealand in Denmark.

Dimension II: The meso-regional dimension

When the likely impact is defined as meso-regional, we are talking in terms of regions which are greater in physical size and based on other criteria than those of the NUTS nomenclature. Moreover, these regions often cross national frontiers and embrace several border areas of juxtaposed nations.

Dimension III: The macro-regional or pan-European spatial dimension

In some instances the potential Nordic impact may be so uniform as to be deemed of little interest to the purpose of the overall study. In other instances even the most widespread impact may prove of considerable importance.

Two such instances spring to mind:

(a) impacts that somehow tend to shift the previous 'European balance', for example, from the south-west towards the north-east;

(b) pan-EC Nordic impacts, for example, stemming from increased Nordic political or institutional influence, which may motivate the Community to modify its priorities concerning regionally or spatially relevant policies, for example, the allocational principles governing the distribution of Structural Funds.

Both of these possibilities will be treated in greater detail in Part V of Volume I.

What follows is a summary of the most important potential impacts of Nordic development upon the Community's regional development and spatial organization which may be derived from a closer scrutiny of the special studies.

These impacts are classified according to impact dimensions (micro-regional, meso-regional and macro-spatial) as just defined.

Later in Part IV we shall deal more thoroughly with a number of impacts which appear to be particularly strong. These will be illustrated by a number of maps.

Please note that a thorough cross-analysis of a number of potential Nordic impacts in light of our two institutional scenarios — the integration scenario and the fragmentation scenario (developed in Part II) — will follow in Part V of this volume.

In order to make this summary survey of the impact findings of the special studies transparent, we have ordered them according to likely impact dimensions: micro-regional, meso-regional and macro-spatial.

Under each heading the findings are presented according to whether impacts are anticipated to occur in European peripheral or in European core regions and whether the Nordic impacts are likely to be to the overall advantage or disadvantage of the respective regions.

Again based on the findings of the special studies, we shall further attempt an initial evaluation as to whether impacts must be considered potentially weak or strong.

In accordance with the prevalent scenario assumptions of the special studies, the tentative conclusions presented here are based on the overall integration scenario outlines in Part II of this volume.

3.3. Potential impacts at the micro-regional level

3.3.1. Potentially advantageous Nordic impacts on peripheral European micro-regions

As mentioned in the special study on regional policy (Volume II), a potential conflict may be emerging between a traditional Nordic concept regional policy (in the narrow sense of that word) and the principles governing the distribution of EC Structural Funds. It is furthermore reasonable to assume that this discrepancy will become more acute in the event of a closer Nordic institutional integration with the Community.

What distinguishes Nordic regional policy to a greater extent than that of the Community is the desire to employ regional policy measures in order to stabilize the settlement pattern of the remoter, peripheral areas and stave off rural depopulation. This is especially true of Norway.

As also indicated in the special study, there are, however, differences between the Nordic countries. Sweden operates a regional policy which focuses somewhat more on achieving social welfare goals. As a result, the related physical, cultural and educational infrastructure has tended to attract the rural population to the larger provincial towns.

Recently Nordic regional policy has been hampered by the prevailing economic recession. This causes an increase in population migration to the larger provincial centres, which counteracts the efforts to stabilize settlement in the thinly populated areas. Rural/urban migration in the remoter areas concentrates problems in the provincial towns where social friction and unemployment show a marked increase. The battle intensifies between the different geographical regions as they fight for an adequate share of the limited resources offered by restricted State budgets.

Exchanges of documents in preparation for Norway, Sweden and Finland's forthcoming membership negotiations with the Community have highlighted the manner in which Norden, through its regional policies, has successfully minimized the living standard gap between its core and periphery, a problem which is so common to other countries. The average GDP per capita of the wealthier southern regions of Norden is only 13 % above that of the Nordic peripheral areas.

It seems appropriate to compare this relatively minor Nordic difference to the vast differences existing within the Community. Recent findings indicate that the 10 least developed regions within the Community, primarily located in Greece and Portugal, have average incomes per capita which are less than a third of those enjoyed in the 10 most developed regions located in the Community's northern core areas (R. Hall and D. Van der Wee in *Nord Revy*, No 5/6, 1991). Furthermore, national differences in individual Member States appear much greater than within the individual Nordic countries.

This minimal regional inequality in living standards has been the result of a long tradition of transference of resources to the peripheral areas in order to maintain and improve agriculture, fishing, education and social services. This is reflected in the peripheral regions being characterized by an unusually high percentage of their work-force in the primary and tertiary industrial sectors. The tertiary sector is actually just as well represented in the northernmost regions of Norden as it is in the south. All in all, employment in the tertiary sector is 12 % above the EC average. This high tertiary sector employment figure compensates to some degree for the lack of secondary sector employment opportunities, i.e. in manufacturing. Geographically, manufacturing is concentrated in the mid-Nordic region.

As long as an institutionally integrated Norden pursues its quest to at least partially maintain its traditional commitments to the relative equality in regional living standards, it is fair to assume that this will have spin-off effects within the Community, that is, supporting the case of increased regional support to other EC peripheral regions which possess similar characteristics to those of Norden's own peripheral areas.

One such peripheral region is the Scottish Highlands and Islands region which does not receive subsidization from the national government on the same scale enjoyed by Nordic peripheral regions. One result is that unemployment is relatively higher in the Scottish peripheral regions than in the Nordic periphery.

Nordic regional policy support for industry has wavered slightly in recent years. For many years the official policy was to grant subsidies to individual enterprises to aid investment and reduce running costs. However, this individual treatment has recently been partly replaced by a harder policy line. There is greater caution and scrutiny. Loans to industry are now dependent on prevailing market circumstances rather than on purely individual company needs. Although far from foreign to Norden, regional policy is becoming consciously more infrastructurally oriented and in that sense more akin to the policies pursued within the Community.

Recently, the argument that the Community ought to acknowledge low population density as a regional support criterion was forcefully made by the Nordic countries. Whether they shall succeed in this endeavour is as yet undecided, as is the eventual fate of other Nordic demands for EC recognition of long distances and harsh climate as grounds for preferential treatment.

Should the low population density criterion fail, the initiation of special programmes based on resource-based industrial sectors might compensate to some extent. However, within certain primary industries, especially fishing and forestry, EC regional development or compensation (equalization) programmes would most likely benefit few micro-regions in Norden due to its technological advantage over its European neighbours.

Finally, it should be pointed out that an EC policy aimed at compensating technologically advanced Nordic fishing and forestry regions might conceivably lead to a micro-regional 'scramble' for the benefits from the limited number of primary industry support programmes. In the case of the fishing and forestry industries, which will be dealt with more comprehensively in the next paragraph, the advanced Nordic micro-regions would be likely to face strong opposition from fishing regions along the Danish and United Kingdom North Sea coasts as well as in Ireland.

3.3.2. Potentially advantageous Nordic impacts in core European micro-regions

Several of the special studies show that commercial integration between Norden and the Community is already highly developed, and that the interaction is expected to continue, particularly in the service, tourist and energy industries. While greater political cohesion as a result of Nordic integration might well further encourage commercial integration, politics in itself is not the engine. The driving-force in fact lies outside the political sphere of influence. It is spontaneous business decisions, operating under free market conditions, which rejuvenate demand. This ought to be advantageous to some European micro-regions.

Three of the special studies have in particular focused on the likely effect of Nordic development on European core micro-regions:

(a) general industry (primary/secondary industries) (Volume III),
(b) the business service industry (Volume III),
(c) the tourist industry (Volume II).

The special study on industry (primary and secondary)

This special study has considered the future for employment, investment and internationalization. Certain industrial branches have been analysed in greater depth as they are very representative of Nordic industry.

Due to the modern, high-tech exploitation of the vast forest reserves which occupy a large percentage of the total land surface of the Fenno-Scandinavian area, certain Nordic industries have gained world importance — forestry, timber, and the pulp and paper-processing industries. Swedish and Finnish primary and secondary industrial concerns predominate. The competitive advantage enjoyed by the Nordic countries due to their high-tech equipment and modern processing plants has allowed them to win a prime share of the total European market.

The question remains as to how long the Nordic-based industries will be able to maintain their competitive edge on their EC rivals if the EC integration process is completed.

However, the special study suggests that the greatest increase in employment within these industries will actually occur in central Europe, rather than in Norden itself. This is because there will be advantages to be gained through a more market-oriented industrial loca-

tion of the processing industries. The European core has several large urban agglomerations in which the related processing industries are already established: central England, eastern Holland, Belgium, southern and western Germany. As a whole, the industry will be able to take advantage of new market trends, particularly an increasingly differentiated market, and pay heed to changing environmental preferences. For example, besides being close to the client, the 'in vogue' paper recycling industry will have the added advantage of being located right in the very heart of its recycled material source.

The possibility that European integration might have a dampening effect on the Nordic forest, timber and pulp and paper industries worries many Nordic communities, as many of them are almost totally dependent on these industries for their economic livelihood. There are usually no alternative industries in the vicinity. Furthermore, many settlements are remote, making them unattractive relocation candidates for other industries.

Another important secondary industry in Norden is the transport production industry. Sweden has clearly the best vantage point due to its broad production range, while Finland and Norway tend to concentrate on favourable market niche production areas. The most drastic geographical effect of European integration is likely to be felt within the automobile industry. Sweden, with its important automobile production, has already taken steps to achieve closer cooperation with its EC neighbours. The Swedish automobile industry operates with much of its production phase (component manufacturing and assembly) in central European locations: Germany (Lower Saxony, North Rhine-Westphalia, Baden-Württemberg, Bavaria), France (Paris, Paris basin, East), Italy (Turin/Milan) and England (West Midlands). Suppliers and assemblers are also found elsewhere in Europe. In all, 35% of the people employed in the Swedish automobile industry work abroad.

The internationalization of the Swedish automobile industry is an obvious advantage for the micro-regions of central Europe. However, it may not be long-lived. Competition from Japan is a constant menace. Moreover, production costs are uncompetitively high compared to those of other continents, partly because manufacturing occurs in the high-income regions of Europe. Finally, due to the worsening economic recession, the north European demand for cars is falling.

The business service industry

The future for the European micro-regions is harder to predict with regard to the tertiary industrial sector (note that tourism will be dealt with separately in the next subparagraph).

Barriers to location and development differ according to the nature of the service. Some will concentrate upon specific geographical nodes, others will locate more diffusely.

Generally, the special study and its selected sources of reference do not foresee any great effect on micro-regional development by this industrial sector as a result of Nordic integration with Europe.

The most likely small effects may be briefly described here.

The special study indicates that barriers will be fewest where areas are geographically close or where cultural similarity exists. Advocates of increasing tertiary industry concentration predict that it will take place in existing major population centres such as London, Paris, and the Randstad (the Netherlands), while opponents see areas with a favourable climate, such as the South of France, attracting an increasing number of service industries. Within Scandinavia, southern Sweden or Denmark might become favourite choices for the relocation of Nordic tertiary enterprises due to the low cultural barrier.

The close geographical, historical, and above all the increasingly strong political bond that now exists between the Nordic countries and the new Baltic nations must favour Nordic service industries being able to establish themselves in the east Baltic area.

Taking the Nordic countries as a whole, the integration process within the service sector itself is likely to have a slightly negative effect. However, there are branches which may benefit enormously. This may be true of the Norwegian shipping industry or the sale of Norwegian know-how through the establishment of technical advisory services replacing less competent local services abroad within the oil and gas extraction industries in places such as Jutland in Denmark, western Holland, eastern England and Scotland.

The special study also reports that Finnish engineering companies already enjoy a strong international reputation. They will be well placed in view of the anticipated expansion of the physical infrastructure. Furthermore, it is obvious that the Baltic Sea regions will represent an excellent market opportunity for the Finns, due to the low cultural barrier, notably in Estonia where there are linguistic similarities.

Factors which might encourage business services to remain 'at home' in Norden include the easy access to the well-educated labour market and a highly developed university network offering research possibilities.

As a supplementary piece of information, the study on business services shows that the peripheral areas of

Norden have a highly trained workforce, in fact, as far as Sweden is concerned, the level of competence is generally higher in the periphery than in the more densely populated south of the country.

The tourist industry

The special study on tourism is based on three developmental hypotheses: (i) the first prognosis foresees development along existing lines, with an exodus of Nordic tourists to the sun-traps of southern Europe and alpine ski-resorts; (ii) the first alternative foresees an increasing fascination with areas of cultural interest; while (iii) the second alternative predicts that the growing concern for the natural environment and greater interest in 'green holidays' will also become a major factor affecting tourism.

Of particular interest to the micro-regions of central Europe is the prospect of an increase in culturally based tourism. Nordic clients are currently a very important source of tourist revenue in the micro-regions of the Mediterranean. However, a shift to other European micro-regions of 'greater' cultural interest might occur. An increase in culturally based tourism will initially favour the culturally rich capital cities of central Europe: Paris, London, Amsterdam, Berlin, Prague, Vienna and Budapest. Provincial towns of particular cultural interest will also prove increasingly attractive: Sienna, Florence, Gerona, Bruges, Delft, Bath, York, Chester, etc.

Barring the capital cities, Oslo, Stockholm and Helsinki, the Nordic towns are less well known (perhaps insufficiently known) as places of cultural interest. A move towards culturally based tourism may be to the detriment of Norden as a whole.

3.3.3. Potentially disadvantageous Nordic impacts on peripheral European micro-regions

A decline in economic growth and living standards may be experienced in European peripheral micro-regions dependent upon a particular resource if the integration of Norden into the EC opens the door to better organized, more competitive Nordic concerns.

The fishing and fish-processing industries

An excellent example of this event happening is within the valuable fishing industry. Iceland and Norway are already major exporters to the European market, while Sweden and Finland have no fishing industry of importance. Iceland and Norway might be able to increase their European market share significantly once European integration has been achieved.

However, this might be disadvantageous to certain European peripheral regions such as in Denmark and the United Kingdom, particularly if the Icelandic and Norwegian fish-processing industries increase their hold on the production and market shares. Micro-regions that will suffer include the western fishing communities of Jutland in Denmark, such as the fishing ports of Esbjerg and Skagen, as well as the North Sea coastal fishing towns of the United Kingdom such as Grimsby, Hull, Aberdeen and Peterhead.

Yet it must be said that there are many circumstances that could affect the actual course of events. Fish processing in the rest of Europe is hardly likely to dwindle into oblivion. Denmark, for example, will probably remain an important processor of the Norwegian catch. Furthermore, if the tendency to process fish closer to the customer wins favour, the opposite situation might occur, with an increase in fish processing at the best-suited coastal sites within easy access of a major European market.

Energy

Norway supplies much of Europe with oil and gas for energy production and consumption: electricity, petrol, etc. However, EC integration will probably have only a minor and rather diffuse effect on the rest of Europe. Energy production is highly capital-intensive, so changes are not likely to affect the employment situation in the other European production areas to any significant degree. Norway has much experience and know-how within the energy industry that might be valuable to countries bordering the North Sea, under which lie rich reserves of oil and gas. The Netherlands, the United Kingdom and Germany might be affected. The nature or extent of Nordic influence is not possible to gauge at this stage.

It is thought that significant reserves of oil and gas lie beneath the Barents Sea, which is owned partly by Russia and partly by Norway. Once the political and territorial issues have been resolved, the exploitation of these resources might lead to the installation of pipelines southwards through northern Norway and Finland to the main European distribution network. Economically, it will mean the rapid growth of micro-regions such as the Finnmark area of northernmost Norway and parts of Lapland in northern Finland.

The nature of the energy flow-lines, costs involved, demand and competition, etc. will all determine how and where other micro-regions shall flourish, or whether currently active micro-regions engaged in exploiting the existing North Sea reserves will decline. As yet, it is too early to see how this development will unfold.

The particular potentials of the creation of a Barents region will be investigated in greater detail in Part V, dealing with transborder regional scenarios.

3.3.4. Potentially disadvantageous Nordic impacts on core European micro-regions

As a result of stronger integration, spontaneous or official interaction between Norden and the Community will increase. Pressure on the existing infrastructure will augment. The special study on transport (see Volume IV) reports on a dramatic growth in goods transport between Norden and the Community in recent years. There is no evidence to show that this trend will change.

Goods transport uses certain fixed physical corridors, for example, the major European river valleys such as the Rhine and Rhone. These will be subject to ever-increasing bottlenecks, particularly if the growth in road transport, notably caused by an increase in large heavy-goods vehicles, continues to accelerate at the current rate. The worst congestion is experienced on the German road network south and west of Hamburg. The limited number of major alpine road passes in Switzerland, Austria and Italy is a crucial problem needing a satisfactory remedy. Unfortunately, the foreseeable integration of Norden into the Community is only likely to create more traffic between North and South and exacerbate the problem.

The areas within or adjacent to these traffic corridors suffer from unacceptable noise and pollution levels. It is a heavy price to pay. This is true of the greater Hamburg region and the Rohr. German unification means that national priority will be given to an improvement of the transport communications network from west to east, rather than north to south, within the country. Micro-regions in the Netherlands, France, Italy and England are also suffering from an unacceptable over-concentration of traffic along a limited number of major routes.

Whether the Maastricht model or the EEA model is employed is immaterial. Norden's entry into Europe will exacerbate the traffic problem.

Congestion creates barriers to growth for the micro-regions which suffer from it. Transport time is lengthened, adversely affecting the effectiveness of companies for which speed is a first priority. This may weaken their position and at the worst lead to closures and job losses, not to mention the severe pollution that pervades the region, contaminating the atmosphere, corroding materials, killing plants, jeopardizing health and eventually reducing the life expectancy of those who live or work in the region.

Within the Scandinavian or Nordic context, there are naturally micro-regions which suffer from congestion and pollution. The Øresund region, representing the border zone between Denmark and Sweden, is a good example. Greater Copenhagen/Elsinore and greater Malmø/Helsingborg already suffer from serious traffic problems. However, congestion in Norden is certainly not on the same scale as that suffered throughout much of central and southern Europe.

With EC approval, the German Government has reacted to the problem by planning to introduce distance-related and possibly environment-related toll payments for the use of its motorway system. Likewise, the Community is considering ways of ensuring a more sensible distribution of traffic across its land surface, as well as introducing penal measures such as the imposition of duties to encourage users to operate with new or modified vehicles and fuels which are less harmful to the environment. At the same time, attempts will be made to try and make people use alternative modes, such as rail or water transport.

No business will shift to an alternative transport mode, however, unless the cost advantage is apparent. Besides, other considerations might still prevent the desired change. Old habits die hard. The 'just-in-time' principle is engrained in business philosophy as it is the most profitable. Consequently, much stock is literally 'on the road'.

A considerable shift in transport mode (to rail or ship) might lead to the establishment of new micro-regions or to the rejuvenation of old ones. It might give the kiss of life to some of Europe's slowly dying ports, once thought beyond resurrection. This could well be true of some Baltic Sea and North Sea ports. Likewise, the most navigable canals and rivers may become important inland routes and rejuvenate waterway transport in Europe.

All in all, however, the special study on transport tends to be pessimistic in its outlook. The future problems seem to outweigh any minor benefits caused by new policies, regulatory measures and changes in habit. In particular, it takes a dim view of the potentials of increased rail traffic. Far too little is being done to create European standards for such essentials as signals or width of tracks to make it credible that rail traffic can alleviate road congestion in the foreseeable future.

The study hints that this sorry state of affairs may well lead to a lower degree of pan-European division of labour than that anticipated as a result of the introduction of the single market, perhaps leading to a greater degree of micro-regional self-sufficiency.

3.4. Potential impacts at the meso-regional level

3.4.1. Potentially advantageous Nordic impacts on peripheral European meso-regions

Given certain circumstances, there will be a strengthening of competition within the agricultural and tourist industries at the European meso-regional level as a result of integration between Norden and the Community.

Agriculture

The special study on agriculture shows that this industry is particularly beset with intricate regulations and subventions.

In Norden, agricultural policies have been much used as a regional policy instrument. It can be wielded in such a way as to anchor the existing settlement pattern in peripheral areas so as to keep remote highlands and lowlands adequately populated. However, this policy is beginning to wane due to the current deepening economic recession, and a more liberalist attitude is likely to be forthcoming. This will allow market forces and consumer choice to make their impact felt more strongly. Moreover, a tendency for the old Nordic agricultural policy regime to be undermined may well follow in the wake of the countries' institutional integration with the Community.

Much of the Community enjoys a higher standard of agricultural productivity than Norden. Compared to its European neighbours, much of Norden suffers from a combination of mountainous terrain and a malevolent climate. Only in Skåne (the southern tip of Sweden) does Norden possess an agricultural region on a par with a neighbouring country — the geographically similar Denmark.

The integration of Norden into Europe, via the Community or the EEA, may well be to the benefit of European agricultural meso-regions at the expense of Nordic ones. One possible scenario is based on the anticipation that Norden-EC agreements will reduce the competitiveness of Nordic agriculture and make life difficult in Nordic regions, part of whose livelihood has been based on arctic or subarctic agriculture.

But the special study on agriculture also makes clear that prognostications in this area are very uncertain as the whole matter of Nordic agriculture's future is being — or about to be — negotiated.

The great transport distances separating many Nordic agricultural regions and markets from European suppliers or markets may be judged both favourably and disfavourably. It could protect the Nordic home market for easily perishable products. By contrast, the long distances will add unfavourable additional transport and refrigeration costs to the export of Nordic products to the markets of central and southern Europe.

A further factor to be overcome, in all parts of Europe, is dietary tradition. How does one break down traditional, perhaps culturally determined, eating habits when trying to break into a new market? However, the special study pays little attention to this marketing problem, regarding it at this stage as being of minor importance.

Much of the Nordic region is likely to be subject to marketing attacks from the agricultural products (particularly food) of the highly modernized and efficient adjacent meso-regions of northern Germany, Denmark and Benelux. These meso-regions will also have an advantage over their southern counterparts due to their closer proximity to Norden. Transport time and costs are assumed to play an important role in the choice of market. However they will not have the same products on offer as their southern counterparts, exotic fruits or wines for example, although how much these products are to be judged as alternatives to Nordic products is tentative. All in all, this development may well entail severe competition to the agricultural and food-processing industries of Norway, Finland, and to a lesser extent Sweden.

Tourism

Nordic tourists represent an important source of income for the tourist industry of southern Europe, particularly the sunny, coastal regions of the Mediterranean.

An analysis of tourist behaviour reveals that Nordic tourists have begun to show a preference for eastern Mediterranean destinations rather than western ones. This is based on a 'quality for money' decision. Either prices in the western half have to fall and/or the resorts of Portugal, Spain, Italy and France have to improve their quality and reduce pollution, or else the eastern Mediterranean (Greece, and the non-EC countries of Turkey, Cyprus, Israel and Bulgaria) will be the winners. In itself, European entry is unlikely to improve the purchasing power of the Nordic tourist. Therefore, if they remain unimproved, the meso-regions of the western Mediterranean are likely to continue their decrease in popularity.

3.4.2. Potentially advantageous Nordic impacts on core European meso-regions

Industry

Manufacturing industry is likely to be greatly affected in the European core meso-regions by the integration of Norden into Europe. The special study predicts that the spatial effects of an increased adaptation to European norms and increased cooperation will benefit the core region. The reason is the enormous concentration of population in these areas and the market potential that it represents.

At present, the sources of information to confirm likely changes are sparse. This is probably a natural consequence of cautious market behaviour. However, investment flows have been analysed as they may provide some indication of future development if trends persist. Apparently, Nordic investment in Europe is greater than European investment in Norden. This is particularly true of the production phase. Swedish and Finnish companies have invested considerable sums of money in France, Germany, the Netherlands and the United Kingdom. Even Icelandic investment has been directed towards Europe. Apart from Ireland, investment in countries who are substantial beneficiaries of EC Structural Fund support are less attractive to Nordic investors, i.e. Portugal, Spain, Greece and Italy.

It has, unfortunately, not been possible to divide the investment data into meso-regional proportions.

3.4.3. Potentially disadvantageous Nordic impacts on peripheral European meso-regions

The transport situation

Circumstances affecting transport influence decisions on industrial location and marketing. The special study highlights certain barriers to efficient transport communication between Norden and Europe. Essentially, as explained earlier, these problems are the overloading and congestion of certain parts of the total European road network, notably in central Europe. This will increase the transport time for goods sent from the European periphery to the European core, or vice versa. The knock-on effect of the extra costs will be represented in an increase in end-user sales price, particularly in connection with farm and food products, although the price of consumer durables and tourist holidays may also increase. The potential welfare advantages of Nordic integration may be counteracted by any increase in transport communication problems.

In order to alleviate the problem affecting the link between Norden and Europe, alternative routes ought to be considered. This may be possible in Denmark and selected parts of northern Germany, for example, the proposed Fehmarn bridge/tunnel link, or perhaps some time in the next century future tunnel links from the Rügen/Zingst peninsula of Pomerania to Gedser in Denmark and to Trelleborg in Skåne, Sweden.

Assuming that production techniques are not too specialized and markets fairly stable, alternative thinking may be the solution at the supplier to industry level. Suppliers located on the Iberian peninsula already suffer from the burden of increasing transport costs and delays in supplying their Nordic customers. They may find their solution in relocating in the new market economies of Poland and the Baltic States which are alternative low-production cost countries. This will naturally be to the detriment of Iberian peripheral areas such as in Portugal, whilst alternatively Baltic countries such as Lithuania may stand to gain.

Concrete documentation for this tendency is not forthcoming in the special study on transport, although the textile industry is mentioned as an industrial branch that might witness relocation, partly due to the transport time/cost problems.

Tourism

The European meso-regions are particularly vulnerable to rapid changes in market behaviour resulting from world events or changes in attitude. With regard to attitude it has already been shown that a shift in interest towards holidays of greater cultural or environmental interest may reduce the market share for the traditional sunshine resorts of the Mediterranean. Holidays in the most important cultural cities will increase. The untapped potential of the vast tracts of beautiful, minimally polluted land in Norden may benefit from an increase in demand for environmentally pleasant holidays, as the current European Green Movement becomes more popular.

Tourism will also be negatively affected by the likely increase of duties, tolls and taxes on transport to reduce pollution and congestion. Interaction will decrease to the detriment of more distant destinations of the European periphery.

Fishing

The Nordic fishing and fish-processing industries have great potential both in the volume of their catch and their productivity. As mentioned in the section on micro-regions, certain localities in northern Europe may be faced with severe competition from Nordic concerns once integration has occurred.

The more diffuse nature of the European fishing industry in peripheral areas, such as Iberia, may prevent them from being greatly affected by Nordic competition. It depends on the degree of dependence upon fishing as the staple livelihood. Furthermore, the fish species caught in Nordic sea areas are not necessarily the same as in the Mediterranean or Iberian Atlantic waters, and traditional dietary habits in Spain and Portugal may therefore shield the Iberian fishing industry somewhat.

Possessing rich fishing grounds is not the only condition for being successfully competitive. Market control is a major factor too. Nordic dominance will not necessarily be achieved by trying to out-manoeuvre the South by fusions. Strong reaction by the rest of Europe, possibly through protectionist moves, may weaken trade connections and jeopardize the Nordic fishing industry as a whole. Therefore fish-processing close to the large consumer markets of England, Germany and Benelux will probably be a wiser Nordic policy to pursue.

3.4.4. Potentially disadvantageous Nordic impacts on core European meso-regions

Due to the limitations and nature of the research methods employed, the special studies have been unable to point to any potential weakening of the European core at meso-regional level. The effects seem to be more significant at micro-regional level, as described earlier.

3.5. Potential impacts at the macro-spatial level

The macro-spatial level is in fact the total European surface area. As already indicated in our discussion of impact dimensions at the start of Part III, Nordic integration into Europe will not be confined purely in effect to small localities, geographical regions or even nations. Certain effects will be universally felt across the whole of Europe, that is, they will be pan-European.

This paragraph looks at the integrational impact on the North-South balance in Europe.

From the way in which the European Structural Fund policies to aid the weaker European regions are organized at present, it is clear that the entry of the relatively wealthy Nordic countries into Europe might be a welcome plus factor. The weaker nations of southern Europe would probably continue to receive Structural Fund and cohesion transfers beyond the year 2000 at approximately the present rate.

Meanwhile, in the event of entry into the Community, Norden would continue to work for an alteration in the allocation of the European Structural Funds, so as to retrieve a larger share of its potentially high contribution in order to boost certain areas of its economy. Support would likely be forthcoming from other EC areas showing similar or analogous physical or climatic characteristics as Norden. Undoubtedly, Norden would encounter opposition — particularly from disadvantaged regions in southern Europe — if it were to pursue a policy of 'pro-Nordic' modifications in the previous allocational criteria determining the distribution of the Structural Funds.

Recently, as already indicated, several Nordic countries have switched their regional policies towards a course closer to that of the Community. This new policy tends to diminish direct aid to individual enterprises and moves more strongly towards broader project-oriented aid programmes. Similarly, the EC policy of improving the basic infrastructure — road networks, educational and cultural activities — is also receiving higher Nordic priority.

The worsening budget situation has also made it more difficult for the Nordic nations to carry on their regional policy of maintaining settlement densities and patterns in remote areas by means of the decentralization of services, a policy which has, up till now, been very successful in creating jobs in these areas which would otherwise suffer from high regional unemployment and witness severe rural depopulation.

The special study on regional policy (see Volume II) claims that Norden will surely advocate a strengthening of European regional policies, and that with its vast experience in this area, Norden would be able to play a major role in advising on relevant and essential criteria for the benefit of Europe as a whole.

Businesswise, both for manufacturing industry and agriculture, European entry may have a generally negative effect on Norden. The competitive edge in certain industries might well be blunted. Nordic production might in some instances be forced to relocate in the European core area due to the advantages of being closer to large markets. This might mean job losses in Norden itself.

A loss of Nordic protective subsidies might weaken Nordic agriculture and subject the Nordic market to attack by European companies. However, the market potential is only 18 million people compared to 344 million people in the rest of Europe.

Gains may also be had by European business services at the expense of their Nordic counterparts. However, Europeans would have to overcome Nordic culture and language, and there is no guarantee that European companies would be able to break through as successfully as they may wish.

Psychologically, the very fact that Norden undoubtedly is a European geographical periphery may be construed to imply a number of 'natural' Nordic advantages: a clean environment, vast open spaces, beautiful nature, invigorating climate and large raw-material resources which could be enjoyed, or exploited, particularly by the European core area. The excellent recreational potential is obvious.

On the other hand, further analysis presented in the special study on Norden's peripherality (Volume II) shows that a population drift towards Norden purely on the basis of the abovementioned advantages is extremely unlikely. This is due to a stronger human preference to live in countries with warmer climates. Furthermore, there is the centuries-old, economically created, rural-urban migration trend in Europe, which is a legacy from the agricultural and industrial revolutions. Economic factors seem to outweigh all other factors, and definitely environmental ones, when it comes to choosing a place to live and work. One can, therefore, readily assume that any environmental advantages enjoyed by Norden will not in themselves be enough to attract industry and create new jobs.

Nevertheless, Norden must be on its guard that its highly valuable environmental assets are not turned into the future European 'dumping ground' for relocating heavily polluting industries from the European core areas. A strict environmental protection policy must be enforced to avoid this disastrous potential threat becoming a reality. In this respect, Nordic resilience is very strong. This can be seen by the current, concerted efforts to avoid an increase in pollution in the Kola Peninsula and the Barents Sea region (see the treatment of the Barents Sea initiative in Part V, Volume I).

The special study on tourism considered the increasing public and political interest in environmental protection and greater interest in wildlife among the European population as a possible future scenario. However, the study concluded that prevailing forces affecting the macro-spatial level will continue. Holidays to the sunny, seaside resorts of southern Europe will predominate, while several factors, including greater environmental awareness, may cause a very slight increase in the number of Nordic people taking their holidays in their homeland or may encourage some southern Europeans to visit the North.

At macro-spatial level, the development of European energy supplies will be diffuse, due to the gradual evolution of a pan-European network in which the Russian Federation is also involved. Norden will play its part in this evolution where cooperation and practical compromise are going to be vital ingredients rather than isolated market decision-making.

Transport problems are more diffuse at the macro-level as they affect both Norden and Europe adversely with regard to trade between the two regions. There are pluses and minuses. Any pluses must be seen in the light of a hidden form of 'protectionism' in which a perceived transport hindrance to the desired optimal trade flow may cause some businesses to defer marketing their wares to more distant markets, thus 'protecting' home markets for domestic goods. However, it has not been possible for the special study on infrastructure to specify which products or industrial branches are likely to be most affected.

Close proximity to the Baltic States and the new market economies of Poland and the Russian Federation must give Norden a clear advantage over many other European countries in establishing new profitable links. Yet, the opportunity has not yet been fully grasped by the Nordic countries, and there is a danger that many useful connections may be established by German initiatives due to that country's exceptionally broad industrial base and experience.

Not all initiatives are based on economic gain. There are equally important issues to be solved through political cooperation with regard to pollution, migration and security. In this area, Norden is showing greater urgency and initiative to shape the course of future events. Politically it may also be said that the opening-up of the Baltic States and the Russian Federation will increase the overall importance of Norden once it becomes a fully integrated member of the Community. Threats to safety, security or the environment will then be taken much more seriously by the other Member States. This may lead to a flow of resources to Norden to reduce and check threats, and of course tendentially result in a decline in importance of the southern European areas.

In this connection, it ought to be mentioned that in the event of Norway and/or Finland joining the Community as full members, the Finnish-Norwegian eastern borders would become the Community's only border with ex-Soviet areas. The importance of this fact can probably be inferred from the extraordinary circumstance that the Community has officially decided to join in the endeavours of the Barents region initiative although neither the initiating power, Norway, nor the other States whose territories are directly involved are as yet members of the Community.

3.6. Conclusions

The special studies reveal that the finer the resolution level the more accurate is the identification of effect. This has been true of the Nordic study's attempt to pinpoint the impacts of Nordic development on the regional development and spatial organization in the Community. The micro-regional level represents the finest level, i.e. the most specific impact dimension. On

the other hand, an alternative philosophy advocates that effects often occur unexpectedly, diffusely or even at random, making a more universal, i.e. scalar, approach to matters of cause-and-effect wiser.

As would have been reasonable to expect, it has not been possible to tackle all the problems even at the finer resolution levels of meso-regions and micro-regions.

Regarding the whole spectrum of subject areas studied, it has become apparent that it is absolutely impossible to identify one simple result of Nordic integration with Europe. Nordic entry will cause many different effects which will be dispersed differently at various regional levels throughout Europe.

The special studies are multifarious and thorough. Even so, they have not tackled every single aspect of potential Nordic impact. In spite of this, the task of portraying lucidly the negative impacts as they may be perceived by the Community has not been insurmountable, even when tackling vital Nordic interests such as fishing and its related industries, or, indeed, other raw-material based industries.

A series of problems regarding the Nordic peripheral areas is likely to grow as a result of EC-European penetration. One of the worst effects will be the disintegration of the widely dispersed population settlement pattern in remoter areas which has until recently been maintained by prudent Nordic regional policies. The result may be a significant increase in rural-urban migration, and consequently the rapid growth of small provincial towns with above-average unemployment.

Not unexpectedly, integration will have a much greater impact on the Nordic economies than on the EC economies. Yet, Norden is well suited to fending off any 'attack' due to its highly educated and well-trained population and its high level of welfare services which will, even if it comes to the worst, continue to maintain a standard of living above the European average for many years to come.

For certain industries it would seem that it is not so important whether integration takes the form of the Maastricht model or the EEA model. These industries include manufacturing, business services, tourism and energy. This is because they have already undergone much deregulation and internationalization.

On the other hand, some of the major primary industries such as agriculture and fisheries will be greatly influenced by the agreements reached during an integration process. They have up till now constituted a mainstay of Nordic regional policy. Ideologically they are regarded as very important, in fact more important than their mere numerical contribution to the social value-added.

EC membership would undoubtedly make Norden a net contributor to the Community's cohesion policies while receiving comparatively little Structural Funds support in return — thus benefiting the southern members of the Community and Ireland.

Nevertheless, in spite of its low population, there is no doubt that Norden would become a significant member, particularly in influencing future European regional policies where it has valuable experience to draw upon. Undeniably, however, this might incite a North-South conflict concerning priorities and therefore allocations, as mentioned earlier.

Norden would no doubt attempt to take existing EC ideologies at their word, such as the principle of greater cohesion, more subsidiarity within the Community, solving environmental problems, allowing more room for interregional — perhaps transborder regional — cooperation and interaction.

The efforts are likely to take the following forms:

(i) the identification of raw material resource-based regions which deserve development aid programmes. This might create a better alliance between Norden and the southern European countries with regard to the forestry, timber and pulp and paper industries, or with central Europe and the United Kingdom with regard to the iron and steel industry and other metal manufacturing industries;

(ii) the demand for greater subsidiarity, even autonomy, with regard to how regional and industrial aid is administered at the local level. This will of course be related to modifications of European regional policies;

(iii) the establishment of a 'northern dimension' within the Community in relation to the overall European need to establish common policies dealing with the challenges and opportunities emanating from Norden's proximity — and by amplification the Community's proximity, should the Nordic States become members — to the Russian Federation and the newly liberated Baltic States in matters such as security, demographic stabilization, environmental protection and the utilization of the vast natural resources and industrial potentials of such regions as the Barents Sea area.

These suppositions must be considered with reservation. Future EC regional policies, geopolitical priorities and the implications of a potential Nordic entry into the Community constitute a very uncertain political, regional and spatial arena in which many acts will be performed before definite shapes and strategies have emerged.

Part IV

Identifying potentially strong Nordic impacts

4.1. Introduction

Whereas the preceding Part III undertook a broad discussion — in more or less catalogue form — of a vast spectrum of potential Nordic impacts regardless of whether they might be perceived as weak or strong, and ordered according to the three impact dimensions defined in this study, we shall now, in Part IV, narrow the focus to a number of Nordic impact factors that we determine to be potentially strong.

To facilitate this determination, we have applied a rough quantitative tool allowing us to compare Norden and the Community.

Based on our strength assessments, we then identify a number of potentially interesting Nordic sectors which are discussed and whose potential impacts upon EC territories we attempt to determine.

The Nordic impact factors analysed are:

(i) nature, environment and peripherality (including demographic characteristics);
(ii) industrial clusters;
(iii) the Nordic energy sector;
(iv) agriculture and the agro-industry;
(v) fisheries;
(vi) tourist industry.

At the end of Part IV our findings are presented in graphic form.

4.2. Measuring impact strength

In order to obtain some idea of the potential strength of Nordic impacts — and therefore their relevance to the overall purpose of this study (some may be too weak to be of any appreciable interest) we have employed a rough tool as the basis of our immediate considerations.

As a point of departure it should again be pointed out that in terms of total population the Nordic countries are small compared to the total population of the Community. As indicated in Table IV.1 below, the combined population of Norway, Sweden, Finland and Iceland amounts to no more than 5 % of the total for the Community.

Normally one would expect a certain correlation between this demographic fact and the likely impact of various Nordic sectors upon a large and populous area such as the Community.

It is clear that almost regardless of any imaginable Nordic development, one may expect little or no regional/spatial impact contribution from Nordic sectors whose relative size *vis-à-vis* the Community falls below a certain level. On the other hand, it is evident that Nordic sectors showing relative strength compared to EC totals may be assumed to exert some potentially appreciable influence.

Obviously, strong Nordic sectors cannot automatically be translated into strong impacts. It has to be taken into account that barriers to flows, regardless of their nature or origin, may modify or eliminate expected impact contributions.

Table IV.1
A quantitative comparison of Norden and the European Community

	Norden excluding Denmark the Faeroes and Greenland	The European Community including Denmark	Norden as a percentage of the European Community
Area (100 km²)	1 215	2 304	53
Population (1 000)	18 035	333 296	5
Population density (km²)	15	145	10
Agricultural production (1 000 tonnes)			
Corn	11 536	143 396	8
Milk	8 263	113 766	7
Potatoes	2 695	42 767	6
Livestock (1 000)			
Cattle	7 019	81 959	9
Swine	4 046	111 338	4
Sheep	3 308	105 594	3
Horses	175	1 598	11
Forestry (1 000 m³)			
Roundwood removals	113 474	125 774	90
Fisheries (1 000 tonnes)			
Total catches	3 613	6 193	58
Atlantic cod	506	359	140
Energy			
Natural gas (million m³)	27 812	122 905	23
Crude oil (1 000 tonnes)	81 861	102 952	80
Electricity (1 000 GWh)	320	1 772	18
Hydroelectricity (1 000 GWh)	209	147	142
Electric energy per capita	17 731	5 316	300
Other commodities (1 000 tonnes)			
Iron ore	14 756	5 610	263
Ferrous alloys	5 916	92 616	6
Crude steel	8 316	132 168	6
Aluminium	1 045	2 419	43
Cut timber (1 000 m³)	22 602	34 331	66
Paper and pulp	21 751	9 676	225
Newsprint	4 476	2 761	162
Transport			
Commercial shipping (gross tonnage)	19 017	63 944	30
Private vehicles (1 000)	8 708	124 002	7
Railway traffic (passenger/km)	11 964	235 222	5

Sources: Nordic statistical yearbook, UN statistical survey, UN, *Yearbook of industrial statistics* (statistical years 1989 and 1990).

Some specific Nordic characteristics and sectoral strengths of potential importance to the flows of goods, services, capital and persons have been indicated by asterisks in the table above.

As becomes immediately apparent, Norden's area is vast compared to that of the Community. Were the Nordic countries to become members of the Community, the area of this 'Europe 16' would increase by 53 % compared to the present 'Europe 12', i.e. if one leaves out Nordic areas such as Greenland, the Faeroe Islands and Svalbard. The justification for doing so may be considered somewhat dubious. They are, after all, very much a part of nations whose develop-

ment is central to the entire Nordic impact study. If one does take into account the entire Nordic area, including Greenland, the Faeroe Islands and Svalbard, Norden's combined area would exceed that of the present Community (see Figure I.1 presented in Part I).

As indicated in the special study on Norden's peripherality (Volume II), this vast Nordic area has given rise to a number of Nordic special characteristics, primarily vast areas with very sparse population and long distances creating physical barriers to economic activities and the need to overcome internal Nordic cohesion problems by means of transport infrastructural investments (see the special study on infrastructure in Volume IV). On the positive side, Norden does posses vast areas of virtually untouched natural beauty which might bode well for 'environmental tourism' (see the special study on tourism in Volume II). By the same token there is in Norden no lack of physical space for the location of economic activities — a fact that might help Europe alleviate the growing problem of congestion in core economic areas (see the special study on peripherality in Volume II).

Norden's unique physical and geographical characteristics may well in themselves have spatially relevant impacts on EC territories, particularly on the assumption that the Nordic countries were to join the Community (i.e. if Variant II of the integration scenario presented in Part II, Volume I is realized). In particular, if the Nordic countries were to gain EC acceptance of their claim that long distances, sparse population and cold climate should modify the existing allocational principles governing the disbursement of Structural Funds, this might well create effects throughout the EC area.

For one thing, one might hypothesize that tendentially there could be a shift in balance from the South of Europe towards the North. For another, the general acceptance of 'Nordic' principles might conceivably be to the advantage of a number of specified regions within the present Community, in particular the Scottish Highlands and Islands and certain sparsely populated areas of the Iberian peninsula (see the special study on regional policy in Volume II).

Together with other quintessentially Nordic problems — such as the cold climate and rough terrain — the question of long distances has now been raised by the Nordic countries in preparation for their negotiations with the Community. Some of the features have already been touched upon in Part I of this volume.

Apart from Norden's sheer size and physical/geographical characteristics, the potential effects of Nordic development on EC regional and spatial organization may be evaluated on a factor basis. The preceding table indicates some potentially interesting areas with an adequate relative size *vis-à-vis* the Europe of Twelve.

4.3. Nordic economic sectors of likely regional and spatial relevance

On the face of the empirical evidence, the following Nordic sectors ought to command some attention: forestry, paper and pulp, fisheries, metal mining and refining, and perhaps above all the strong Nordic, i.e. almost exclusively Norwegian, energy position in terms of deposits of natural gas and oil.

One crucial Nordic sector is not featured in the table above — the travel industry, including both tourism and business travel.

Norden's demand for international travel services is markedly higher than that of the EC countries. Per inhabitant and year, the Nordic countries generate 1.11 bed occupancies compared to only 0.97 in the Community. In other words, the 'travel inclination' among Northerners is 15 % above that of EC Europeans.

This aggregated figure covers both tourism and business. We have to assume — albeit without adequate statistical documentation — that the level of business travel is rather equally distributed among advanced industrialized nations. Consequently, tourism would seem to account for the difference between Norden and the Community. Generally, the frequency of foreign holiday-making appears to be directly correlated to the degree of northerly location, with Norden being at the top.

It must also be noted — as particularly relevant to the purpose of this study — that most of the Nordic demand for tourist services is directed toward non-Nordic countries. Only 12 % of Nordic travel is to destinations in another Nordic country. The rest of the Nordic travellers aim for the Continent. We may be even more specific — for southern Europe.

Altogether it might well be argued that the potential impact of Nordic development on the travel industry is among the 'heaviest' contributors to regional and spatial effects in the Community.

In the light of this observation, we have extensively summarized our conclusions in this area at the end of Part IV. We also refer to the special study on the travel industry in Volume II.

As evidenced in Table IV.1 above, Nordic agriculture is not a strong Nordic sector, particularly if one takes into

account that a great deal of it survives on State transfers and would have difficulties in a pan-European market-place. This very fact, however, could be of prime importance in the event of closer Nordic integration with Europe as Nordic 'low pressure' in agriculture might lead to significant regional impacts in strong and strategically well located EC agricultural regions.

Norden's — and again we are primarily talking of Norway — huge merchant fleet is very difficult to assess in a context relevant to regional and spatial developments and no attempt has been made in this study. One would assume, however, that given a major relocation of international sea trading routes favouring a north-eastern passage between western Europe and the Far East (a cost-cutting possibility which is currently under active investigation by Norway and Russia), Norwegian commercial sea power may become yet another factor enhancing the regional potential of the Barents Sea area. This entire problematic is further expounded in Part V of Volume I.

4.4. Barriers to impact

Potentially interesting impact sectors should, however, be analysed in the light of certain barriers to free flows.

The long distances involved in transporting goods and people from Norden to the rest of Europe have always constituted such a barrier, for example, the distance from the northern Cape to Oslo equals the distance from Oslo to Rome! In principle it must be assumed that the greater the distance, the weaker the interaction.

Other physical barriers are mountainous terrain and the necessity to cross seas, for example, the narrow strait between Denmark and Sweden has yet to be bridged. These geographical features play their part in impeding interaction and increasing the journey time necessary to complete a transaction. On the whole, one must assume that interaction will normally be most intense in the border regions between the Community and Norden.

Infrastructural barriers

The physical barriers may naturally be reduced by improving physical infrastructure — roads and motorways, railways, air-routes, telecommunications and information technology. With regard to the latter two frontiers of science, distance may even be 'removed' according to the modern high-tech principle of 'there is everywhere'. The major flow factors affected by infrastructural progress are goods, passengers, movements of labour, movements of capital and services. The degree to which Nordic integration will succeed depends greatly on the nature of Euro-Nordic infrastructure today and its outlook for tomorrow.

Cultural barriers

In spite of a well-developed infrastructure, cultural barriers may restrict interaction. Cultural differences reduce cohesion, affecting the spatial impact of European integration processes. If one regards Europe as a mosaic of different regions (the concept of 'the regions of Europe'), such cultural barriers may be perceived as very significant. This is as true for Nordic cultural regions as it is for EC regions. Conversely, these historically determined cultural regions, which may include certain border zones traversing existing State boundaries, ought to be the source of inspiration for transnational interaction.

Environmental barriers

These will either limit regional growth and transport development or influence flows, for example, tourist flows (see the special studies on tourism and transport). Acceptable, sustained growth must pay heed to ecological requirements. Environmental determinants should be seen as positive guides to a better utilization of the wide-open spaces and special areas of cultural and ecological interest, an infrastructural development which respects nature, more pleasant working and leisure environments and less pollution.

Impacts — strong or weak

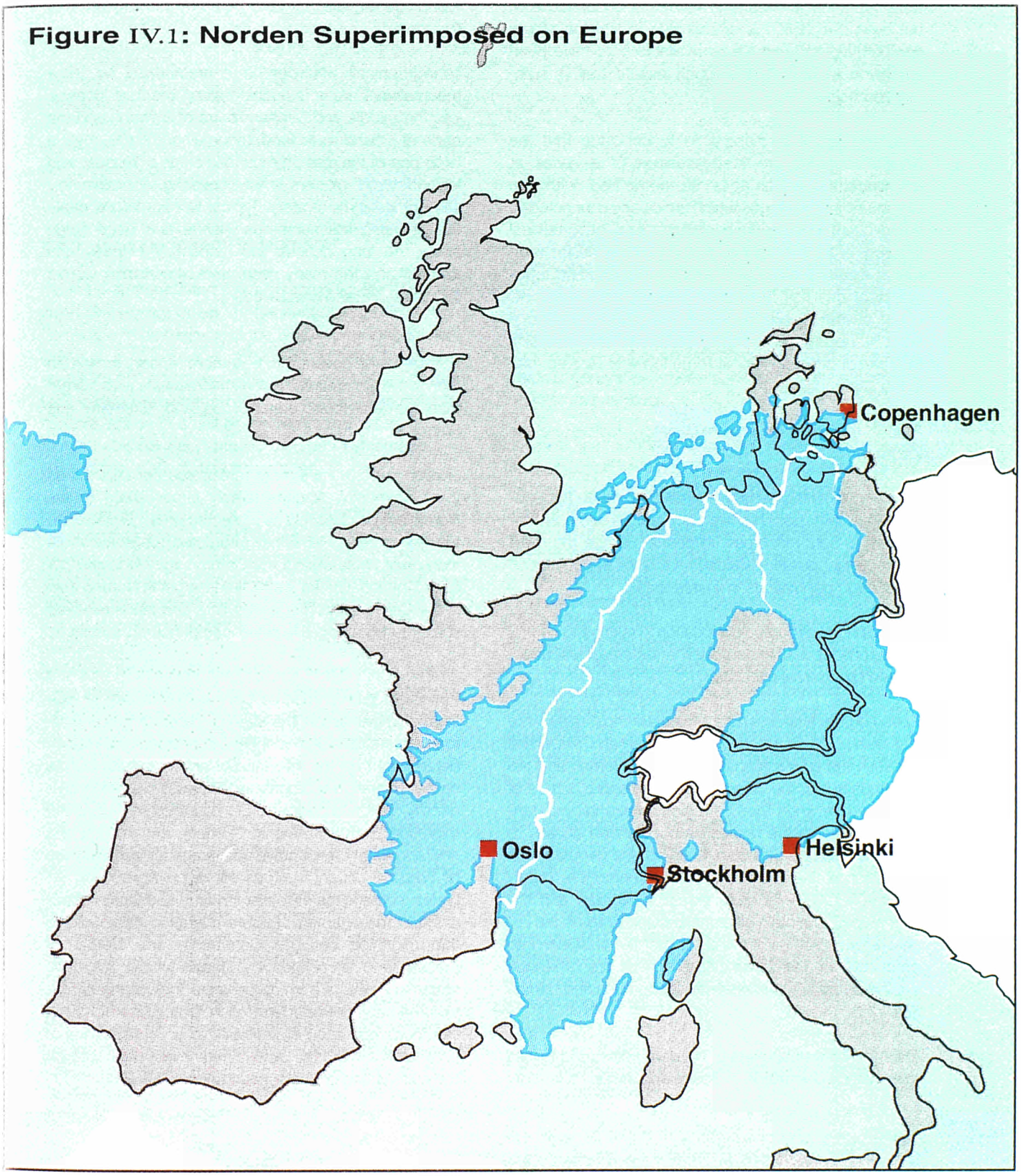
In the preceding Part III of this synthesis report a summary survey of all potential Nordic impacts on EC regional development and spatial organization based on the findings of the special studies was presented. In the rest of Part IV we shall emphasize a somewhat different focus. With a view towards the rough quantitative assessment tool just discussed, we shall concentrate on potentially strong Nordic impacts leaving out those potential impacts which may be deemed comparatively inconsequential.

In the descriptive analysis below, the assessment schema will not be too strictly adhered to, but the barriers and opportunities of each criterion will be analysed in relation to selected economic sectors.

4.5. Nature, environment and peripherality — impact strength

Obviously, Norden's vast territory compared to its sparse population constitutes a problem area, calling for careful analysis (see Figure IV.1 below). Will spatial and regional impacts on EC territories based on Norden's special geographical characteristics become appreciable or not of any great importance?

FIGURE IV.1: Norden superimposed on Europe



The questions are partly speculative in character and may be illuminated only by presenting some observed geographical and environmental properties of Norden compared to EC regions, and by reasoning about possible hypothetical effects. Emphasis is on description, but even description is difficult due to lack of reliable comparative data. However, available data have been employed to provide the rough picture that is summarized below.

Summing up, it is reasonable to conclude that the Nordic countries are in possession of a series of environmental advantages as compared with the Community, advantages which are clearly connected to the different population geography and geographical location. A substantially larger part of the Nordic territory is relatively virgin land, and the climatic and topographical qualities are rather different from most EC countries and regions (especially the geographically closest). Generally (according to our preliminary analysis), the level of pollution seems to be lower in Norden than in the Community.

Among the most obvious explanatory factors are the following:

(i) low population density makes daily life and economic activity possible without great pressure on nature and its resources. In central Europe the most important pollution determinant is the concentration of large populations in limited areas;

(ii) peripheral geographical location in relation to central Europe leaves Norden outside the area most affected by external effluents.

Based on the available data (which are most relevant to city areas), however, we find no dramatic disparities between the environmental qualities of Norden and the Community, but the differences in size and structure of city areas between the two regions make for substantial disparities in the respective population's access to unspoiled and clean nature. Even so, the people's own evaluation of their local states of environment — reported by OECD — is quite similar in Norden and the Community. The main difference obviously lies in the largely different shares of the areas that are not taken into productive or residential uses, or that are otherwise spoiled by continuous presence of humans and human activity.

The 18 million inhabitants of Norden correspond to less than half the population of Spain, and occupy a territory corresponding to more than half of the EC total area. The climate (based on data for the capitals) is colder than in the southern neighbouring EC regions, especially during the coldest winter months when the areas surrounding the cities may be covered by snow for three to five months.

Topographically, Norden is characterized by large mountainous areas, stretching along most of Norway, into the middle and northern parts of Sweden and the north of Finland. In Iceland, mountainous areas cover a large part of the area. In mountain areas of Norway and Iceland large glaciers exist, covering approximately 11% of Iceland's territory. Typical Nordic natural qualities are also the numerous islands and deep fjords along the long coastal line (especially Norway and Iceland) and the many rivers and lakes/inland waters (especially Finland and Sweden).

Forested area covers 5 to 6 % more territory in Norden than in the Community. Swedish forests alone are larger than the total forest areas of England, Germany and France.

Norden has 20 times more forest area per capita than the Community. A considerably larger share of the Nordic area is classified as protected area, compared to the Community. Per capita protected areas are more than eight times that of the Community. Measured per capita, national parks are 77 times larger in Norden than in the Community. This leaves flora and fauna relatively sheltered from negative influences of human activity.

Possible regional impacts on the Community of EC-Nordic differences in the state of nature and the environment are difficult to identify. Dimensions to be considered might be the influence of environmental factors on net migration (comprising the gross migration propensity of Nordic people to EC-countries as well as the migration of EC-citizens to Norden), and natural and environmental comparative advantage for certain types of industrial activity, such as ecological agriculture, fisheries, some kinds of tourist industry and waste deposits and management. Recent migration data indicate that migration between Community and Norden is modest and dominated by Danish-Nordic migration streams. There are no observable indications of environmentally motivated migration, directly in the form of individual motivation or indirectly as a consequence of prior environmentally determined investment. Maybe the cultural barriers have been underestimated.

Table IV.2
Population densities and distribution of area and population (as % of total) between regions in Norway, Sweden and Finland, 1990

Region	Population				% share of population				% share of population growth		
	1960	1970	1980	1989	1960	1970	1980	1989	1960-70	1970-80	1980-89
Southern/central	100	111	115	121	65	68	68	69	103	76	90
Capital region	100	117	124	133	18	20	20	21	46	30	45
Mid-Nordic region	100	99	102	104	29	27	28	26	-3	20	12
Nordkalotten area	100	100	103	102	6	6	5	5	0	4	-1
Norden (Iceland)	100	107	111	115	100	100	100	100	100	100	100

4.5.1. How peripheral is Norden?

It can be demonstrated that aggregate figures of population density are deceiving because they obscure the fact that a large majority of the Nordic population is residing in a highly urbanized south-western to south-eastern 'belt' occupying a relatively small share of the total territory, and that most of the people living outside this belt reside in small or medium-sized urban settlements or within easy access to urban settlements — even to the relatively few larger cities.

Hardly more than 10 to 15 % of the Nordic population may be classified as really peripheral in a national geographic context. The term peripherality in a European context probably applies to some degree to this 10 to 15 % of the population. As for the main part of the Nordic population, peripherality is a too complex and multidimensional concept to be employed even as a tentative diagnosis of the Nordic status within a rapidly integrating western Europe. Moreover, inter-Nordic differences are substantial, prohibiting rough generalizations.

Development strengthens this allegation. The past quarter of a century has seen a continuous centralization of economic activity and population settlement, however, at periodically varying scales and levels of settlements and regions. On almost every dimension and regional level, urbanization has been taking place — in terms of modernization, standardization, integration and direction of change in patterns of settlement. At present, most of the countryside is, roughly speaking, highly urbanized, and the rural districts are no longer particularly rural in the traditional meaning of the word, even if some sectoral division of labour clearly follows a regional dimension according to our three-region classification (see Figure V.4 in Part V) — with primary production over-represented in the middle and northern region apart from Iceland.

Even if important Nordic industries are producing crude, semi-manufactured or intermediate output, based on localized natural resources (there are important variations to this picture, however), geographical peripherality and population sparsity cannot be stated as the main determining factors. Distance and topographical impediments certainly may be barriers to economic life and general accessibility — locally, as well as nationally in relation to the peripherally located minority of the Nordic population — but observations do not support an allegation of general peripherality, whether at the national or the international level.

However, the multidimensional and multilevel processes of urbanization have had the explicit effect of expanding the areas of built environment and economic activity around the already moderately settled share of the Nordic area, easing the burden of permanent utilization and potential pressure on the larger sparsely populated or uninhabited areas. At the same time, continuous integration and deliberate attempts to prevent the peripheralization of the more distant settlements have counteracted a far stronger, underlying, national process of demographic and economic centralization — keeping up a certain interregional population balance. These processes, however, have not been without disadvantages to smaller settlements distant from the somewhat larger centres functioning as integrational agents.

The most probable prospects of Nordic population geography are that sparsely populated areas, areas with smaller scattered settlements and uninhabited districts, will experience a continuation of the process of demographic 'thinning-out' as a combined effect of lower natural population growth and net out-migration, while the larger urban settlements and the more densely populated regions will become steadily even more densely populated.

4.5.2. Nordic demographic impacts on the Community

The regional impact on Norden's southern border regions with EC areas seems to be relatively strong. The centre of population and economic gravity will continue to concentrate closer to the continent, the regions concerned containing a growing share of the population, in

accordance with the observable or underlying forces that have been at work for several decades. Potential peripherality will be a 'contingent probability' to a steadily decreasing fraction of the Nordic population.

The direction of the long-term development of Nordic population geography and regional structure will most probably be little affected by the choice between the most likely paths of closer integration into western European economic and social cooperation.

The economic foundation of the 'peripherally' settled minority of the Nordic population is heavily dependent on primarily public sectors and on State transfers. To a large degree Nordic policies have been moulded by the traditionally strong influence exerted by the geographical periphery and by the impacts of rural values and interests. To the really rich, but population-poor regions, the important question is whether these traditional national policies — and not least their welfare and transfer aspects — can be maintained. This would seem far more important than the isolated effects of changing conditions pertaining to various private economic sectors.

Table IV.3
Population densities and distribution of area and population (as % of total) between regions in Norden (excluding Iceland), 1990

Region	Population density	Area	Population
Southern/central Norden	44	25	68
Mid-Nordic region	9	48	27
Nordkalotten area	3	27	5
Norden (Iceland)	16	100	100

Based upon observable trends during the preceding three decades, and the emerging material and ideological development especially during the 1980s, the most likely development of the Nordic regional structure and population geography is a continuation — at a somewhat greater pace, depending on the speed and degree of economic integration — of the pattern of long-term development towards a demographically more concentrated and socioeconomically more urbanized and southward-oriented structure. Low population density will become a steadily less suitable characteristic of a growing majority of the Nordic population.

The Nordic periphery — infrastructurally integrated, rich in resources and environmentally well-preserved — may increasingly come to be regarded as a valuable source of recreational welfare and profitable tourism. In both senses the Nordic demographic and geographical periphery — and the Nordic concern about its periphery — will become a common European concern, and the target of European investment and political measures. The fading practical concern about settlement pattern preservation at the Nordic national political level, may well be gradually counteracted by a growing EC concern on the part of — environmentally motivated — recreational and investment interests in the larger region.

On the other hand, the 'southern belt' of more densely — and more heavily — populated Nordic regions will tend towards becoming a more equal match in the economic and social interchange, especially with the northern EC regions, within a steadily more integrated and cooperating economy (see Figure I.2, Part I).

Specific impacts at the EC regional level are difficult to predict, with Denmark and northern Germany as the most likely arena for a multitude of diffuse, economic and infrastructural effects.

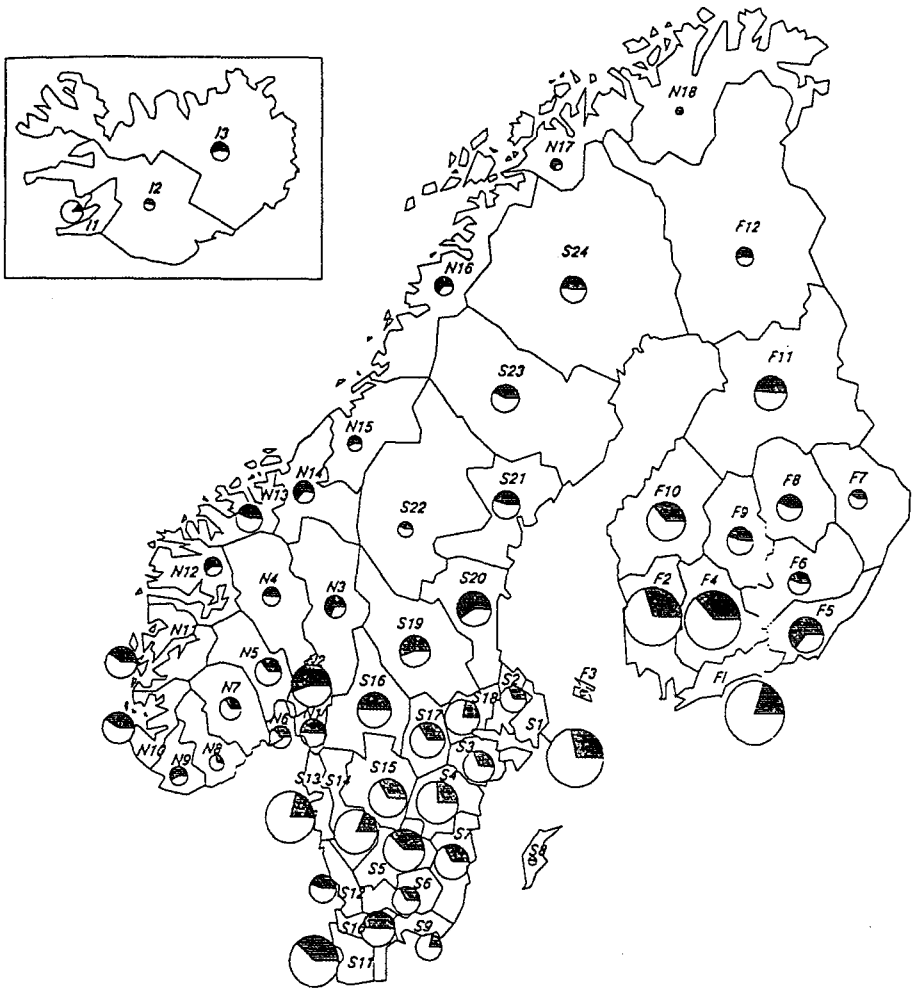
4.6. Impact strength of industrial clusters

The national economies of the Nordic countries under consideration here account for a relatively small proportion of the western European economy — their GDP is of the magnitude of two years' average growth of the EC/EEA economies as a whole in the 1980s. This is the simple reason why changes in their manufacturing sectors cannot have any major impact on manufacturing industries in the EC on average.

The clusters are leading examples of exceptions to this plain rule in the following two senses. Firstly, Nordic countries are important producers. Secondly, the clusters have so far, at least to a major degree, relied on their (Nordic) home base in the development of their strategic resources. (See the special study on Nordic industrial clusters, Volume III, and the statistical appendix.)

The economic integration of the Nordic countries in the Community will be reflected in the prospects for the leading Nordic clusters in several ways. Yet the significance of or the difference between the two integration alternatives, i.e. the Maastricht-like and EEA-like variants outlined in Part II of this volume, should not be exaggerated because the dynamics of industrial clusters is primarily dependent on competition in the world markets. Given the fact that many of the branches concerned have long experience of this operational environment, they are used to adjusting themselves to ever-changing conditions. The most significant exceptions are those activities which have been cut from international competition. The food-processing industry is a representative example of these sensitive sectors.

FIGURE IV.2: Location of manufacturing employment (ISIC 3) in Nordic countries by counties (lääni, län, fylke) (black segments refer to the shares of resource-based industries)[1]



[1] These include in Sweden and Norway ISIC branches 31, 33, 34 and 37 and in Finland sectors 11, 14-15, 17 and 23. In the case of Iceland the division into resource-based and other sectors refer to fish-processing v. other manufacturing sectors.

With regard to forest industry, physical barriers are overcome by proximity to markets and customized production is anticipated to characterize its strategic orientation. These factors and also EC regional policies will probably lead to relocalization of operations in the direction of Europe. In addition, EC directives on the environment will presumably influence forest industries and other resource-based Nordic industrial sectors as well. In general, the sectors would be more motivated to acquire an image as local producers in the Community notwithstanding the Nordic countries' future arrangements concerning integration.

The prospects for the leading clusters and Nordic economies as a whole are increasingly conditioned by the availability of skilled labour, high-quality management and R&D activities in particular. A critical challenge enhanced by internationalization concerns the future domestic supply of these strategic resources. At the moment, there is a tendency for the most internationalized Nordic corporations to develop their R&D operations mainly abroad.

Developments in EC regional policies will also have an impact on Nordic manufacturing industries, especially on the locational pattern of direct investments. Any assessments of this effect are, however, very tentative for the reason alone that the future line of policies remains uncertain. For instance, differences between EC countries with respect to State intervention are prevalent. Currently, a more interventionist approach is implemented in France, Italy, Belgium and also to some extent in Spain, while the Netherlands, Denmark, the United Kingdom and Germany are advocates of a less interventionist approach. Naturally, the possible entry of Nordic countries will also have an impact on the strategies applied in tackling regional structural problems.

Infrastructural barriers

Overall, there have recently been marked changes in the Nordic approach to industrial and regional policies. Accessibility and supply capacity, i.e. infrastructure, have been acknowledged as key factors in improving competitiveness. Traffic links to the Continent are a prime example of the projects under construction. With regard to regional development, the concrete practices of these supply-oriented restructuring and reindustrialization strategies are country-specific, because settlement systems vary by country and because there are differences in political traditions. Probably, the Norwegian approach will also in the future be most decentralized whereas Sweden will represent a much more concentration- and corridor-oriented strategy.

Regardless of conscious policy strategies, political upheavals have probably had the most important role in changing the preconditions for recent industrial development in the Nordic area. The collapse of the USSR has paved the way for the appearance of the Baltic rim as an economic region which may become a strong recipient in the competition over foreign direct investments in northern Europe. Finland will especially try to utilize its position as a bridgehead, physically and culturally, to Russia, in particular to the St Petersburg region and to Estonia. (See the special study on Nordic industrial clusters in Volume III).

In addition to political changes in neighbouring areas, the weak economic performance of Nordic countries in the early 1990s has emphasized problems of adaptation and raised the question of a possible break with past trends. In the final analysis, the issue at stake is the dynamics of the Nordic model in a wide sense.

The basic elements of Nordic industry — clusters and major corporations — have evolved relatively steadily during the long term. From their perspective, adaptation is not a new issue. An important new structural feature is that the interdependency between the successful adaptation of Nordic enterprises and the growth of Nordic economies has become less tight. In the ever more integrating European and global economy, Nordic industrial enterprises are no longer so tightly connected with their original locations. This also sets new requirements for successful strategies for regional economic development.

The impacts of Nordic industrial development on the regional development and spatial organization in the Community, seem to be quite diffuse. No map of Europe can be drawn where impacts of possible future Nordic developments may be indicated with a high degree of specificity.

However, if the past may be considered a guide to the future, it should be rather interesting to study the following map indicating the contact destinations of Swedish industry in 1990. Clearly the focus has been on the old EC economic core areas.

The regional and spatial impacts on the Community's territory of Nordic industrial development will be illustrated by the geographical maps (Figures IV.10 and IV.11 at the end of Part IV).

4.7. Impact strength of the Nordic energy sector

Norway is at present the only non-EC Nordic country with a production of oil and gas, and statistical material indicates the tremendous importance of the Norwegian energy sector *vis-à-vis* that of the Community. In the course of 1992 Norway has even decided to increase its exploitation of fossil energy resources.

The most important barrier to production seems to be political. It must be taken into consideration that fossil energy resources are non-renewable. But the perspective is a rather long one as new discoveries are anticipated in the Norwegian Sea and in the Barents Sea.

The Community has managed to keep total energy demand rather stable since the first oil shock in 1973/74. Oil demand has declined, being replaced by imports of natural gas and domestic production of nuclear power. To decrease dependency on Middle East oil and to meet environmental concerns, a decrease in the consumption of oil and coal has been planned. Much of the imported oil and coal will undoubtedly be replaced through an increase in the imports of natural gas, but some countries (like France) have planned to continue the construction of more nuclear power plants, as well.

Table IV.4
Energy demand in EC countries *(million tonnes of oil equivalent (mtoe))*

	Total	Oil	Gas	Coal	Nuclear	Hydro
1973	1 004.9 (100%)	621.7 (61.9%)	115.6 (11.5%)	235.6 (23.4%)	19.9 (2.0%)	15.3 (1.5%)
1979	1 080.9 (100%)	607.4 (56.2%)	173.6 (16.0%)	241.9 (22.4%)	37.7 (3.5%)	41.5 (3.8%)
1988	1 101.7 (100%)	497.8 (45.2%)	202.6 (18.4%)	237.8 (21.6%)	151.6 (18.1%)	20.7 (1.9%)
1989	1 123.4 (100%)	501.3 (44.6%)	201.2 (17.9%)	241.5 (21.5%)	163.0 (14.5%)	15.6 (1.4%)
Projections (IEA base case USD 35/bl from 2000 no new taxes)						
1995	1 267.9 (100%)	543.0 (42.8%)	248.6 (19.6%)	278.3 (22.0%)	177.5 (14.0%)	20.5 (1.6%)
2000	1 242.8 (100%)	506.9 (40.8%)	270.6 (21.8%)	258.3 (20.8%)	84.5 (14.8%)	24.5 (2.0%)

The increased import of gas must first of all come from Siberia, the North Sea and North Africa. In the longer run, gas may also be supplied from the Middle East (Iran). A freer movement of natural gas is considered a precondition for the success of EC policies in this field. The European Energy Charter should, *inter alia*, also be viewed in this context.

Norway is in a unique position in Europe in the field of energy. Revenues from the sector are of overall macroeconomic significance for the country. Energy influences Norway's foreign policy and it has significant economic impacts on the 'oil towns' and surrounding areas (Stavanger, Bergen and Oslo).

The other Nordic countries, on the other hand, are importers of energy and share many interests with the EC countries. This implies a desire to reduce consumption of oil (and coal) and to increase the use of natural gas and possibly also nuclear power. In addition, the consuming countries have a great need for Norwegian petroleum.

Today the Nordic countries are not very integrated in European gas networks. New pipelines in the Nordic/Baltic area must be constructed if gas should take a significantly greater share of overall energy supply. Some possible pipe linkages to improve this situation may be mentioned:

(i) between Ekofisk centre and the Danish network — would open Norwegian gas to Sweden and Denmark in 'smaller' quantities;

(ii) between the Norwegian shelf and Sweden. Routes both from mid-Norway or the North Sea are possible. These routes will supply gas to Sweden as well as to a potential, new Norwegian domestic market;

(iii) between Sweden and Finland and/or the Baltic States. These routes will open for exports from the CIS to Sweden as well as Norwegian exports to Finland/the Baltic States if a link between Norway and Sweden is established;

(iv) between Sweden and Poland, increasing the possibility of increased Norwegian gas exports to Poland, the Czech and Slovak Republics and Hungary, if pipelines between Norway and Sweden are established. Alternatively, Norwegian gas to these countries must pass through the German network from Emden;

(v) across the English Channel. This route will give Norwegian gas a fourth potential route to the Continent (through the Frigg-pipes and the UK);

(vi) if gas is produced in the Barents Sea, Norwegian and/or Russian gas must be transported to the markets either as LNG or through pipeline. Such a pipeline will most likely be routed to the south through Sweden, or Finland and the Baltic States;

(vii) between Warsaw and Berlin, increasing CIS gas exports first of all to Poland and northern Germany.

The construction of some of these alternatives is a precondition for any larger increase in gas consumption within the Nordic countries, supplied either from Norway or the CIS. The pipelines to the Continent now under construction (Zeepipe and Europipe) will, in addition to the existing Norpipe and a potential route across the Channel supply the basis for a significant growth in EC imports of Norwegian gas. As networks become more integrated, security of supply and flexibility for consumers in northern Europe will improve. Crucial factors are the speed and content of the regulatory processes, prices on oil and gas as well as the development in the CIS.

A 'free-flow' scenario, where all Nordic countries (except Iceland) enter a European economic and political union, may politically give more power to the Commission and make it easier for it to impose regulations on the producers.

On the other hand, if Norway manages to use its significant position as the major energy exporter in Europe to influence decision-making in this field, the process may be halted, at least as long as Norway has a rather reluctant attitude towards the regulations. This may be true for the transmission of gas, the development and production of petroleum, and the distribution of rent. The speeding-up of the 'concession' directives at the end of 1992 can be viewed in such a perspective.

In a micro-regional dimension, the opening-up of offshore markets to a competitive Norwegian energy industry may benefit the counties around Stavanger, Oslo and Bergen. Norwegian offshore industries may enter all offshore markets in Europe, both in the North Sea and elsewhere. This is probably true even if integration were to go no further than an EEA agreement.

In a macro-spatial European perspective an inclusion of Norwegian petroleum in the EC energy portfolio would improve the Community's energy balance significantly. Of course, oil and gas can be exported with or without any Norwegian EC membership. On the other hand, if Norwegian gas and petroleum could be formally included as an internal EC resource, it's existence might to a larger extent influence overall EC energy policy-making. With a seat at the table, however, Norway would be in a position to influence these policies.

An inclusion of Norwegian petroleum in the EC energy portfolio would probably also strengthen the EC's desire to further increase North Sea production in order to reduce import dependency on the Middle East (oil) and Russia (gas).

The outcome of this dilemma of interdependence and decision-making would, in turn, influence production decisions and contribute to generally determining the overall distribution of rent in the petroleum business in Europe, not least in northern Europe.

The regional and spatial impacts on the Community's territory of Nordic industrial development will be illustrated by the geographical maps (Figures IV.10 and IV.11 at the end of Part IV).

4.8. Impact strength of agriculture and the agro-industry

As already shown, Nordic agricultural production — outside Denmark — accounts for a rather small percentage of total production within a 'Europe 16'. In the case of agriculture, however, smallness by itself is no indication that Nordic development may not have an appreciable and clearly identifiable impact on EC regions.

More precisely, it may be anticipated that in the event of a closer Nordic integration with the EC, agricultural areas of Denmark will be strongly — and positively — impacted.

Nordic integration will have only marginal effects on the EC as a whole, but it will probably result in a radical decline in agricultural production and the agro-industries in the non-EC Nordic countries except for southern Sweden. This is due to natural disadvantages and to disadvantages stemming from likely changes in agricultural subsidy policies.

Due to physical and infrastructural barriers, Nordic production of fresh milk, potatoes and some vegetables may be maintained in the northern, western and eastern parts of the Nordic area. Extensive meat production based on sheep may be maintained along the western coast of Scandinavia and in Iceland. Intensive production of pork, poultry and eggs may be possible, if cheap feeding stuff can be imported, but the investments in new production units may prove too heavy.

Due to centrality and geographical conditions the major part of the food for the Nordic markets — i.e. in case of Nordic institutional integration with the Community —

will be produced in the south-Scandinavian agricultural and agro-industrial area reaching from the North Sea coast of Denmark and through southern Sweden almost to Stockholm. This area is in the lead in Europe regarding productivity both in agriculture and in agro-industry.

The integration of the Nordic markets into the Community will increase the sale or the prices of wine, fruit and vegetables from the southern part of the Community, but only marginally. The other regions in the northern part of the Community could in the short term benefit from Denmark turning to the North. In the long run, however, Denmark's (and southern Sweden's) positions in other European markets are likely to be strengthened (see the special study on agriculture, Volume III).

The quality aspects due to Nordic environmental advantages will support the development of an agriculturally and agro-industrially strong area in southern Scandinavia. To some extent these aspects will tend to protect some special productions in other parts of the Nordic area as well. However, institutional integration with the Community is likely to result in serious agricultural transformations in the outskirts of the Nordic area, leading to radical decline in agricultural employment in weak regions.

If, however, the Community were to put more emphasis on the environmental aspects of resource utilization — not at all an unlikely supposition as stressed elsewhere in this report — the agriculture and agro-industry in geographically disadvantaged areas of Norden would benefit. This would, in turn, reduce the impacts of the integration of the Nordic countries on other regions of the Community. With only one or two Nordic countries entering the Community, the development of the south-Scandinavian agricultural and agro-industrial area would be slowed down, though not halted.

In any event, there would hardly be any noticeable impacts on other regions in the Community.

The regional and spatial impacts on the Community's territory of Nordic agricultural development will be illustrated by the geographical maps, Figures IV.10 and IV.11 at the end of Part IV.

4.9. Impact strength of Nordic fisheries

Norden's tremendous weight in fisheries is described in the special study in Volume III.

The situation in terms of potential Nordic impacts on EC territories, however, is not a simple one, not least due to the fact that future resources are uncertain. Everyone knows that there has been over-fishing, but how this translates into simple remedies is little understood. The 'Tragedy of the commons' means that the individual user can always catch some fish although the entire resource may be in the process of being depleted.

Even in situations where quotas are controlled, there is no guarantee of a return to historically prevalent conditions.

This means that politics and vested interests ought to assume a humbler position compared to the majesty of natural realities.

It is in the fish-processing industry that three different scenarios may emerge.

The first scenario might be called 'comparative advantage prevails'. Here the considerable public support of the fisheries sector in both the Community and in certain Nordic countries would be withdrawn.

Secondly, there is a scenario of 'increased Nordic production'.

A third scenario might be called 'Norden in the European Community'.

Scenarios one and two may be considered irrelevant to the purpose of this study. If free trade and free fishing are introduced, we should not be concerned with an impact area, i.e. the Community, which has been trying to introduce strong policies in this field.

Concerning the applicable scenario — 'Norden in the European Community — it is the prevalent Nordic opinion that Portuguese and Spanish trawlers would quickly devastate Nordic fishing grounds if they were given free access to them.

This would of course obliterate whatever advantages, including jobs generated in the fish-processing industry in the EC — particularly in Denmark — which have so far been derived from the interaction with Nordic fishing grounds.

It goes without saying that fishing centres in the Iberian peninsula would stand to gain mightily from a comprehensive opening of Nordic waters to EC exploitation, i.e. for a relatively short period until the maritime resources are exhausted.

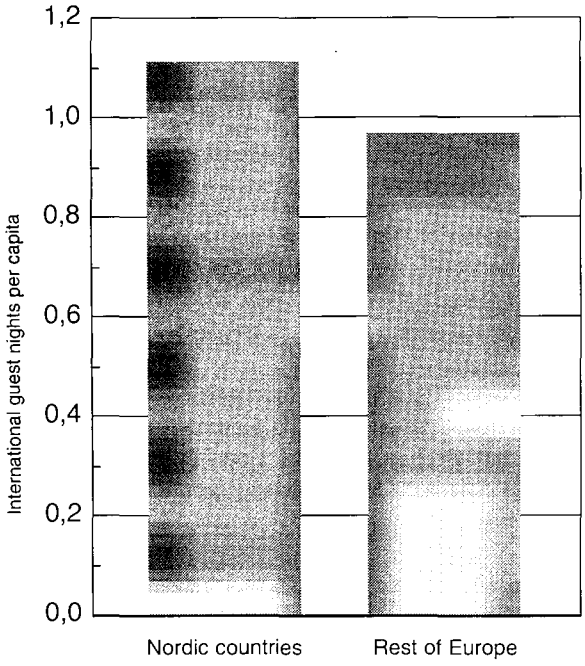
The regional and spatial impacts on the Community's territory of Nordic fisheries will be illustrated by the geographical maps, Figures IV.10 and IV.11 at the end of Part IV.

4.10. Nordic tourism in Europe and European tourism in Norden — impact strength

As already stressed in Part IV, Nordic tourism may be considered among the weightiest Nordic impact sectors. The reason becomes immediately apparent if one studies the following Figure IV.5 showing that Northerners have a 15% higher propensity for foreign travel than citizens of the Community and compares this to the fact that tourism counts for a big share of total effective demand in Norden. Another interesting fact is that, on the whole, Nordic countries have markedly negative travel balances, i.e. their citizens spend much more money abroad than their countries can earn from foreign tourists (see Figure IV.6).

To this must be added that only 12% of Nordic travel outside the country is to another Nordic country, the rest is predominantly to the Continent.

FIGURE IV.5: International tourism per inhabitant

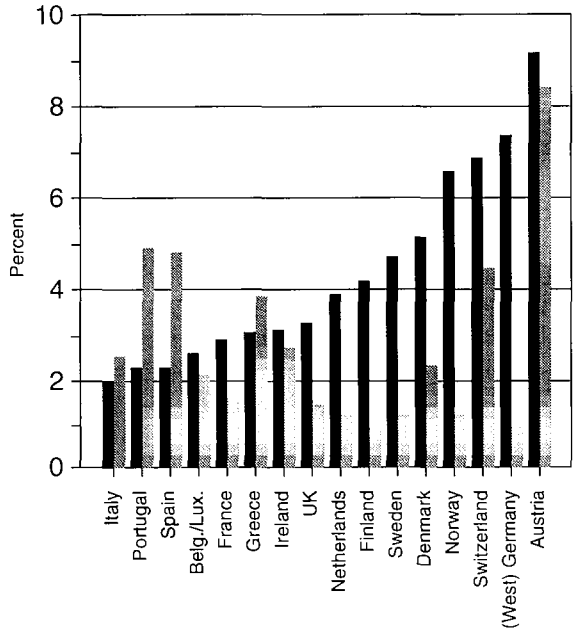


Obviously, market integration will have direct effects on tourism. Roughly they may be grouped as follows:

(i) deregulation of the transport companies,
(ii) infrastructural measures in transport,
(iii) fewer national controls of the travel sector.

It would consequently appear rather safe to predict increased tourism as a direct outcome of integration. But the strength of this effect will depend on whether new barriers arise.

FIGURE IV.6: International tourism



Tourism is influenced by a number of paradoxes.

Distance is certainly a hindrance to free flows — the amount of social interaction being invertedly proportional to distance. On the other hand, distance also indicates barriers between culturally and geographically dissimilar areas, and it is precisely this dissimilarity which generates travel. In other words, distance is both a barrier and an enticement.

In addition, distance is a relative concept influenced by the available infrastructure and means of communication. Clearly, tourism is based on the gradual improvement of infrastructure, but there may be limits. The very act of travelling may in itself be considered part of the total tourist experience and then again, unpleasant complications, burdens and insecurity may detract from that experience. Thus infrastructure may have a double nature.

The same observation holds true for cultural dissimilarities. Differences in way of life may create friction in regard to spontaneous economic internationalization but at the same time they constitute a vital motivation behind tourism.

Ecological problems and concerns function in much the same way. To be sure, ecology sets limits to the degree of areal utilization. On the other hand, ecologically vulnerable areas of unspoiled beauty may certainly attract tourists.

We shall now present some main scenarios for the development of tourism.

4.10.1. The first scenario: trends are prolonged; free flow without barriers

We assume that Western Europe will be able to maintain a certain economic growth of the order of 2 to 3 %. Part of this growth will be obtained through processes of institutional integration, which will facilitate the flow of people, goods, services and capital between the nations.

This will create a strong market growth in international tourism, both as regards recreational and occupational travel. Recreational travel will grow as a result of the increasing purchasing power in large groups of the population, but also because changes in the supply system will reduce the prices. Mass tourism will show a rising trend. The dominant aspect of the supply system will still be the 'Fordist' tourist industry, i.e. the customer basis will consist of the large groups of people who are motivated by sunlust. This will be the market for low-quality mass tourism.

On the other hand, in a polarized market there will also be a group of people with strong purchasing power and with other preferences than the mass market. They will turn away from the Fordist tourist areas, i.e. the large concentrations of seaside and mountain resorts. Their motivation for travelling is wanderlust, and the travelling pattern will be characterized by multidestination travels. They will prefer scheduled flights and the motorcar to package tours. As the price competition in civil aviation gradually increases, it will become cheaper to make special and flexible arrangements, and quality tourism will include an increasing part of the middle class. Customer-adapted tourism will develop from a distinctive élitist tourism, comprising relatively few people, to a new form of mass tourism. Increasingly larger parts of Europe's middle class will become a new group of inter-railers, but they will go by high-speed trains or by air and stay in hotels. The really élitist tourists will be ousted to quite new destinations.

Occupational traffic will also undergo strong growth due to economic integration. A number of trades will be dominated by international enterprises. Not only traditional industry will be internationalized; this will also apply to a constantly rising number of service businesses.

In the occupational segment of the travel industry, too, polarization will occur. On the one hand, we find the large number of white-collar workers who will have to accompany the greater circulation of goods. On the other hand, we find the somewhat smaller groups within decision-making and knowledge production. This of course applies to all executives at the headquarters of the large multinationals. The same thing also applies to the internationalization of the knowledge-based service sector: consultancy services, research and development, as well as universities and colleges.

Based on these premises — growth both in recreational and occupational traffic — a general assumption of an annual growth of around 5% in the international travel industry does not appear excessive. An annual growth of 5% implies a growth in international tourism of 63% over a 10 year period.

This scenario is predicated on the assumption that the importance of distance will steadily decrease, implying that continuous improvements in infrastructure and logistics can be realised. Obviously, this would only be likely if Europe's institutional cooperation were to become ever closer. If the Community were to prove unequal to the task of developing needed infrastructural links — possibly building up a deficit in this vital area — then of course the preconditions for the free flow of tourism would disappear.

Another precondition is that culture is not allowed to become a barrier. This, however, may very well prove to be a dubious assumption. A culturally variegated Europe is undoubtedly an exiting place but it is also full of conflicts which may in the final analysis counteract the development of tourism.

Europe's environmental problems will no doubt prove to become yet another barrier. General economic growth has a way of throwing up an unexpected amount of environmental disturbances. Previously, industry was the main culprit with respect to environmental destruction. Now, to a larger extent, it is transport and the service sector. Even tourism can be included in these environmental accounts.

As a first approximation, however, we shall discount such potential barriers in order to detect new patterns under conditions of free flows. And clearly, free flows in the travel industry would lead to new regional patterns.

As already indicated, our first scenario implies a relatively strong economic growth and as a consequence of that a strong increase in the demand for travel services. We may further assume that this demand will be the same all over Western Europe. A strong growth in the tourist markets allows expansion in almost all destination areas, but a considerable redistribution will take place.

Impacts on Nordic countries

In the past, the Nordic countries were almost pure market areas for international tourism. Norway, Sweden, Finland and Iceland were on top as regards sun lust, and the role of these countries in international tourism was primarily that of demanders. Given the conditions

underlying this first scenario, this will still be the situation in the 1990s. The charter flights to southern Europe will still be full. When sun is combined with sand and sea, the Nordic countries have little to offer. The relationship between continental Europe and the Nordic countries will still be characterized by the fact that the southern areas have a very strong attraction. Thus, to an increasing degree the Nordic countries will become a departure area.

However, the Nordic countries obtain a somewhat improved balance in their tourist accounts through winter tourism as they develop into a more important destination for the product combination of sun, snow and ski. In these market areas the Nordic countries will receive an increasing number of tourists from other countries, particularly because limits to further development will be reached in the Alps.

The Nordic countries will also develop into an important destination for summer tourism but this will never become a form of mass tourism similar to the departures from Norden. It will remain an attractive option for the specially interested, i.e. the élite. As Norden becomes gradually more closely associated with the rest of Europe through economic integration, occupational travel to the larger cities of the Nordic countries will increase.

To an increasing degree, élite tourism is likely to be drawn to the special attractions of the Nordic Arctic area (north of the Arctic Circle) and Iceland.

Most of the winner regions are Norwegian, which reflects the broader opportunities this country has within all the market segments that might be attracted by the north. The regions of Sweden and Finland achieve their ranking primarily through urban development. Through its investments in Lapland, Finland, too, stands to capture a considerable share of the growing north-of-the-Arctic-Circle tourism.

Impacts on Europe

Norden will affect the Continent through an increased acceptance in the market, meaning that an increasing number of people will choose the Nordic countries as a destination. To a certain extent this will affect tourism in Europe negatively, but this will hardly be seen as heavy competition. The fact is that Nordic countries are in a position to offer something which the rest of Europe cannot. In addition they may help relieve the pressure on areas which, according to general agreement, have reached their limit for tourism, not least the Alps.

Under the general development assumptions, the most important contribution by the Nordic countries to European tourism will be on the market side. The Scandinavians will be an important group of customers for large segments of Fordist tourism. Together with UK citizens, Germans and Dutch, the Northerners will be an important force behind a further development of 3-S tourism, both with respect to volume and geography.

Southern Europe: The traditional tourist regions of the Mediterranean, i.e. the holiday resorts in Portugal, Spain, France and Italy, will be saturated. In the course of the strong growth in tourism during the 1990s they will still experience growth, but this growth will constantly be faced with new limitations: general overcrowding, infrastructural overloading and strong environmental deterioration of the holiday resort surroundings. The growth will level out and be directed towards new areas.

At first the environmental problems in the western parts of the Mediterranean will turn the pressure eastwards. This is well in keeping with a trend that has been noticed during the 1970s and 1980s. The 1990s will see a strong development of new tourist resorts in Greece and particularly Turkey. Somewhat later the European frontier for 3-S tourism will reach its extreme limit and be removed to other continents. From now on the really élitist tourist who is also a sun-seeker, will go to Africa, Asia or America.

Central Europe: Central Europe will be the great destination for European tourism. Even if countries such as the United Kingdom, Belgium, the Netherlands, Germany and Denmark already have a high travel consumption, travel intensity will continue to grow. In Europe as a whole it will grow from 322 arrivals per 1 000 inhabitants in 1990, to an estimated 400 arrivals per 1 000 inhabitants in the year 2000. Central Europe is in the lead in this development.

Central Europe, however, is not as strongly developed as a destination area. Due to the growth in demand there will also be a development in the typical departure countries. Various thematic parks or other forms of integrated tourist concepts, for instance, will be developed. Examples of such places are *Legoland* in Denmark and *Euro-Disney* in France. In Belgium, the Netherlands and the United Kingdom the concept of Centre Parcs has been successful and continues to grow. In Central Europe the development of such centres based on synthetic attractions, is continuing. This is a complete development of combined tourist infrastructure and superstructure.

The Alps: In Switzerland and Austria the brakes will be put on. The overcrowding and the special environmental problems of the Alps region will result in a very restrictive policy by the authorities and the tourist industry. The growth in the number of tourist beds will be halted and will actually start to go down a little.

This development will start in the resorts that have long-standing traditions as established tourist destinations, but will gradually spread not only to the rest of Switzer-

land and Austria, but also to the mountain regions of Germany, France, Italy and former Yugoslavia. The Alps will begin to develop in a qualitative rather than a quantitative direction.

4.10.2. The second scenario: cultural multiplicity will increase

Both occupational and recreational travel is affected by cultural patterns. Even if the economy will allow a relatively strong growth in international tourism, cultural forces may play a moderating role.

In our second scenario for the travel industry we shall focus on culture not only as a new barrier, but also as a new opportunity.

Occupational travel will take place inside the larger meso-regions created by developments of the 1990s. Let us look at the Nordic countries as an example. They participate in an international business culture channelled through new cultural ties.

(i) The traditional ties have been across the North Atlantic — to Iceland and the USA — and across the North Sea — to Germany and the United Kingdom. This pattern will be weakened.

(ii) In the 1990s the opening towards the East will create a new regional trend supplementing the old one. At first new patterns of Arctic collaboration involving Russia will develop (we shall return to this theme in Part V below).

(iii) Beyond the year 2000 a 'new Hanseatic League' will emerge involving extended cultural collaboration between Norden, the Baltic States, Poland and other areas of Eastern Europe.

Throughout the 1990s we shall see travel behaviour in Europe shifting in focus from international package tours to more domestic tourism. Domestic tourism means more holiday-making both in one's own country and one's own region. Northerners are starting to behave more like the French and the Italians. Thus, it might be interesting to look at the trends that are seen exactly in these markets.

Both in France and Italy people turn away from the gigantic resorts on the coast, to small places in the hinterland or to new destinations. In France, rural Gers is becoming very popular, in Italy one turns away from the dirty Adriatic coast to the cleaner sands of Sardinia, Calabria, Puglia and Campania. Rimini is largely out as a destination. Market shifts like these cannot simply be explained as the result of changes in purchasing power and supply. Here we are dealing with deep cultural trends that control the market.

In the new process of regionalization the primary identity will be related to some regional level. If the region is a successful one, a regional pride associated with culture in a wide sense will develop, not least with important institutions that produce and apply knowledge and competence. Institutions of knowledge, such as universities and research centres, will gain important symbolic meanings. This also applies to knowledge-intensive ways of production and to special regional competencies.

This shift from nation to region is part of the process that is often described as the liquidation of modernism. The State as a regulator or generator of economic development will gradually lose legitimacy, and a cultivation of the competitiveness of the regions will emerge. Traditional regional policies — meaning the policies of the State capitals directed towards the regions — are likely to lose importance. In the post-modern era the regions will play the part of developers. Surely, this trend is not only consequential for the regions themselves but equally a matter to be considered in national processes of growth.

A new city culture will emerge from this new region-alization. The important institutions of knowledge will have a city-oriented pattern of localization. The regions, therefore, will cultivate their centres. Even if intra-regional differences will persist between centre and periphery, the periphery will accept the necessity of functional regions, whose strong nodes will determine the competitive force of the region. The ideology is that nations have a very limited potential for generating growth, whereas the regions' ability in this respect is great.

Even if the process of regionalization appears to reduce the importance of the national level, this level will in no way disappear. Firstly, because many regions will appear as nations. We may identify about 100 such national regions in Europe. Secondly, because the regions will still be part of nation States that retain an identity of their own. The nations themselves will derive strength from cultural multiplicity. Regionally divided nations will not be looked upon as a disadvantage, but as a source of strength. Regional multiplicity will be considered as beneficial to the nation.

New barriers and opportunities

European re-regionalization will certainly affect tourist behaviour. Generally speaking, Europeans will become more home-oriented, i.e. more attached to the national and regional arena. In a sense this may constitute new barriers to international tourism.

But at the same time the cultural differences offer new possibilities. Nations with great cultural multiplicity will be attractive, partly because tourists from other regions find the cultural variety attractive and partly because people will be more concerned with their own country's

Figure IV.10: Micro-dimensions

Agricultural and Fishing Area
Potentially Positively Impacted

Fishing and Offshore-dependent Area
Potentially Impacted (Mostly Positively)

Fishing Area
Potentially Negatively Impacted

Areas Potentially Positively Impacted
by Nordic Regional Fund Eligibility Criteria

cultural resources. This will stimulate wanderlust both at home and abroad, but the new regional/national identity will swing the pendulum homeward. International tourism will level out, and when people go to other nations it will be more in order to experience a cultural heritage that may put one's own region or nation in perspective. This will make historical cultural regions attractive.

Tourism will also become more city-oriented. The cities contain the largest concentrations of historical and cultural institutions. Medieval and renaissance cities will become the symbols of deeper regional identities. In many ways the cultivation of the cities in the new regional Europe will be a revitalization of the city regions that existed before the nation States. And from this will arise new barriers and conflicts formerly contained by the nation State.

Environmental problems will grow during the 1990s, but the process of regionalization will create a framework of interpretation focusing on local and regional conditions. The subsidiarity policy of the Community will stimulate this process. This is likely to imply that developmental projects that will change distinctive cultural landscapes, either in the cities or in the periphery, will be strongly resisted. In this situation tourism may become the target of the environmentalists as never before.

Synthetic tourist development projects that require dramatic encroachments on the landscape will be resisted through prohibitions and restrictive consequential analyses. The use of cultural monuments as part of the tourist product will be prevented if it means hard wear. Large-scale resort tourism will lose its legitimacy as it leads to heavy local pollution; at the same time it will become deprived of certain privileges in terms of exemptions from environmental restrictions.

Impacts on Nordic countries

The Nordic countries form a geographical periphery in Europe and will appear relatively less interesting if tourist tastes turn in the direction of culture, traditions, cities. Even the big Nordic cities are small, and the urban traditions at the level below the national capitals are little developed.

Impacts on Europe

A measure of Nordic withdrawal from mass tourist European destinations — in particular where Northerners have constituted a substantial part of the market — may result in major setbacks in definable regions.

Southern Europe: Perhaps the greatest loser area in this process would be the synthetic tourist products offering 3-S tourism. The largest continuous belt in this category is found in southern Europe on the Mediterranean coast. The same kind of product is found along the Atlantic (Madeira and Algarve) and the Black Sea.

The real loser regions will be the centres of mass tourism whose development has taken place without any consideration for the environment. Costa del Sol, Mallorca and Rimini are examples of such regions, which may at best survive as second-rate tourist resorts. The number of visitors will gradually go down.

Mediterranean regions with 'cultural roots' will not lose out to the same extent. Examples are Madeira, Catalonia, Naples, the Greek Islands and Cyprus. But if such places are to preserve their cultural identity and prevent tourist overloading, the number of visitors must be kept down and perhaps even reduced.

The real winner regions in southern Europe will be the old city regions, and in many cases these are situated inland and not on the coast. The renaissance cities, for example, Seville, Montpellier, Florence and Venice, will experience their second renaissance. Multidestination tourism between historical cities will become an important tourist category.

Central Europe: In the central parts of Europe, too, tourism will be directed towards the cities and cultural heritage. The big cities will become the most important destinations, not only for business culture, but also for the recreational tourists. The obvious winner regions will be the capitals and the provincial capitals as well as smaller, but distinctive regional centres. Even deindustrialized regions may develop a regional identity which will sell on the tourist market.

But rural culture will also flourish. Green tourism (also called soft tourism) will become an important travel category, above all in culturally rich areas where agriculture has created special products or distinctive landscapes. The extent of this tourism, however, will be small. Old health resorts and mineral baths constitute a more specialized rural market which may be revitalized.

The Alps: In Switzerland and Austria, cultural orientation will boost developments towards a more quality-oriented tourism. Quantitatively, therefore, the Alps area will be a loser region, but quantitative losses may be compensated for through increased value.

4.10.3. The third scenario: new environmental barriers

The reduced economic growth at the beginning of the 1990s will lead to a levelling-out of occupational travel. As growth gradually resumes, the volume of occupational travel will remain relatively stable. Businesses and enterprises will try to reduce travel to the necessary minimum.

The exchange of knowledge and information will to a larger extent take place via the ISDN network. Tele-conferences will replace a number of meetings that were formerly dependent on personal contact and travel. And all necessary meetings will be better prepared through prior exchange of information. To begin with, the basic motivation behind this change of behaviour will be cost reductions, but as ecological consciousness is sharpened — in the business world as elsewhere — environmental reasons will start to supplement economic ones.

The holiday market will also change. Already markets are signalling that the era of large-scale Fordist tourism may be over, not least due to environmental concerns. Groups with strong purchasing power will prefer high-quality products to mass consumption. Even if at present totals may appear marginal, they will undoubtedly eventually reach levels where high-quality tourism will compete with mass tourism in economic importance. The increasing quality requirements will lead to a quantitative stagnation in international tourism measured by number of arrivals and bed nights. But measured by consumer expenses, profits and employment there will be a volume increase.

A number of different names have been assigned to this new market trend. Product developers talk about low-impact tourism, soft tourism or simply green tourism. Whatever the name, suppliers will have to adapt to the new market trends and will gradually gain the support of the political apparatus.

The Community will try to produce a sustainable system of transport and tourism

As the ecological crisis deepens during the 1990s, the Community will introduce common overall policies to achieve sustainable development in regard to supranational challenges.

One important goal will be to secure 'sustainable mobility' — to begin with, without any impediments to the free choice of transport mode. Thanks to the development of high-speed trains, a large-scale change of traffic from air and road to railway may be envisaged. To be sure, however, such policies cannot meet with reasonable success unless determined attempts to standardize and streamline Europe's very diverse rail systems are undertaken, as stressed in the special study on transport infrastructure in Volume IV. It must be our assumption, therefore, that the Community will have no other option than to go ahead with this task.

In the course of the 1990s high-speed trains will traffic increasingly larger parts of Europe. Eventually they will not only cover the 'golden triangle' in central Europe but also the larger cities and most important tourist regions in the Iberian peninsula and Italy. The large number of bottlenecks on the old European map, for example, large mountain ranges and straits, will be broken by new connections. High-speed trains will go through the Alps and the Pyrenees and also across the English Channel and Øresund, between Sweden and Denmark. Oslo, Gothenburg, Malmø and Stockholm will also be connected with the new network via the Scan-Link project. The more peripheral parts of Scandinavia, however, will not be linked.

The Community will probably not develop a comprehensive tourist policy with a sustainable profile, but more likely a general policy of sustainability with obvious consequences for the transport and tourist sectors.

As it becomes gradually clear that it is not possible to overcome the ecological crisis connected with transport by building more hard infrastructure, one has to address the transport-generating functions in society. Tourism will be hard hit since this is a luxury production. To an increasing degree, recreation will be diverted towards domestic tourism.

The environmental programme is based on a combination of supranational measures and use of the subsidiarity principle. It will most likely be left to the regions themselves to determine the degree of control in their tourist industries, but the Community will introduce common rules for transport and the use of energy. These rules will lead to a strong increase in the price of energy, which will in turn increase the price of transport.

Impacts on Nordic countries

Undoubtedly, the Nordic countries shall have cause to be pleased with a growing trend towards green tourism as a certain share of the total European market is channelled towards the North. To a certain extent this will be at the expense of the market basis of continental businesses.

Iceland, Norway, Sweden and Finland will come to constitute very interesting destinations for north Europeans. As Eastern Europe gradually recovers, particularly the Baltic States, nature-oriented tourists from the East will also arrive in increasing numbers. Finally, the vitalization of the southern European economies will result in smaller, but altogether important flows of tourists from Spain, Italy and Greece.

The Nordic countries, however, will not become an area of mass tourism. Even if the flows from central and southern Europe are multiplied, they will constitute a relatively small proportion of the total tourist flow. A considerable part of the visitors to the Nordic countries will also be self-catering tourists, which implies fewer hotel development projects and other tourist activities generating large revenues. The appeal of the Nordic countries lies in the possibility for the tourist to manage on his own with a minimum of commercial consumption. Chalets, caravans and camping, hiking and fishing,

sports and activities will form important elements in the new Nordic tourism. Tourists who are attracted to the Nordic countries will resemble their inhabitants, i.e. they will prefer to manage on their own and to contribute something to their own recreation.

The winner regions in the Nordic countries, therefore, will be those that can offer forests, mountains and coastline — preferably under extreme conditions such as in the north-of-the-Arctic-Circle area. Iceland can be regarded as a culture region, but just as much as a nature region with an attraction value for wilderness tourism and tourists who take a special interest in unusual aspects of nature.

Impacts on Europe

All in all, a development in accordance with the principles of sustainability will lead to a considerable setback for tourist regions in Western Europe.

Southern Europe: The area around the Mediterranean will be hardest hit by this shift towards sustainable tourism and transport. Not even massive purification efforts can clean up the Mediterranean in the short term. The biggest loser regions will be the Portuguese and Spanish Costas, the large resorts on the French and Italian Riviera, and gradually the increasingly over-populated Greek Islands.

Central Europe: At the beginning of the 1990s this is a leading departure area, but by the beginning of the next century it may to an increasing degree become a destination area — for its own tourists. The increasing domestic tourism does not only mean holiday-making in one's own country, but to an increasing degree in one's own region. The consequence of this will be that countries like Germany and the United Kingdom will receive increasing flows of tourists — from themselves.

The Alps: This is the region that first set upper limits to how much tourism the area could stand. There is no reason to believe that this will not continue, and this may lead to further reductions in the capacity of a large number of resorts. Switzerland and Austria will lose in quantity, but will be winners in the contest for high-paying tourists looking for quality.

The regional and spatial impacts on the Community's territory of Nordic tourist industry trends will be illustrated by the geographical maps, Figures IV.10 and IV.11.

Figure IV.11: Meso-dimensions

Positive Impacts of Nordic Tourism

Potentially Negative Impacts of Nordic Tourism

Potentially Positive Impacts of Nordic Industrial Clusters

Core Impact Area of "Baltic" Integrative Efforts
(Positive effects mainly deriving from infrastructural and enviromental measures)

Extended Impact Area of "Baltic" Integrative Efforts
(Largely positive effects mainly deriving from infrastructural measures)

Part V

Transnational regional scenarios

5.1. Introduction

As already indicated in the executive summary, Norden's participation in transnational region-building must be considered Norden's heaviest, regionally and spatially relevant, impact contribution to the new pan-European architecture, the one which has the clearest and most easily demonstrable effects on well-defined regions within the Community, and which offers the weightiest Nordic contribution to European cohesion.

We now turn our attention to this most important class of impacts.

We shall emphasize three main questions.

(1) How will regional development and spatial organization in the Community be impacted by the interaction between Norden and adjacent regions of the former Soviet Union?

(2) In what manner may northern EC regions such as Denmark, Schleswig-Holstein and Mecklenburg-Western Pomerania become affected by 'Baltic' integrative efforts?

(3) What may happen to the regions bordering on the North Sea as a result of impulses towards meso-regional integration?

For each of these problem areas the potentials related to transnational region-building will be assessed.

We shall emphasize three projects of transnational region-building (see Figures V.4 and V.12 below) which will be called:

(i) the greater Baltic Sea region, subdivided into the core Baltic Sea region and the west Baltic Sea region;

(ii) the greater Barents region, with the subregion, the core Barents region;

(iii) the greater North Sea region;

The choice of these three regions is by no means accidental. They are all, by nature, functional transnational regions, at least embryonically. They are all involved in various forms of institutional cooperation or partnerships, out of which official transnational political institutions have evolved or may evolve. Agreements have been signed establishing the Baltic Sea Council and the Barents Council.

These two councils are thus political realities, and therefore it is quite in order to consider both as established regimes.

The analysis and assessment are, of course, complex. Nevertheless, we shall attempt to present simplified visual representations of our main findings.

5.2. A theoretical perspective

It is known that functional regions may be either horizontally or vertically integrated. Consequently, an analytical schema to evaluate these two types of regional organization and their potential impact strengths is presented.

The vertically integrated functional regions will be assessed on the basis of the presence or absence of economically dynamic urban agglomerations. The vertical regions may be said to be the equivalent of the classical development of settlement hierarchies, for example, as identified and described by Christaller, who in 1933 derived a general spatial organization on the basis of the distribution of central places in southern Germany. Normally, it is expected that central places provide the most sophisticated range of goods and services, labour division, etc., and thereby command a vast market area, geographically speaking.

Figure V.1: Europe's Cohesion

"Central": Approximate Southern extention of Nordic socio-cultural heartland

"North": Approximate Southern extention of Nordic sparsely populated periphery

"South-west": Approximate Northern extention of core beneficiaries of "cohesion" allocations

"East": Approximate Eastern extention of core beneficiaries of EC and Nordic border region-building

The essential point is that they are dynamic, influencing their surrounding territories. Spatial hierarchies within the settlement pattern develop, based on the existence of these central, economically dynamic, urban agglomerations.

Central place theory is based on the idea that very specialized functions and services are only able to 'survive' by being located at central places (e.g. urban agglomerations, capital cities or large county towns) which are well situated geographically to command wide markets.

At a certain distance, surrounding the central place, secondary centres of importance are found which, it must be underlined, may also have their specializations. Then, there are minor settlements surrounding each secondary centre. A settlement hierarchy based on vertically interacting cities is thus identifiable.

Today, one could say that there is also a system of interacting cities which is based on a highly developed infrastructure.

The greater the degree of centrality enjoyed by a settlement, the greater its influence on the surrounding hinterland with regard to region-building.

In Europe one might talk of axes of linked central places. These functional axes have been comically dubbed as visually representing 'banana shapes' on the map of Europe. The 'blue banana' starts in the English Midlands and stretches through London, Brussels, the Ruhr, Frankfurt, Munich to reach Milan and Turin. Likewise, the 'green banana' (or the 'sun belt') starts in Milan and stretches west through Marseilles and Lyons to reach Barcelona. These two axes represent Europe's greatest continuous urban agglomerations: the two European core regions.

However, smaller agglomerations are necessary bases for more limited region-building. Cities might function as growth nodes, perhaps as a result of some specialist superiority in a particular field, for example, the result of highly specialized industrial clusters, or as specially selected regional growth centres.

Nevertheless, the dynamic spin-off advantages of the large conurbations are today being eroded by increasing problems related to traffic congestion, environmental degradation, and demographically ageing populations (increasing proportion of inhabitants retiring, due to age, from active economic life). The apparent advantages of flexible production specialization systems and technologically advanced service communications and transport infrastructure are thus diminishing.

This makes a stronger case for a regional mosaic development, away from centralization tendencies. This movement is likely to increase in momentum towards the year 2000, as is outlined in the following statement taken from the EC strategy document 'Europe 2000':

'First it is clear that market forces have encouraged many firms to locate or relocate away from the high-cost central areas (European core)... . Secondly, the Community's core area is becoming characterized by an ageing population structure (demographically top-heavy — with an increasingly inactive population, economically, due to the large increase in the number of senior citizens)... . Thirdly, new development in advanced transport and telecommunications will eventually alter 'time geography', to the advantage of areas remoter from the congested centres of activity... . Fourthly, the rising costs of congestion in the central areas of the Community — delays, pollution, etc. — are likely to act as increasingly powerful deterrents to new investment in the same areas'.

Yet, to all intents and purposes, it has to be admitted that the spatial organization in Europe and Norden resembles the hierarchical settlement pattern perceived by Christaller, caused by predominantly vertical functional forces: the little village settlement or farming community on the European periphery at the bottom of the hierarchical scale, and the large information capitals and industrial conurbations of the European core at the top.

Moreover, vertical, hierarchical functionalism is reinforced by being accepted as the most natural basis for current planning. A good example is the EC FAST programme. Highly specialized research and development requires the high-tech service network that only top central places can provide on site. Therefore, R&D continues to be concentrated within the large urban agglomerations, leaving the subsequent spread of innovation, service benefits or resultant products to filter slowly down through the hierarchical network from the central place. Many outlying areas may receive no benefit at all as they command a low purchasing power.

The question remains how this trend may be reversed if money for research, administration, business headquarters, etc. is continually pumped into the core areas rather than the periphery. Once again, the hierarchical spatial pattern is reinforced by a complacent acceptance of the status quo.

Research on manufacturing and service industry dynamics has shown that the central place, vertical function suits the way in which many businesses are organized. The general advantages of industrial concentration are apparent: nearness to a large labour market, the opportunity of realizing economies of scale, nearness to services and public utilities, low transport costs, an abundance of suppliers or buyers to choose from.

No wonder that the outcome has been industrial concentration (including industrial clustering) and areas of high population density.

In summary, it is true to say that the advantages of agglomeration appear to outweigh any advantages of isolation (although certain industries are forced to locate close to their raw material or energy source which may lie in very remote regions, for example, aluminium smelting at hydroelectric power stations along high-velocity rivers in Norway).

The following analytical schema may help in evaluating and categorizing the developmental potentials upon which to base EC-relevant regional impact scenarios.

FIGURE V.2: Analytical schema to assess and categorize functionality

Functionality	Development potential based on degree of functionality	
Horizontal / Vertical	Well-developed interregional networks and alliances	Poorly developed interregional networks and alliances
Agglomerations	Optimal conditions for development Likely to become regional winners	Dynamic urban potential for some positive development Seeking interregional partnerships is a main strategic feature
Poorly developed urban agglomerations	Potential for positive development Urban growth is a main strategic feature	Potential regional losers

The above analytical tool introduces the concept of horizontal functionality, according to which regions cooperate and establish partnerships across frontiers, i.e. along horizontal axes.

Through horizontal functionality, region-building is achieved independently of the vertical functionality of urban agglomerations.

In recent years many regions built on horizontal functionality have arisen in Europe, partly compensating for the lack of larger urban agglomerations. The process is gathering speed.

Quite simply, regions can improve their competitive edge through political and economical partnerships, whether they be cooperative ventures related to resource exploitation, industrial production, environmental conservation, tourism, or other matters.

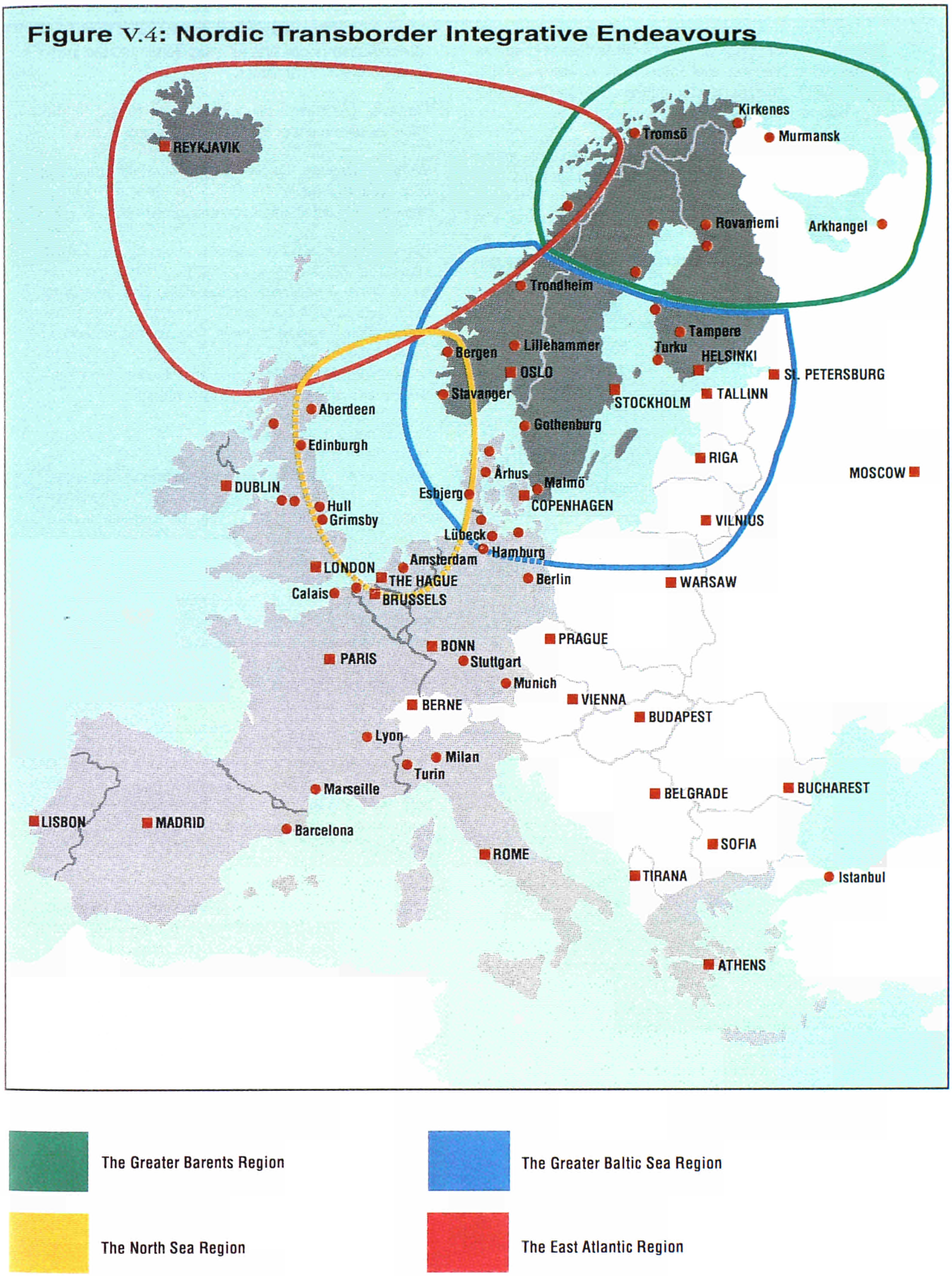
To apply these theoretical observations to the task at hand, it is amply clear that new challenges in the EC-Norden border areas require new forms of cooperation. As everywhere in Europe, these border regions belong to in most cases not very old — centralized State systems. Hitherto, they have been administered and kept under control by often far-away national capitals.

It is a noteworthy fact that many of these border regions share common historical, physical, economic and cultural features with adjacent regions in neighbouring States. But this is hardly surprising in view of historical circumstances: many border regions have in the past belonged to the same State (e.g. until 1864 Denmark and Schleswig-Holstein were parts of a united kingdom), and as recent European experience has shown, old memories die hard.

Naturally, some of these border regions have suffered from neglect, being regarded as distant buffer zones rather than focuses of development. However, within an integrating Europe, these zones will be perceived very differently. They will be given higher priority as actors in the region-building, acquiring more power both politically and economically.

Attempts to counteract the regionally debilitating effects of impenetrable State boundaries have acquired a long-standing legitimacy in Norden through the establishment of Nordic transborder cooperative regions crossing the frontiers of all Nordic States including

The following illustration, Figure V.4, complements the 'European' picture by indicating four 'Nordic' transborder regions that should be of interest in a study of Norden's likely impact on EC areas.



Denmark. These endeavours have for many years been financed by the Nordic Council of Ministers and administered by the high-level, inter-Nordic advisory committee NERP (the Nordic Committee of Senior Officials for Regional Policy).

Consequently, in the event of a closer Nordic integration with the Community, one should not assume that Norden would be a European novice in the field of regional partnerships. Nor should one assume that countries within the Community would be, as evidenced in the following presentation of European transregional cooperation.

In general terms Figure V.4 shows potentials for Nordic region-building at the meso-regional level in the broadest sense. The east Atlantic region may be considered less relevant with respect to Norden's influence on the Community.

5.3. The greater Baltic Sea region — a potential core region in Europe

The abortive Soviet *coup d'état* of August 1991, in fact, created not only a new political Europe, it also opened an enormous economic frontier between Western and Eastern Europe with Norden — and in particular Norway and Finland — as new Western front-line States bordering on old Soviet territory.

In a broader sense all States around the Baltic Sea have been forced into the role of partners. These States are Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland, Sweden, and, less directly, Norway.

This area already has its representative body, the Council of the Baltic Sea States, established in March 1992. At the founding meeting, former German Foreign Minister, Hans Dietrich Genscher invoked the idea of a 'Europe of regions' and pointed to the Baltic Sea region as yet another exponent of this ideal.

The participants in the founding Baltic Conference in Copenhagen made clear their commitment to tackle a series of tasks through regional cooperation: the development of infrastructure, securing human rights, improving the environment, strengthening democratic institutions and the eventual incorporation of all the Baltic States into the Community.

Above all, the Conference stressed the need to strengthen regional cooperation as a supplement to the traditional cooperation of States.

However, great uncertainty exists with regard to the future development of the Baltic Sea region.

What knowledge do we possess which may be employed to ensure the Baltic Sea region's political stability and sustainable economic growth?

Evoking historical constellations such as the former Hanseatic League is inspiring, but hardly practical today. What is required for the Baltic Sea area is to appreciate what it has to offer in terms of functional cooperation, regional partnership and the establishment of rational future networks. It is also important to understand that the Baltic Sea area itself may be subdivided into numerous functional subregions.

One impetus in the creation of functional regions in Norden and the Baltic Sea area is the need for developing an East-West cohesion as explained in the special study, 'The Baltic connection' (Volume IV). The deepening economic and social gap dividing the various Baltic Sea regions must be eradicated to guarantee fair cooperation. Today there is obviously a geographical cohesion due to the binding force of the Baltic Sea itself. A further cohesive element might well be the traditionally high standard of education in the region as a whole, particularly at university level, which has already become the basis of international university cooperation and ought to be the springboard to even greater interaction and maturer relations.

But economic and social cohesion is definitely unsatisfactory at the present time. There is still the age-old national security problem all along the extensive border zone with Russia. The security issue is of primary importance to region-building all the way from the Barents Sea region to the Gulf of Finland in the south.

The likelihood of a Baltic Sea region emerging is supported by the findings of the special study on transport (Volume IV). The study identifies several pressing problems. The fact is that the European road network will not be able to support the prospective increase in traffic. Goods transport is increasing faster than road capacity, and the changeover to rail transport is slow. Full road capacity will soon be reached. Bottlenecks on the motorways of the European core and northern Germany will become common.

Figure V.5: The Baltic Sea Region as Europe's Third Core Region

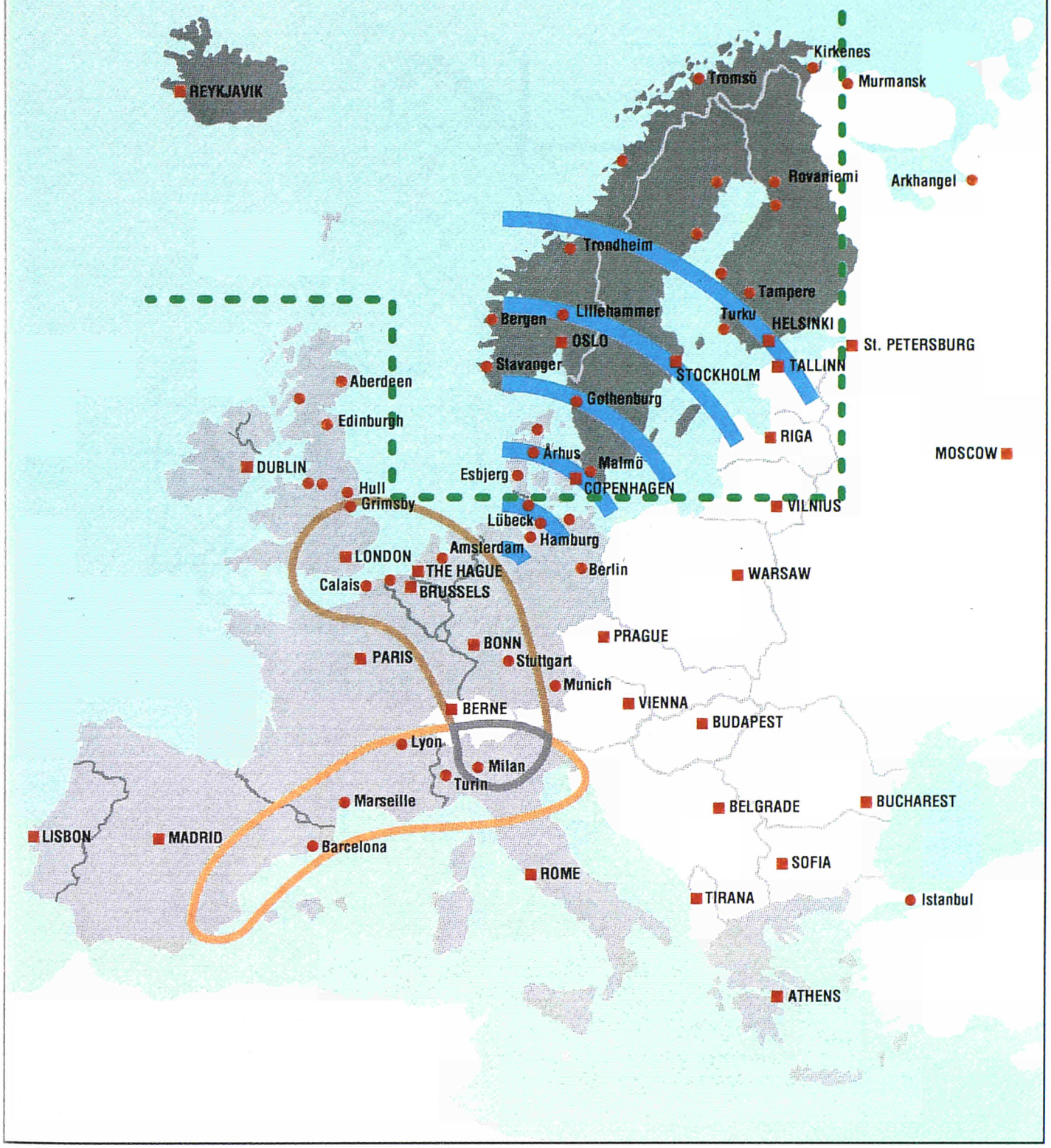


FIGURE V.6: Motor traffic on main international traffic arteries, 1985

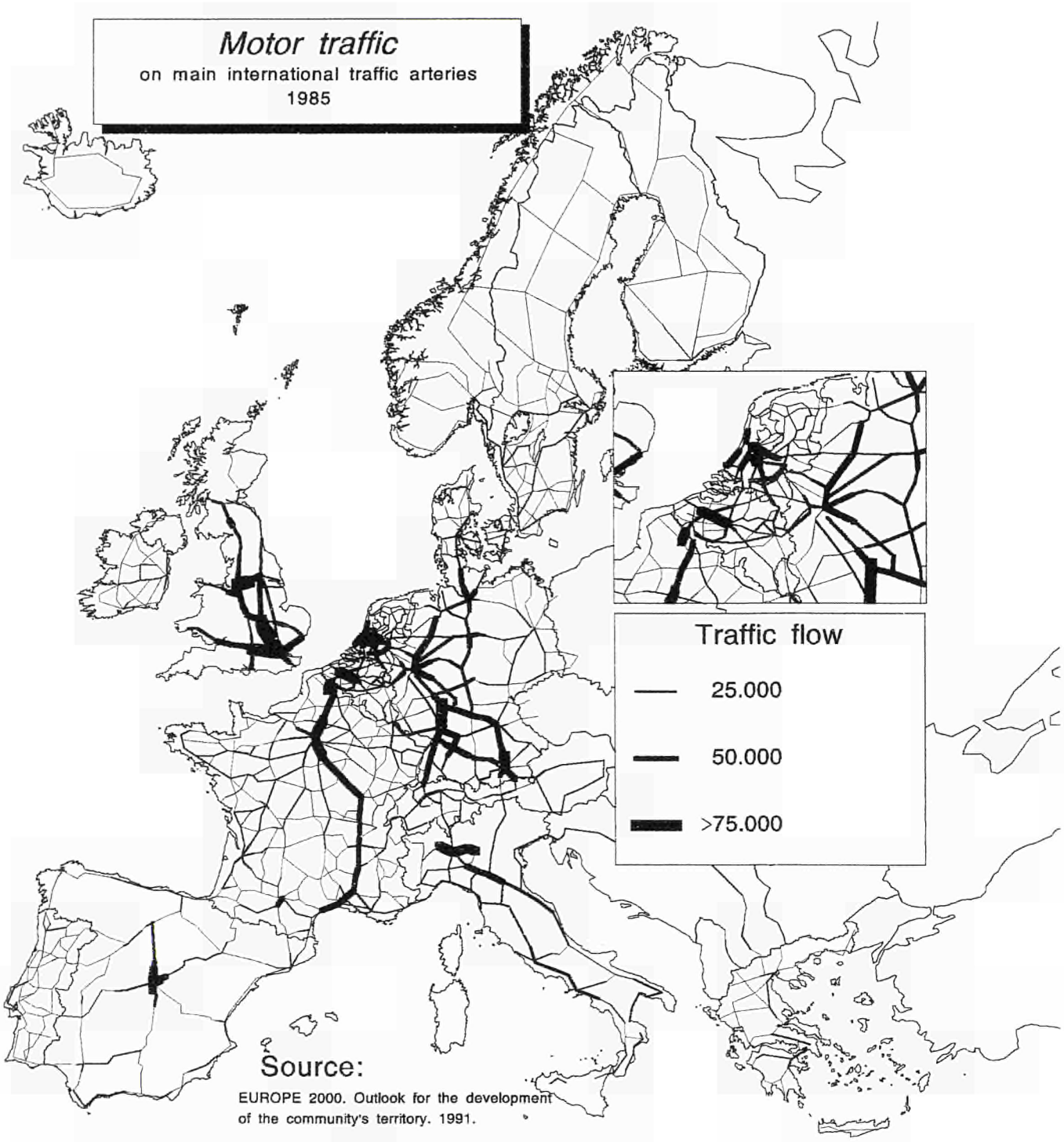


Figure V.7: Transportation Funnel for Norden

Attempts to redress the problems of congestion and pollution have already been made by the German Government (subject to EC approval), the idea being to impose motorway tolls based on distance travelled and to invest in motorway development west-east, instead of north-south, in order to remove traffic congestion in central Europe. The implementation of such ideas would probably favour development in the northern border regions, including the Baltic Sea region.

One knock-on effect of the increasing problem of traffic congestion is that it is becoming a new industrial location determinant. To reduce the aggravation of transport delays and foreseeable tolls, companies are taking steps to shorten transport distance, and thus remove the danger of likely increasing transport costs. Companies are relocating closer to their end-user markets, and suppliers closer to their industrial clients.

This could make certain regions more attractive as growth nodes, such as the greater Baltic Sea region because of its location north of the bottlenecks. The general picture of motor traffic congestion emerges from the following two Figures V.6 and V.7.

If a viable Baltic Sea region could be established — and it is by no means assured that the creation of the Council of Baltic Sea States or indeed other integrative efforts will guarantee such an outcome — it is clear that the greatest economic growth potential is found in the southern part of the region below a west-east line from Oslo, through Stockholm and Helsinki to St Petersburg.

Within the north-south longitudinal territorial zone stretching from Lapland to Kaliningrad, there are 17 million inhabitants, which is equal to the combined populations of Denmark, Sweden and Finland. The urban population density (based on towns with a population greater than 50 000 inhabitants) is lowest in Schleswig-Holstein (27 %) and highest in greater St Petersburg (82 %). Within that range lie the national urban density averages of Denmark (32 %), Finland (35 %) and Sweden (50 %). If urban population size is an important growth criterion, then the Baltic Sea region seems well poised.

This southern zone is the most populated and most urbanized area of the region (see also Figures I.2 and I.3 in Part I). It also possesses the most important industrial clusters.

Staatskanzlei Schleswig-Holstein has made a list of more than 30 different initiatives for strengthening and stimulating functional integration in the greater Baltic Sea region.

Moreover, certain large municipal authorities in the Baltic Sea region ('Hansetage der Neuzeit' — consisting of 100 Hanseatic towns) have already organized to promote industrial and cultural development. Other cooperative bodies include: the Baltic Chambers of Commerce Association (BCCA — promoting free trade in the area), the Baltic Ports Organization (BPO — also involved in solving coastal environmental problems), the Baltic Tourism Cooperation (BTC — promoting tourism in the area), the Baltic university programme (organizing student exchange within the region) and the Conference of Baltic University Rectors (CBUR — stimulating cooperation in education and research). The initiative is also being taken to develop telecommunications, new sea ferry routes, motorways (also in connection with the Scan-Link and Via Baltica).

Obviously, the political ambition from a Nordic point of view is to change the pattern of trade and cooperation in the Baltic Sea region from situation A to situation B (see Figure V.9 below). This can by achieved by the establishment of a Baltic Sea regime, including both EC regions, Nordic regions and East European regions.

We must, without a doubt, be cautious in our estimation of a future vertically integrated, functional region in the Baltic Sea area, particularly when referring to our analytical schema on potential functionality (see above). Viewed in that context, the Baltic endeavour might be most suitably categorized as 'possessing a potential for positive development'.

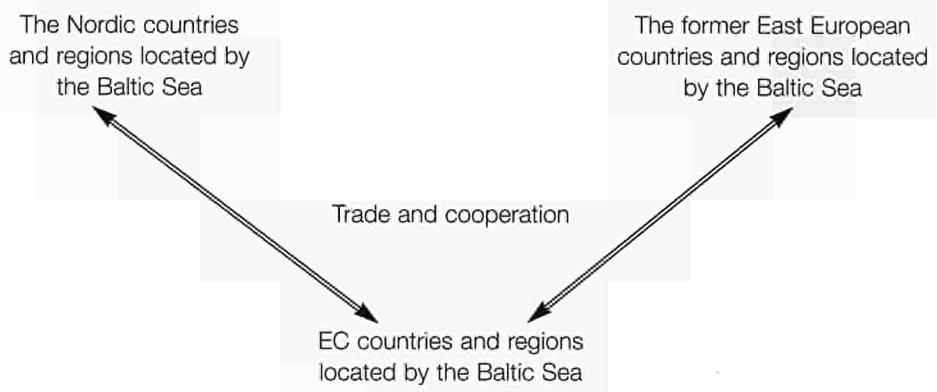
In particular the political and cultural barriers still existing in the region should be stressed. To become successful — and perhaps successfully integrated with the Community — the greater Baltic Sea region must significantly reduce the political barriers which exist today. Successful efforts to accomplish this task would automatically strengthen the economic development of the Baltic Sea area as a whole.

Crucial to the establishment of a functional region will be the improvement to the infrastructure: roads, railways, ferry and air routes, and telecommunications. Certain initiatives are already in the planning phase or under implementation — the Øresund Bridge linking Denmark and Sweden, and the Fehmarn project linking Germany with Denmark. A motorway expansion in eastern Germany is the inevitable result of German unification. The motorway network will extend to the eastern Baltic Sea area as the 'Via Baltica', and road and rail development will take place all the way north to the Kola Peninsula. New ferry links will also be established to link the coasts of the Baltic Sea (see Figure V.10).

Precisely how this planning will be coordinated, however, is as yet unclear.

FIGURE V.9

Situation A



Situation B

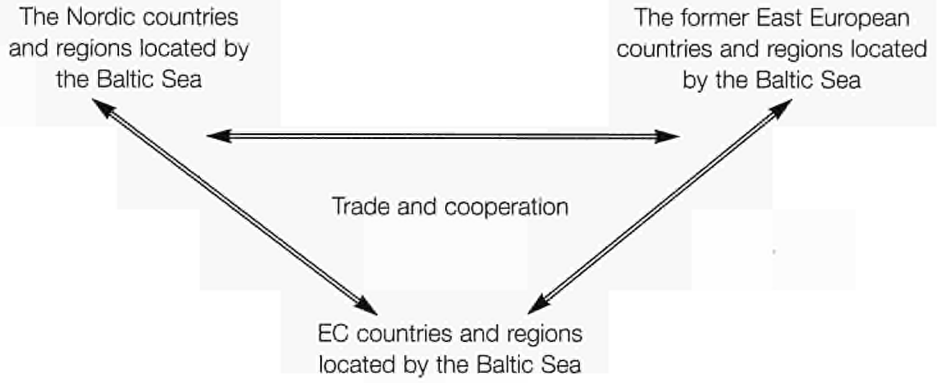


FIGURE V.10: Transport links in the Baltic Sea, year 2000

Source: Based on Kuljetukset 2010. Jyväskylä 1990.

Subregions shown:

1: The core Barents region.
2: The core Baltic Sea region.
3: The west Baltic Sea region.
4: The North Sea region.

5.3.1. Potential patterns of subregion-building in the Baltic Sea region

Against this background, two subregions may be identified within the Baltic Sea area and certain prerequisites to regional development may be defined more precisely.

Our identification of two subregions is certainly not based on any politically authorized plans under implementation. We have merely attempted to foresee likely developments, given the interplay of selected criteria. Our assumptions may consequently be best understood as hypotheses aiming to provoke and stimulate. As such, they may nevertheless be useful and even instrumental in the shaping of future policy, in this case regional policy.

It is our basic assumption that two Baltic Sea areas — a west Baltic area and a core Baltic area to the east — will soon become fast-growing functional regions.

With reference to the analytical schema above, this will occur because dynamic urban agglomerations, combined with the development of interregional infrastructural networks, and successful collaboration through regional and national alliances will provide optimal conditions for growth. Relatively speaking, both areas will be European regional winners by the year 2000.

European competition is not purely a question of nations fighting for market shares or growth factors. Regions compete as well, and they are becoming more important as central actors on the politico-economic scene, often helped by their central governments as well as the Community through the Structural Funds, interregional programmes, etc.

The map above (Figure V.12) illustrates part of our reasoning for identifying two Baltic subregions. Firstly, the largest urban agglomerations are found in two geographical locations, the south-west Baltic Sea area and the mid-east Baltic Sea area. These two areas both have well-developed infrastructural plans and are focuses of coming central government investments.

The trends leading to this conclusion are as follows.

The west Baltic Sea region has or is in the process of establishing an infrastructural basis which links a network of towns, forming a relatively compact urban agglomeration. Growth occurs along an axis starting at the Norwegian town of Lillehammer, passing through the Norwegian capital city of Oslo to the Swedish town of Gothenburg, southwards to Malmø, on to the Danish capital of Copenhagen, before ending at the three German seaports on the Baltic Sea coast, Kiel, Lubeck, Rostock and their hinterlands.

The subregion's high urban density gives it a great potential for vertical integration. The core agglomeration of the west Baltic Sea region will no doubt be the twin-city hub of Copenhagen/Malmø which boasts a combined population of 2.5 million in addition to various other advantages such as one of northern Europe's major international airports (Kastrup outside Copenhagen) and two of Norden's oldest and most respected universities (Copenhagen and Lund).

At the beginning of 1993, Danish and Swedish central and local authorities established the Øresund Council, whose function is to exploit to the full the development potential connected with the completion of the Øresund bridge/tunnel which will give the two countries their first ever fixed land transport link by the turn of the century.

As already indicated, the west Baltic Sea region's northernmost limit will undoubtedly be the Norwegian Lillehammer district, which will enjoy the attention of world sporting interests in 1994, when it hosts the winter Olympics.

In the Lillehammer region, the winter Olympic preparations have necessitated large investments in the local building industry and access infrastructure. Rail and motorway sections intended to become part of the Scan-Link project are under construction. This new infrastructure will connect Lillehammer more effectively with Oslo and Gothenburg and later, through the proposed west Baltic axis, to the Øresund bridge/tunnel between Copenhagen and Malmø, ultimately leading on to the envisaged Fehmarn connection which will give Denmark and Germany an alternative border-crossing point to the traditional Jutland peninsula rail-and-road routes.

The removal of other barriers is also on the agenda — not least political barriers — as the region has a long common history and linguistic ties with the neighbouring border regions of Denmark and Germany.

Environmental barriers are, however, likely to play a part in the Scan-Link project. Recent Swedish objections have cast doubt on the ecological sustainability of the Sound bridge as originally planned. It remains to be seen whether these Swedish environmental concerns may delay the completion of the bridge connection or possibly prevent the entire plan from being carried out (in spite of the fact that the Danish-Swedish agreement to construct the bridge has the form of an internationally binding treaty).

Another distinct possibility jeopardizing the Sound bridge might be that more centrally located Swedish economic interests, for example, around the Stockholm area, might feel little inclination to co-finance infrastruc-

ture which would no doubt lead to the strengthening of a competing urban agglomeration to the south. In this connection it is noteworthy that the infrastructural ideas of the Stockholm County Council in terms of closer linkages with Germany and the Continent seem to pay scant attention to the Øresund bridge and, on the face of it, to favour ferry links with Germany which bypass Malmø and Copenhagen (see the map outlining the two potential Scan-Link routes, Figure V.16).

The other subregion, the core Baltic Sea region, (see Figure V.12) may be seen as a scenario for region-building in the eastern part of the greater Baltic Sea region. It is based on trends which point towards the evolution of a functional region, offering the possibility of economic growth based on regional integration.

The region lies along an axis which starts with the greater Stockholm/Uppsala city zone in the west, crosses the Baltic Sea eastwards (to include the city regions along the coasts of the Gulf of Finland: Turku (Åbo), Helsinki and St Petersburg) and southwards (to include Tallinn in Estonia and the Riga city region in Latvia).

Like the west Baltic Sea region, this eastern region is not formally recognized by any form of treaty. It is therefore not an 'official' region, but an expression of institutional collaboration on a horizontal integrational basis.

In 1990, however, Russia and Finland signed a pact of mutual cooperation which fixed the following goals for the development of their common border regions:

(i) to create the conditions for economic cooperation so as to benefit both countries;

(ii) to support measures which lead to greater political and economic stability in the border zones;

(iii) to strive to reduce the possibility of harmful episodes and confrontation. The long-term aim is to implement comprehensive preventive measures.

In 1991-92, Finland's contribution to this collaboration was FMK 182 million. Aid is given right along the 1270 km border zone with Russia. On the Finnish side, the area of transborder cooperation covers four counties *(län)*. Much of the area is very thinly populated and suffers from serious economic growth problems. In our functional regional scenario, it is the southern part of this border zone, i.e. the axis section of St Petersburg-Helsinki, which is regarded as a vital growth node for the core Baltic region. Greater Helsinki (Nyland County) has a population of 1.1 million, while greater St Petersburg has 6.7 million.

The region as a whole has a high degree of urbanization: the large towns and cities have a total population of 14 million. The planned infrastructural improvement will accelerate integration. With regard to transport, this will include better road, rail, air and sea ferry connections. The proposed motorway, the 'Via Baltica', will effectively connect the region to the Continent and the EC countries (see the special studies on infrastructure and transport — Volumes II and IV respectively).

More importantly, commercial interests are at stake, and this must be seen in the light of other foreign investment interests in the area. In comparison with their investment in other countries, both Sweden and Finland seem highly motivated to become involved in the Baltic States and the St Petersburg city region.

There are several reasons for this strengthening trend. Firstly, the geographical nearness of potential markets is obvious. Secondly, there are very significant historical, trading and political ties, going back many centuries. Finland has a particular advantage as it is the western country with most experience in dealing with the formerly State-run economies of the East. Furthermore, the Finnish and Estonian languages resemble each other, having Finno-Ugric origins (unique in Europe, apart from Hungarian). This considerably facilitates communication between the two neighbouring countries (see the special study on the Baltic connection, Volume IV).

The greater Stockholm city region is relatively densely populated, with 1.5 million inhabitants. It is the centre of high technology and the service industry in Sweden, and therefore represents a potential growth node in the core Baltic Sea region.

Infrastructural improvement is a prerequisite to successful functional regional development. In the past, the Stockholm transport and communication network has always been oriented towards Gothenburg, thus establishing the connection with the Scan-link and Nordic link. The recent renaissance of the eastern Baltic Sea area, and European development in general, forced Stockholm County Council in 1992 to try to answer the question: 'Is Stockholm county capable of competing in the Europe of the future?'

The conclusion was that future success would hinge on improving European connections through infrastructural investments. The figure below was drawn up to propose how the new infrastructural development ought to take place. It is interesting, as it shows the new infrastructural orientation towards the east as integration with the rest of Europe and the Community approaches. Furthermore, the plans seem to reinforce the concept of a functional core Baltic Sea region, with Stockholm as one of

the central actors. The future impact of the European border regions will cause a further shift of gravity in economic growth towards the east and the greater Baltic Sea region, and probably lessen the pressure on Schleswig-Holstein and the Copenhagen city region.

Summing up, the potential functional strength of the two Baltic subregions — referring to our analytical schema — may be assessed as follows.

The west Baltic Sea region is to be placed in the category of 'optimal conditions for development — likely to become a regional winner' in European development. This conclusion is based on the existence of dynamic urban agglomerations. As long as the infrastructural development is relatively effective, the outlook for horizontal interaction will be good.

The scenario based on the core Baltic Sea region is to be placed in the category of 'potential for some positive development'. The core Baltic Sea region has the potential to strengthen its position through 'developing horizontal interregional networks and alliances'.

This conclusion is based on the existence of several dynamic city regions, and by the year 2000, St Petersburg may also become a significant contributor to the realization of this potential. However, the trend towards developing an interregional network and system of partnerships must be considered weak primarily due to impediments imposed by the historical fact that until recently a major part of this potential meso-region was subjected to the dislocating effects of the Communist system. Moreover, the development of an effective infrastructure in the new eastern zone will not take place before the year 2000.

Returning to the west Baltic Sea region, it should be stressed that different patterns of development may emerge. Northern German transportation bottlenecks may contribute to concentrated growth along a Baltic arc from Copenhagen/Malmø to Rostock. No bottlenecks would seem to occur along this Scan-link because the Nordic link from western Norway through Jutland will relieve some of the traffic problems. In addition, Sweden has opened new routes directly across the Baltic Sea to Poland and the Mecklenburg-Western Pomerania coastal region.

The two following visual scenarios (Figures V.15 and V.16) illustrate these alternative, developmental patterns.

In the first spatial scenario, both Nordic arms of the Scan-Link converge in an axis emanating at the Copenhagen/Malmø urban agglomeration and pointing southwest across the Fehmarn connection towards contact points in Schleswig-Holstein and Mecklenburg-Western Pomerania. This scenario is based on a intense utilization of a coming Øresund bridge creating a Danish-German-Swedish micro-region of 'enhanced agglomerative effects' — a type of region which we have labelled 'interferency region'.

Undoubtedly, this regional constellation might well cause problems of traffic congestion at least in the long run.

Our alternative scenario (Figure V.16) would to some extent alleviate the drawbacks of a southern Nordic zone exposed to congestion and the concomitant problems of concentrated environmental exposure.

Perhaps the alternative scenario is best interpreted as a supplement to the first one. In other words, it may well become an important feature in Scandinavian-Continental relations regardless of whether the Øresund bridge is built or not.

5.4. The greater Barents region

Figures V.4 and V.12 show the geographical position of the greater Barents Region.

In nature, it is an entirely different type of region from the previously discussed Baltic Sea regions.

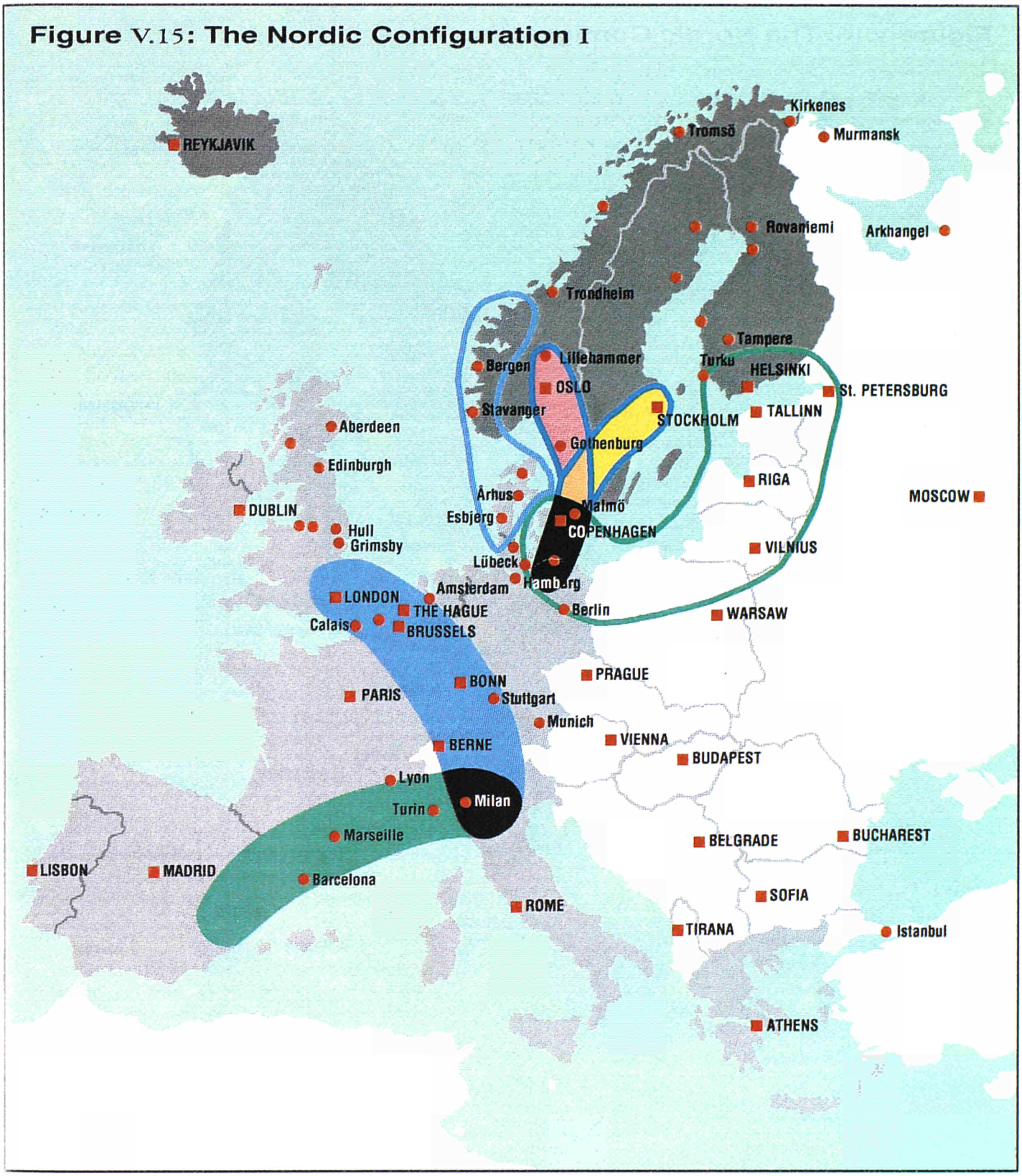
The Barents region may be described as a politically initiated meso-region being the product of an initiative taken by the Norwegian Ministry of Foreign Affairs.

In the words of the former Norwegian Foreign Secretary, Thorvald Stoltenberg at the inauguration of the Barents region in 1992: 'We regard the establishment of a greater Barents region as the most natural next step following the creation of the greater Baltic Sea region. While the latter will concentrate on the development of the Baltic Sea areas and the southern border regions of Norden, the establishment of the Barents region will contribute to the attention paid to the northernmost part of Norden, fostering understanding and inspiring cooperation to mutual advantage'.

The local basis of cooperation stems from seven administrative regions: Norwegian Nordland, Troms, Finmark, Swedish Norrbotten, Finnish Lapland, and the Russian counties of Murmansk and Archangel. The autonomous Republic of Karelia within the Russian Federation has also expressed its wish to participate in the work. The aim of the association is to establish a functional region on the basis of horizontal integration.

Interestingly, though the initiative has been very much a national one, it is the expressed desire of the Norwegian Foreign Office that eventually the momentum of these

Figure V.15: The Nordic Configuration I



Areas impacted by West Link/Nordic Link

Interferency Regions
(Regions of Reinforced Agglomerative Effects)

Areas impacted by Scan Link

Areas impacted by Via Baltica

Figure V.16: The Nordic Configuration II

Areas impacted by West Link/Nordic Link

Areas impacted by Scan Link I

Areas impacted by Via Baltica

Areas impacted by Scan Link II

cooperative endeavours should devolve to the local counties and the several indigenous populations of the greater region.

As a consequence, the institutional organization is double, involving both a national and a regional regime.

The Barents Council and the Barents Regional Council are the important administrative and political bodies. The Barents Council is made up of governmental representatives from Norway, Sweden, Finland, Iceland, Denmark and Russia. In addition — and significant in a pan-European perspective — the greater Barents region accord of January 1993 has been ratified by the European Commission, who has thus indicated its interest in and commitment to this Norwegian initiative although none of the core partners in the endeavour, i.e. the countries with regions belonging to the greater Barents area, are as yet members of the European Community.

A number of other major international powers have agreed to participate in the effort in the capacity of observers.

It would probably be true to say that the commitment of the European Commission is not least motivated by a desire to cooperate in the stabilization of potentially turbulent ex-Soviet regions bordering on what may well in the future become prime focuses of Community developmental efforts.

The Regional Council consists of actors from the administrative regions involved. In addition, it is the expressed desire of the project's initiators to involve representatives of the area's indigenous peoples on an equal basis.

Its task is to promote region-building through mobilizing private and public investment and commitment. It is also the declared objective of the regional forces to work for the creation of a strong regional identity and to establish Barents region institutions adequate to the coming political and administrative responsibilities.

In the long run it is the intention that the Regional Council take over the central responsibility for the progression of the project.

Though the moving forces behind the greater Barents initiative have been traditional national actors — as already mentioned — the project gains a distinctly European regional relevance through the growing role entrusted to regional and other bottom-up forces. Consequently, it would be apt to characterize the Barents initiative as a prime example among many European attempts to further the idea of regional partnerships — and one which should command the attention of European observers committed to cooperation not only within Western Europe but also between Western Europe and former State-dominated economies.

The secretariat is based in the Norwegian town of Kirkenes, and for the year 1993 the Norwegian Government has granted NKR 250 million as a start to the envisaged regional development.

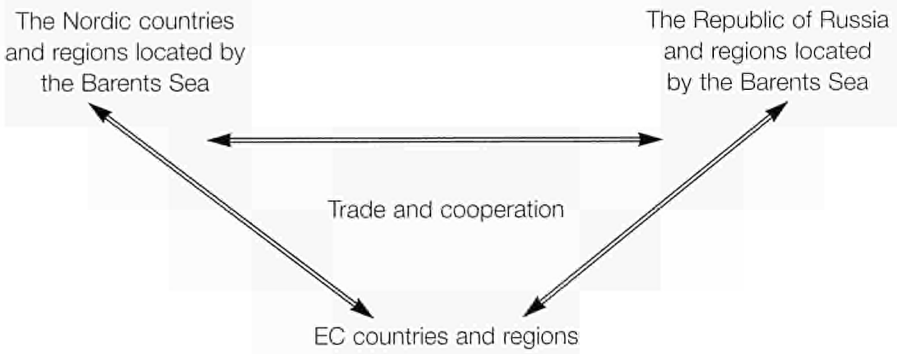
The Finnish Government has also been involved in specific projects, such as research in the Murmansk region and the gathering and analysis of statistics. Finland is strongly engaged in the solution of the region's environmental problems.

An expressed aim, integral to the treaty, is that development should adhere to EC policy. It is to be a natural part of the concurrent political and economic integration process between the Community and Norden.

Owing to its particular institutional form and special construction, the greater Barents region is unique in Europe. It will be interesting to see whether other transnational regions which cross the former Iron Curtain will try to imitate this construction, perhaps involving the European Commission as a signing partner.

Obviously, the ambition is to establish a pattern of trade and cooperation in the Barents region which is similar to that of the Baltic Sea region as indicated in the figure below (Figure V.17).

FIGURE V.17: International economic framework of the greater Barents region



The main characteristics of the greater Barents region may be defined as follows:

(i) a vast territory;
(ii) a harsh climate;
(iii) a dispersed low-density population;
(iv) a co-existence of several indigenous peoples;
(v) a wealth of untapped resources.

As the statistics accompanying the special study on the Baltic connection (see Volume IV) clearly indicate, the area's natural resources are truly enormous, so enormous, in fact, that they have caused knowledgeable observers to talk of the greater Barents region as both Europe's coming 'Middle East' (due to the deposits of gas and oil thought to be buried under the Barents Sea) and its coming 'Ruhr' (due to the wealth of valuable minerals in the Kola Region). But these natural resources are by far not the only ones to be found in the area.

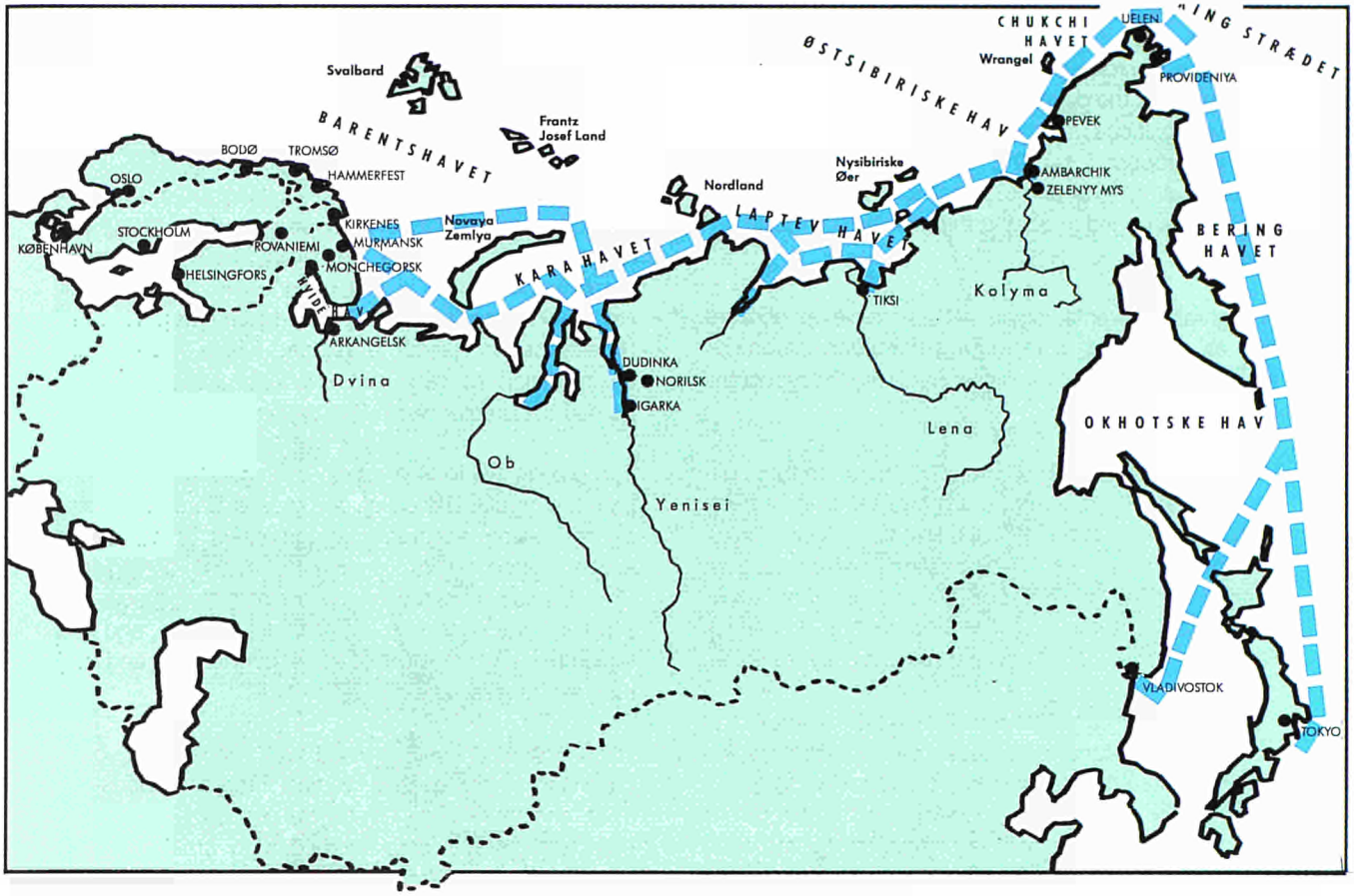
The region-building policy tasks that will form the basis of interregional and transnational cooperation within the greater Barents region are as follows:

(i) how to exploit the natural resources;
(ii) how to develop commerce and trade relations;
(iii) how to solve threatening environmental problems;
(iv) how to maintain peace, security and demographic stability in the wake of the disintegration of the Soviet Union or even the threat of a break-up of Russia itself.

It is a certainty that the collaborating powers and regions will attempt to exercise strong control with regard to the exploitation of the various natural resources. Furthermore, and particularly relevant to the last point, top priority will be given to protecting unique arctic ecosystems and rare flora and fauna.

At the same time, there is a desire to increase trade and develop sea-routes from Europe to Asia via the north-east passage. However, the latter will require heavy investment in ice-breaking activity during the long winter season. Should this dream ever be technologically fulfilled as well as economically viable, another door to economic prosperity will be open for the Barents region.

FIGURE V.19: The north-east passage



KORT: CLAUS LYNGGAARD/DE BASKERVILLE

The routes indicated are the most navigable. During the very short ice-free period (in most places at most three months of the year), the north-east passage from Europe to the Far East is twice as fast as the traditional route through the Suez Canal.

Source: Nord Revy, 1991.

Should the north-eastern route become viable, there is no question that there would be strong spin-off effects on land, particularly in Norway's Finnmark county and Russia's Kola Peninsula where a whole range of services would be in demand: harbour facilities, pilot and weather forecasting services, aerial surveillance, ice-breaking assistance, repair facilities, to mention the most important.

In addition to developing its economic and trading potentials, the Barents region seeks to establish its own identity. The northern tip of Norway has maintained close trading ties with neighbouring regions to the east for much of the past 1000 years, most notably the so-called 'Pomor trade' that lasted until the beginning of this century. However, this trade was severed after the Bolshevik Revolution in Russia of 1917. It has yet to be re-established, although the way may now be clear after the dissolution of the Soviet Union in 1991 and the tentative moves towards a market economy in the newly independent Russia.

A sense of common identity is certainly lacking in the greater Barents region today. There are strong linguistic contrasts, for example, Russian, Finnish and Norwegian are all totally different from each other, not to mention various Samic (or Lapp) dialects in addition to other languages spoken by peoples indigenous to the area. This linguistic variation imposes a serious barrier to communication, which has to be constantly overcome.

Furthermore, there are cultural differences and traditional ways of life that are dissimilar from place to place. This does little to unify the region, and attempts to do so are naturally regarded with some scepticism by minority populations as further threats to their disappearing, yet cherished, livelihoods.

As a consequence of these cultural dissimilarities in the widest sense it is at present difficult to see how the greater Barents region could develop into a proper identity region. Therefore it seems currently destined to evolve functional strengths instead.

As serious environmental and security problems have to be overcome, the development of a functional region to achieve solutions seems assured. Various strategies may be proposed, but the most important point is to ensure that the local and regional actors become mobilized and engaged in solving the problems through co-operation.

The greater Barents region will also develop horizontally as a product of increasing European integration and the need to establish firmer links with the rest of the Continent.

Vertical integration will, on the other hand, be more difficult, due to the enormous uninhabited or only thinly populated areas (area: 145 000 km^2 (for the core area); population density: 8 inhabitants/km^2), which contrast sharply with the localized pockets of large urban population in the city regions of Murmansk and Archangel, where the urban population density is as high as 92%.

Using the analytical schema to evaluate the strength and potential of functional regions, the greater Barents region would seem to be best placed in the following category: 'potential for some positive development'. The region is able to further strengthen its position through 'developing interregional networks and alliances'.

The reason for this assessment is the enormous wealth of natural resources in the region which await exploitation. Furthermore, there is already a number of very large towns which are dynamic in behaviour. Towards the year 2000, there is likely to be an opportunity for greater integration and the development of interregional networks and alliances.

A variant of the scenario foresees the crystallization of a subregion, the core Barents region, based on the major towns of Murmansk, Archangel, Kirkenes/Vadsø and Tromsø, as these already sizeable population concentrations will be well placed to act as centres for the management of resource exploitation, processing of raw materials, and major ports of call along any sea routes which might eventually open up the north-east passage (see Figure V.12).

5.5. The greater North Sea region

Current trends seem to make a case for a scenario based on a functional North Sea region. Among the countries that comprise the 'Nordic Four', Norway is the only participant in this region. The integration of Norway into the Community would clearly stimulate the development of such a region, which, due to its incorporation of vast adjacent land areas, shall be named the greater North Sea region.

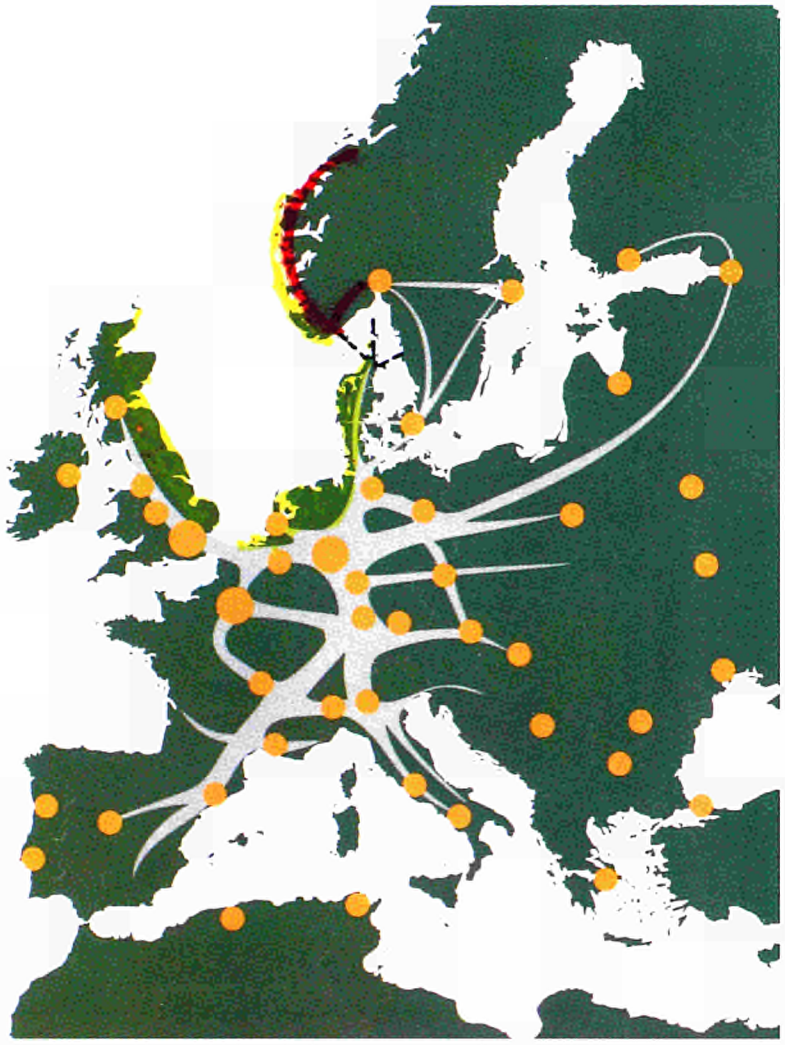
The greater North Sea region distinguishes itself from both the greater Baltic Sea and greater Barents regions by not having any treaty or agreement of a broader scope signed by its constituent nations or regions. Nevertheless, there are functional similarities. A series of initiatives and economic activities are in place, and this region has a long history of trade, cooperation and cultural exchanges.

The North Sea coast is lined with many ports, both great and small. As such, vertical integration does not exist, and there is no identifiable association of physically linked urban agglomerations to create such a region or a growth axis in the future.

However, some of the towns have entered into a form of horizontal cooperation through the establishment of an organisation known as the Association of North Sea Societies. The members are; Stavanger, Esbjerg, Bremerhaven, Groningen, Antwerp, Dunkirk, Hull and Aberdeen. The aim of the organization is to unfurl the common historical and cultural ties of the North Sea region and to stimulate a feeling of common identity and promote cultural activities, while at the same time promoting commercial activities and influencing authorities by means of newsletters and lobbying.

FIGURE V.20: The greater North Sea region

FIGURE V.21: Europe's most important routes and their relationship with the North Sea region as foreseen beyond the year 2000



Source: Miljoministeriet, Copenhagen, 1992.

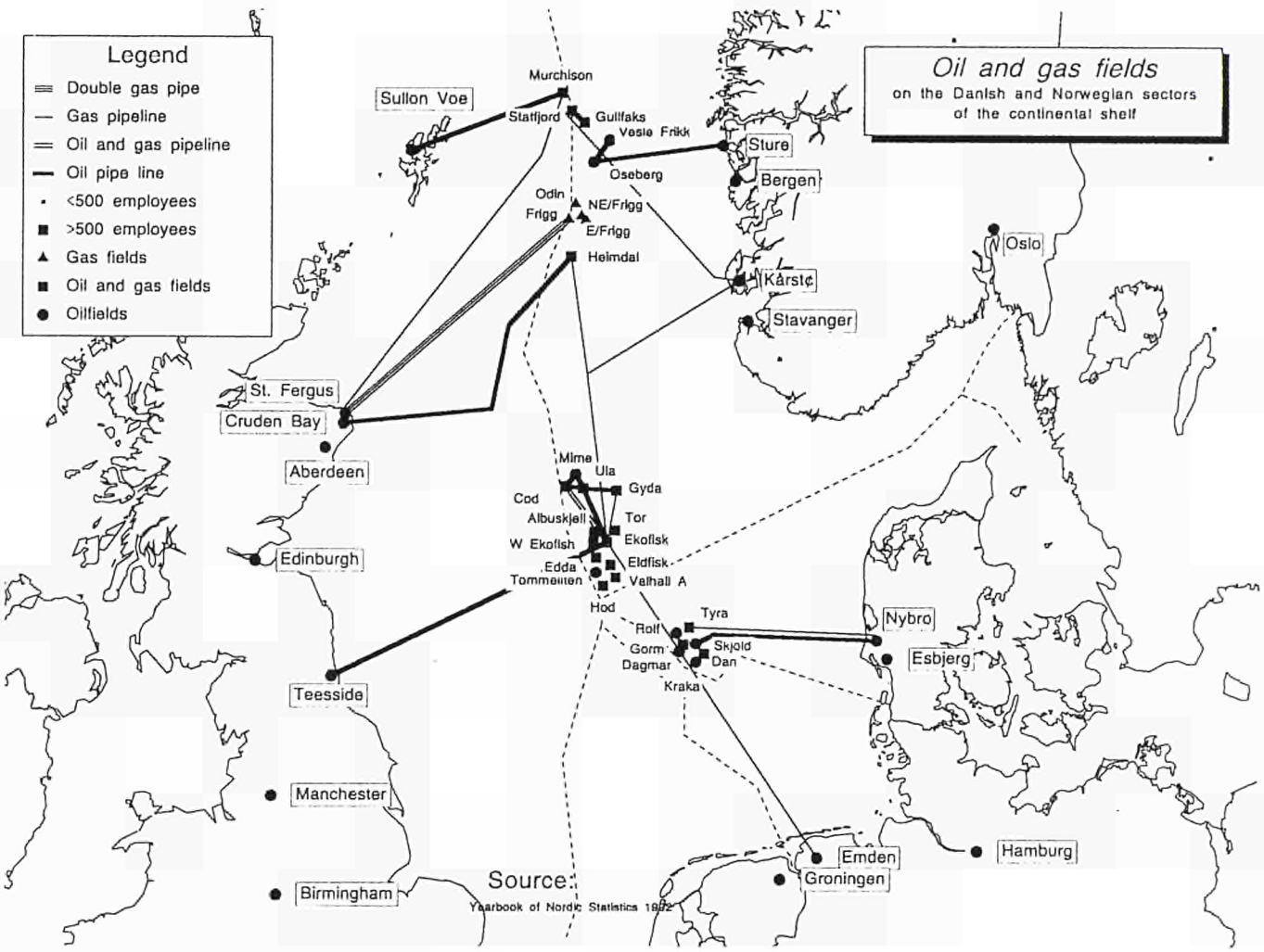
Large Cities and Capital Cities

Infrastructural development and planning are central themes of this functional region. A good example of the progress being made is the construction of the Channel Tunnel between England and France. Another example might be the development of the west link: the improvement of the north-south transport communications link from Norway to Germany via Denmark. In the north, the motorway network will be naturally built to link up with the Nordic link. The west link will necessitate better ferry services between the Danish port of Hirtshals and the Norwegian port of Kristiansand. West Norwegian and Jutland local authorities have started to cooperate in connection with the west link as they seek to promote commercial activity and tourism through infrastructural improvement.

Norway is also keen on a more effective sea ferry service to the United Kingdom as perhaps an alternative route south to continental markets. Although seemingly rather optimistic, the traffic congestion which is notorious in northern Germany could in this way be avoided.

However, the most important assumption behind the developmental scenario for the greater North Sea region is based on the exploitation of oil and gas reserves under the North Sea, as well as the connected petrochemical, refining, alternative processing and service industries.

FIGURE V.22: Oil and gas fields, December 1992



Source: Yearbook of Nordic statistics, 1992.

Pipelines stretch across large sections of the North Sea bed to reach many nations along its shore. Pipelines know no boundaries and bind regions together in a network, attracting capital and specialized labour (see the special study on energy in Volume IV).

With reference to the analytical schema for evaluating and categorizing the developmental potential of functional regions, the greater North Sea region has been placed under the following definition: 'potential for some positive development' but it really 'needs to strengthen its position through developing its horizontal functionality and establish legitimate interregional networks and alliances'.

This categorization is based on the significant resource base and the historical tradition of trade and cooperation, as well as the high number of dynamic urban centres. The scenario represents a possibility for the direction of development towards the year 2000. Until now, its potential for horizontal integration and cooperation has not been sufficiently developed.

Part VI
Synopses of Nordic impacts

A

Impacts on the regional development and spatial organization in the European Community

Macro-spatial dimensions

1. Synopsis of regional policy impacts

Regional policy scenario:
Allocation principles of the EC Structural Funds are changed to recognize sparse population, long distances, cold climate and Arctic agriculture as legitimate objectives. Norden's interest is maintaining settlement patterns and socio-geographical cohesion.

Statements:
Based on the special studies on Nordic regional policy and agriculture (Volumes II and III), the following statements may be derived:

Trend integration scenario — EEA-like:

(i) Nordic regional policies are not part of the agreement.

(ii) EC Structural Fund objectives remain unaffected.

Regional and spatial impacts on EC territory

None

Trend integration scenario — Maastricht-like:

Alternative 1:
(i) Nordic regional policies adapt to EC regional policies after transitional arrangements.

(ii) Structural Fund objectives will encompass 'Nordic' criteria.

(iii) The Interreg programme covers the entire area of EUR 16.

Regional and spatial impacts on EC territory

Relatively strong and geographically well-defined regional and spatial impacts in EC areas with geographical and climatic characteristics corresponding to those of Norden, the reason being that such areas would become eligible for structural support.

EC border regions with Norden and/or other regions who have entered into functional partnerships with Nordic regions would experience appreciably positive effects.

Alternative 2:
(i) The prospect that a number of current EC regions might raise 'Nordic' demands for support creates concern in the Community.

(ii) EC support for Arctic agriculture is accepted by the current members as a compensation for not meeting other Nordic demands for changes in Structural Fund allocational criteria.

Regional and spatial impacts on EC territory

None, as there are no Arctic (agricultural) climatic zones within the EUR 12.

Contrast fragmentation scenario:

(i) EC regional and spatial policies are weakened as are all other general policies.

(ii) In some cases, nations are able to resurrect national regional and spatial policies to compensate for the weakening of pan-EC policies — in some cases they are not.

Regional and spatial impacts on EC territory

(i) Considerable, negative regional and spatial impacts as the absence of EUR 12 or even EUR 16 cohesion policies would in many cases be compounded by the *de facto* weakening of nations' ability to back Nordic-EC functional regions and transborder regional partnerships.

(ii) In the event that transborder functional regions and regional partnerships are able to proceed and thrive in the face of pan-European fragmentation (not at all an unlikely proposition where economically prosperous and socio-politically strong regions are involved), the effects could hardly be labelled as Nordic impacts on the Community in any meaningful sense relevant to this study, i.e. unless the Community were to change its complexion from an assembly of States to an assembly of subregions or transnational regions.

2. Synopsis of the impacts of a Nordic growth area

Nordic growth area scenario
A 'third European core area' develops in Norden as a consequence of the enormous economic potentials inherent in a Nordic-Eastern commercial and resource-management partnership, general European and international integration and a 'new deal' in the pan-European division of labour as a result of transport congestion and the high environmental and economic costs of further agglomeration in European 'banana' areas.

Statements
Based on the conclusions in Parts IV and V of the synthesis report, the following statements may be derived:

Trend integration scenario — EEA- and Maastricht-like:

(i) Russian and Baltic State border zones adjacent to Norden may be defined as a new economic frontier and indeed as a new European frontier.

(ii) There are enormous resources of partially unexploited natural riches and unspoilt nature in the greater Nordic area including previously Communist-ruled border regions.

(iii) Politically and indeed institutionally, the Community has already commenced its engagement in the region through its signing of the Barents Sea accord and its declared commitment to the Baltic Sea cooperation.

(iv) The undisputed existence in the greater Nordic area of environmental, political, security policy and demographic challenges to Norden and by amplification to all of Western Europe

would, if anything, seem to call for an even greater EC commitment to developing the vast potentials which might offset such threats.

(v) The southern part of Norden is relatively densely populated — with a number of dynamic urban agglomerations — facilitating mutually advantageous regional partnerships with northern regions of the Community.

(vi) Interregional cooperative schemes involving both Nordic, 'Eastern' and EC regions and countries, such as the greater Barents Sea region, the Baltic region and, embryonically, the greater North Sea region are already unfolding.

Regional and spatial impacts on EC territory

The general, macro-spatial effects would be appreciable as there would be a marked tendency towards a shift from south to north within the Community. In the Community's northern 'border' areas with Norden (most notably in Denmark and a number of northern German *Länder*) a closer integration with a new (greater Nordic) European growth area might contribute to sustained economic growth.

In central parts of the Community, the growing burdens of congestion (delays, pollution, rising costs of location) would be reduced.

In the southern parts of the Community, the impacts would be small or negligible due to the remoteness of the greater Nordic area. A greater EC absorption in northern Europe might easily be compensated through a larger pan-European revenue base.

Contrast fragmentation scenario:

(i) The Community's engagement in and actual ability to further Nordic development would wane.

(ii) National interests both among EC Member States and in Norden would be impelled to assert their sovereignty over regional matters and spatial policies within their borders.

(iii) The greater Nordic area would suffer from a lack of cooperation. Growth potentials would not be realized — meaning that the threats of environmental, political and security dislocations emanating from Eastern regions would be harder to contain.

(iv) There would be no pan-European shift of emphasis from south to north (not least because there would be no pan-Europe to undertake such a shift).

(v) Intra-European barriers to trade and other economic activities would re-emerge, including barriers between current EC Member States and Nordic countries.

(vi) Pan-European cooperation would become decidedly sector-oriented dealing with selected problems such as environmental issues, illegal immigration and organized crime.

Regional and spatial impacts on EC territory

A fragmentation scenario would have decidedly negative impacts on EC regions compared to the forfeited potentials of the Norden-EC integration scenario. Hardest hit would be EC border regions with Norden.

B

Impacts on the regional development and spatial organization in the European Community

Meso-regional dimensions

3. Synopsis of transborder region-building

Transborder regional scenario
The Baltic Sea region, the Barents region and the North Sea region establish themselves as vertically and horizontally integrated regions. The same applies to their subregions; the west Baltic region, the core Baltic region and the core Barents region. Nordic transborder regions are able to compete in a 'Europe of regions'.

Statements
Based on Part V of the synthesis report, on the special study on producer services (Volume III), the special study on the Baltic connection (Volume IV) and the special study on the Baltic environment (Volume IV), the following statements may be derived:

Trend integration scenario:

(i) Administrative regions, centres of competence such as universities and research centres, and local enterprises gain growing importance as actors in functional regions. Money from the EC Interreg programme acts as catalyst in the process.

(ii) Functional regions have begun forming political and administrative institutions.

(iii) Urban agglomerations in primarily the west Baltic Sea region and the core Baltic region are well positioned to take the lead in a dynamic region-building. Even in the North Sea region, cities have begun to cooperate, and transport infrastructural developments point to a potential future of increased networking.

(iv) In the greater Barents region physical infrastructure is being developed with a view towards creating corridors in the direction of Europe and towards overcoming the east-west transportation and communication impediments of the past.

(v) In the southern Baltic regions the Via Baltica from northern Germany towards St Petersburg and with further connection to Helsinki is under construction.

(vi) A similar objective has been realized by Scan-Link connected to the projected bridge connection over Øresund and the Fehmarn Belt. The Nordic link will connect Norway and parts of Sweden to the Continent via Jutland in Denmark while the west link is intended to facilitate traffic between the south-western part of Norway via the Skagerrak and Jutland eventually to connect with the Nordic link.

(vii) The transportation bottlenecks in west-central Germany are becoming increasingly more severe.

(viii) The Community has indicated its initial desire to invest in reducing or eliminating the many environmental 'bombs' ticking away in the north European border zone with the ex-Soviet Union. No doubt such commitments would have positive economic effects in the core Baltic region and the core Barents region.

Regional and spatial impacts on EC territory

The general meso-regional impacts of successful Nordic transborder region-building in adjacent EC areas would be considerable.

In concrete terms, positive effects would be noticeable throughout the entire area from Zealand and Jutland to Schleswig-Holstein and Mecklenburg-Western Pomerania where intensified economic development and urban agglomeration should be expected.

Particularly the northern German regions should benefit from closer linkages with the core Baltic region through the Via Baltica — in addition to the benefits they would undoubtedly reap from the planned bridge connection between southern Sweden and the Copenhagen area with further connections to the south.

EC regions all around the North Sea from northern Jutland to Bruges and Aberdeen would benefit from the establishment of a more integrated North Sea region. Jutland would appear to gain most from development of the Nordic link.

Meso-regional impacts in the Community of potential developments in the greater Barents region would be difficult to detect. Impacts would be of a macro-spatial character, i.e. they would tend to influence regional development and spatial organization throughout the Community.

Contrast fragmentation scenario:

(i) Development of the functional EC-Nordic-Eastern transborder regions would stop or become severely impeded.

(ii) Stimuli for the regional initiatives are weakened because regional competition is no longer so important. National competition — and protection — prevails.

(iii) The great Nordic infrastructural projects intended, among other objectives, to create geographical cohesion among regions in the greater Nordic area get lower priorities by national governments. Some may never be fully carried out.

(iv) As part of a survival strategy the Nordic governments will continue their environmental cooperation with Eastern countries and/or border regions and they may well seek to maintain a modicum of political and economic cooperation for the same reason.

Regional and spatial impacts on EC territory

A fragmentation scenario would have heavy negative meso-regional consequences compared to the lost potentials.

4. Synopsis of impacts from agriculture, fisheries, tourism and transportation

Industrial scenarios
Given certain circumstances, there would be a strengthening of competition within the agricultural, fishing and tourist industries at the meso-regional level. Iceland and Norway might be able to increase their marketing share of fish significantly once European integration has been achieved. Transport barriers in central Europe will change the market conditions in favour of the Community's northern and southern regions due to their increased industrial competitiveness.

Statements
Based on the special studies on agriculture and the agro-industry and fisheries (Volume III), tourism (Volume II) and transport (Volume IV), the following statements may be derived:

Trend integration scenario:

(i) Though agriculture is particularly beset with intricate regulations and subventions, and though prognostications must be very uncertain due to EC-Nordic membership negotiations under way, it would seem fair to conclude that in case of closer integration much of the Nordic four would become subjected to marketing attacks from core agricultural areas of the Community. In particular, it may be predicted that a southern Nordic agricultural centre would emerge encompassing Denmark and southern Sweden whose producers are close to the tastes of other Nordic consumers. However, the beneficial influence might be felt in northern Germany and the Benelux countries.

(ii) The Nordic fisheries and fish-processing countries of Iceland and Norway should be able to benefit from a close integration with the Community.

(iii) Tourism is particularly vulnerable to rapid changes in market behaviour resulting from world events or changes in public attitudes. According to two of the three developmental scenarios presented in the special study on the travel industry, the traditional mass tourism, 'sun-lust' resorts of the western Mediterranean would stand to lose from envisaged changes in the behaviour of Nordic tourists who have, until now been important customers. 'Cultural' destinations in and around historic cities would stand to gain from Nordic tourism. It is doubtful to what extent European integration or fragmentation would influence tourist behaviour.

(iv) Transportation bottlenecks and EC-wide environmental taxes on energy use — both very conceivable results of increased physical transportation due to growing European integration — would appear to benefit outlying regions north and south of the traditional bottlenecks, increasing their industrial competitiveness.

Regional and spatial impacts on EC territory

The integration scenario indicates positive impacts of Nordic development on strong agricultural regions in Denmark, northern Germany and Benelux barring political developments as a result of membership negotiations or fluctuations in general EC agricultural policies.

Due to pan-European transportation difficulties it predicts an enhanced competitive position in northern regions such as Denmark, Schleswig-Holstein and Mecklenburg-Western Pomerania who are able to easily expand their trade with less congested areas.

The prevalent indications in the tourist study are that sun belts in primarily the western Mediterranean will lose Nordic customers whereas eastern Mediterranean — less polluted and more inexpensive — destinations stand to gain as do 'cultural' inland locations in central and southern Europe. Alpine resorts may lose marketing shares to Nordic destinations, but tourism in the Alps would have to be reduced anyway due to overcrowding threatening the environment.

At the meso-regional level the fisheries scenario predicts the strongest impacts in coastal communities of Denmark and other areas around the North Sea whose fish-processing industries are located close to the large consumer markets of the United Kingdom and Germany.

Contrast fragmentation scenario:

(i) In all likelihood the Nordic countries would to the best of their economic ability continue their strongly regulated and subsidized agricultural policies keeping out agricultural products from other countries.

(ii) They would continue their current strongly regulated fisheries policies and attempt to gain access to overseas markets in order to compensate for losses in EC markets. Denmark

might well lose its current position as major importer of Icelandic and Norwegian fish for processing for EC markets.

(iii) Trends in tourism would probably be relatively unaffected.

(iv) European transportation bottlenecks would become less of a problem because European prognoses for the increase in transportation due to expected free flows would quickly become less ambitious.

Regional and spatial impacts on EC territory

Again the effects in northern regions of the Community — Denmark, Schleswig-Holstein and probably Mecklenburg-Western Pomerania — would be decidedly negative as they would lose important developmental potentials.

C

Impacts on the regional development and spatial organization in the European Community

Micro-regional dimensions

5. Synopsis of impacts from fisheries, manufacturing industry, producer services, energy, tourism and transportation

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Industrial scenarios
Given certain circumstances, there will be stronger micro-regional competition within the areas of the fishing industry, manufacturing industry, producer services and tourism. Icelandic and Norwegian fish-processing industries may increase their hold on production and market shares. Transport difficulties might change market conditions in favour of northern and southern EC micro-regions. Oil and gas production will continue to increase in the North Sea, and new offshore activities will open in the Barents Sea.

Statements
Based on the special studies on tourism (Volume II), fisheries, manufacturing industry and producer services (Volume III), the following statements may be derived:

(NB: Some statements of relevance at the micro-regional level in particular concerning fisheries, tourism and transportation have already been cited in Synopsis 4 immediately above and will not be repeated here).

Trend integration scenario:

(i) Nordic forestry, timber and pulp and paper industries, and the Swedish transport industry tend to expand in the core regions of Europe.

(ii) Norway supplies much of Europe with oil and gas for energy production and consumption. Norwegian oil and gas pipelines are spread out from offshore stations to harbours all around the North Sea, creating jobs in local communities.

(iii) Norway has much experience and know-how within the energy sector which might help generate jobs in producer services in certain micro-regions around the North Sea board.

Regional and spatial impacts on EC territory

The internationalization of certain Nordic industrial clusters, like the forest and transportation industries, will mean obvious advantages to certain micro-regions of central Europe.

The same conclusion must be made concerning the impact of Nordic producer services, but it must be added that regional and spatial impacts of this latter sector are anticipated to be very slight.

The impacts of the Norwegian oil and gas production and related industries might become valuable in micro-regions located on or close to the North Sea coast in Denmark, Germany, the Netherlands, Belgium and the United Kingdom.

In addition we must mention some potential micro-regional impacts from fisheries and tourism. An expansion of Nordic fishing industries might conceivably hurt certain fisheries-dependent micro-regions in Jutland and the United Kingdom from Grimsby to Peterhead. A Nordic shift towards 'cultural' and 'green' tourism and away from traditional sun destinations would undoubtedly cause certain southern European micro-regions to suffer heavily.

Contrast fragmentation scenario:

Apart from what has already been said of fisheries, it would be difficult to state opposing 'contrast' assumptions. Neither tourism, nor the trend towards the internationalization of Nordic industrial clusters nor indeed the development of the Norwegian oil and gas regime in the North Sea area would seem to be greatly influenced by the threat of European fragmentation.

Regional and spatial impacts on EC territory

These would seem slight at the micro-regional level.

Political implications

This study is being undertaken at a time when three of the Nordic countries, Finland, Norway and Sweden, are involved in membership negotiations with the European Community. In addition, these three countries plus Iceland have all ratified the EEA Agreement with the European Community.

As a direct consequence of the fact that important negotiations are taking place involving the Community and most of the Nordic countries, the political implications of Norden's regional and spatial impacts on the Community can only be dealt with in the broadest of terms. For example, crucial Nordic concerns like regional policy, the preservation of settlement patterns, the maintenance of geographical cohesion, agriculture, fisheries and coming oil and gas regimes are currently matters for negotiation whose outcome it would be unwise to predict.

On top of this, to attempt to give very specific and detailed political advice to one party or another would amount to an even greater lack of wisdom.

Within the framework of this study's trend scenario, the institutional integration scenario, the case has been made, however, that certain important policy areas relating to EC regional development and spatial organization could be strongly influenced by a closer Nordic participation.

Even so, it must be understood that this Nordic influence, with few exceptions, will not emanate from economic matters such as the free flow of goods and services or more open competition. This is because Iceland, Norway, Sweden and Finland have a population of only 18 million representing a relatively small market and creating little economic production compared to the Community.

It is only within a few areas that Nordic influence might be sufficiently strong to make a real difference in terms of Europe's future regional and spatial development.

The study has identified five major areas where Nordic influence is or could be of decisive importance. Equally, these areas ought to be the subject of political considerations and become incorporated into the objectives of European strategic planning.

1.

This study identifies first and foremost certain primary industries, and their related secondary and tertiary industries, as being fundamental to the Nordic countries' national economies. Some regions are totally dependent on a specific industry for their survival.

Clearly, some of these industries may have competitive advantages seen within the wider context of a single European market. In addition, Nordic raw-material-based extraction and production may have important effects, both quantitatively and strategically, on EC regional development and spatial organization.

The major Nordic, resource-based economic areas identified by the study are as follows:

(i) fishing and fish processing,
(ii) forestry and related processing industries,
(iii) oil and natural gas extraction, and related industries,
(iv) energy-based metal industries,
(v) tourism.

These production areas are strategically important for the development of the Nordic regions. As the study has revealed, developments in these areas could lead to both positive and negative impacts on European regions. Politically, the EC would be well advised to pay heed to the unique position of the above industries in Norden and to their often crucial role in maintaining Nordic regional cohesion.

The entire matter of Nordic integration with Europe might well be condensed to the following question: 'Is it in the best interest of the EC to incorporate a still functioning and internally coherent Nordic European core area, or would it be better to attempt to impose existing EC political principles and regulations on Norden, thus running the danger of having to deal with an area containing large internal peripheries in the socio-economic sense?'

What type of political and institutional regime could be established to further both the main interests of the EC, which are based on free market competition and free movement of capital, labour, goods and services, and simultaneously protect the economic base upon which the settlement pattern and economic cohesion (within a European context) of these regions and local communities may be preserved?

2.

Planning and use of the vast Nordic area ought to be subject to political considerations also in the EC. The contrast between the Community and Norden with regard to the wide expanses of untouched nature and low population ought to be exploited according to these stark differences. For example, the 'green' movement gaining pace within tourism ought to be exploited within the Nordic areas, while more culture-oriented tourism ought to be focused on the existing EC regions.

On the other hand, such a policy move, would, of course, mean increased exploitation of Norden's natural resources and possibly greater environmental pressure on very vulnerable Arctic and sub-Arctic areas. Sensible exploitation would require a special political approach which ought to commit the Community to establishing environmental regimes instead of just economic ones. In other words, economic regimes must be given a definite environmental dimension in order to protect the vulnerable nature, restrict the extraction of non-renewable oil and gas reserves, renew fish stock and forest reserves, and maintain the existence of the resource-dependent Nordic regions and communities as an integral part of EC regional cohesion policy.

3.

For the Community, the development of interregional cooperation must be given first priority, even when it concerns the transborder regions of adjacent nations. This new priority is a natural result of the goal of 'a borderless Europe'. It is, furthermore, a goal for Norden where it has in fact been practised throughout much of the post-war period, as part of both internal and transnational strategy. Inter-Nordic cooperation, as manifested in the Nordic Council and the Nordic Council of Ministers, has given priority to exactly this kind of regional development through its support for border regional cooperation in Norden.

Seen from the European integration perspective, the functional region-building of Norden and Europe is important, and in this context border regions are very special. Two such important initiatives are concerned with Baltic Sea and North Sea regional cooperation.

Politically, this implies the need for much greater focus on objectives and measures to develop these border regions which physically connect Norden to the Community. It means in particular the planning and development of infrastructure between Norden and the Community. How can future development avoid the current traffic problems of congestion and missing links? How should this be planned and undertaken? There appears to be an immediate need for the establishment of institutionalized, coordinated planning in this area, but of course, particular attention must be paid to the planning laws of respective countries.

4.

Norden's — that is to say Finland's long and Norway's short — strategically delicate borderline with the powerful Russian nation holds special political and economic consequences for Europe's future. The currently unstable situation in Russia makes greater efforts to guarantee security and safety for the Community and Norden all the more necessary as we approach the year 2000.

This study indicates how important it is to conceive of the 'new' Eastern Europe as a frontier region in which gigantic security and environmental problems must be solved. Their complete and immediate solution would automatically overburden Western economies. All the same, great economic development opportunities will result in the long term. Strategic planning and long-term political objectives are required.

One conclusion of this study is that a possible regional strategy in this connection would be to develop functional transborder regions which would come under the auspices of regimes deliberately established to that end. This move should not be restricted to Norden but embrace the whole of the Community for reasons of security, economic growth and environmental protection. These regimes would be able to make the necessarily mature political considerations. Within the integration scenario of this study, the practical consequences are that such common strategic political regimes ought to be established to these ends.

It might be prudent to consider the basis for the newly established regime which deals with cooperation and coordination within the Barents Sea region, signed by the Nordic countries involved, the border regions involved, Russia and even the Community. Is it possible for this political construction to act as a model for future transborder cooperation in the eastern frontier regions?

5.

An expansion of EUR 12 to EUR 16 will automatically bring different forms of politics and administration together. The European Commission has announced that the planning laws of member countries will be described on a comparative basis in a compendium which may at a later date be extended to include all the EEA countries.

Perhaps the same kind of attention might be paid to the regional policies of different countries. Such an endeavour would illuminate how functions are distributed among administrative levels and how the various regional policy apparatuses work in practice.

Within the existing EUR 12, regional economic and social inequalities are greater than in Norden. The political focus should centre on how the Community can benefit from a close examination of the way in which the regional policy of the Nordic countries is aimed strongly at removing regional disparities and establishing regional balance in order to stabilize the settlement pattern and thus maintain the geographical cohesion of the entire Nordic territory.

Sustainable development in the North ought to be the subject of increasing political awareness. In particular, the recent political events involving the greater North Sea region, the greater Baltic Sea region and the Barents region ought to be scrutinized closely with regard to future development.

The Community ought to set up a forum, which must include the Nordic countries. Through such a body, cases could be presented, and discussions related to the new regionalization movement in Europe could be held. Issues affecting the development of former Eastern bloc regions would automatically be treated. Visionary, long-term strategic regional politics might well be the way to describe the function of such a forum.

This might, in turn, facilitate the establishment of regional regimes equal to such challenges as security, the environment and the safe exploitation of natural resources.

The Barents Sea region is an example of such a fledgling regime, in which the Community is involved. However, many other Euro-regimes may be seen from this angle. This is, no doubt, a perspective that ought to be pursued yet further in the interest of both the Community and Norden.

Figures and tables

Executive summary

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References

Ahnström, L. 'Den europeiska gemenskapen — Utveckling och scenarier för 1990-talet', *Nordisk Samhällsgeografisk Tidskrift*, No 13. 1991, Uppsala, 19-29.

Aleman, Fritz René. *Aufstand der Regionen*, Frankfurt a.M., 1979.

Amdam, Jørgen. 'Local planning and mobilisation: Experiences from the Norwegian fringe', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd., 1992, pp. 21-40.

Amdam, Jørgen and Noralv Veggeland, *Teorier om samfunnsplanlegging*. Oslo, 1991.

Amoroso, B. (Red.). *Et spøgelse går gennem Europa*, Roskilde Universitetscenter, 1991.

Amtsrådsforeningen. *Amterne og EF*, Copenhagen, 1991.

Andersen, T.H. *et al.* Udvikling og planlægning i tre tyske storbyer, Miljøministeriet, Planstyrelsen, Copenhagen, 1992.

Andersson, Åke. *Kreativitet — storstadens framtid*, Stockholm, 1985.
— *K-samhällets framtid*, Värnamo, 1988.

Bachtler, John and Ballantyne E. 'The regional implications of the single market and Norden'. *Nord, 122,* Nordic Council of Ministers, Copenhagen, 1990.
— *et al. Regional policy in the European Community: conflict and alliance between European Commission and Member States*, European Policies Research Centre, University of Strathclyde, Glasgow, 1991.
— Clement, Keith and Raines, Philip. 'European integration and foreign investment: the regional implications', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 81-96.

Beukel, E. *Integration og kulturpolitik: Autonomi vs 'spill-over'*. Odense Universitet, 1990.

Bressand, A. and Nicolaidis, K. *'Regional integration in a networked world economy'*, in: W. Wallace (Ed.), *The dynamics of European integration,* Pinter Publ., London, 1990.

Cappellin, Riccardo. 'Theories of local endogenous development and international cooperation', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 1-20.

Cecchini, Paolo *et al. Europa '92: Realiseringen af det indre marked*, Copenhagen,1988.

Christaller, W. *Die Zentralen Orte in Süddeutschland,* Jena, 1933.

Christensen, Poul Rind and Leif Lindmark. 'Location and internationalisation of small firms', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 131-152.

Ciechocinska, Maria. 'The paradox of reductions in development in the East-Central European fringe areas', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 189-202.

Cornett, Andreas P. and Søren P. Iversen. 'Commercial relations in the Baltic rim region in an integration/network perspective', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 107-130.

Dahrendorf, Ralf. 'Stammerne vender tilbage', in: *Weekendavisen*, 13-19 September, Copenhagen, 1991.
Delors, Jaques. Delors Package II, European Commission, 1992.
EG och den regionale utvecklingen i Sverige, Finansdepartementet, Stockholm, 1992.

European Commission, *Europe 2000*, 'Outlook for the development of the Community's territory', 1992.

Fielding, A. J. 'Migration and urbanization in Western Europe since 1950', *The Geographical Journal,* Vol. 155, London, 1989.

Fisher, G. 'Sprache und Identität im bikulturellen/zweisprachigen Kontext', in: *Zwischen Selbstfindung und Identitätsverlust: Ethnische Minderheiten in Europa*, (Red.) Arbeitsgemeinschaft Volksgruppenfrage, Vienna, 1984.

Fischer, Manfred M. 'The economic role of producer services', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 171-188.

Gerner, Kristian. 'Två hundra års europeisk utveckling — karaktäriserat av nationalismen, rasismen och territorialstaten — går mot sit slut' *Nord Revy*, No 3, Copenhagen,1990.

Gidlund, J. and Törnquist, G. (Red.), 'European networks', *Cerum*, 1990:1, Umeå Universitet, Umeå, 1990.

Goldschmidt, E. 'EF og Norden', *Nordisk Administrativt Tidsskrift, 71.årg.*, No 3, 1990, pp. 296-308.
— 'The European Community and the Nordic countries: A view from the Nordic Council of Ministers', in: Laursen, F. (Red.), *EFTA and the EC: Implications of 1992*, professional papers, European Institute of Public Administration, Maastricht, 1990.

Gaardmand, Arne. *Bro til drømmeland*, Copenhagen, 1991.

Halvorsen, Knut. 'European integration and the effects on regional development in Norway' in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*. Berlin, Springer-Verlag, 1993, pp. 61-78.

Hamilton, C. B. and Stalvant, C. 'A Swedish view of 1992', RIIA Discussion papers, No 13, Royal Institute of International Affairs, London, 1989.

Harvey, D. 'From managerialism to entrepreneuralism: the transformation in urban governance in late capitalism, *Geografiska Annaler*, No 71B, Stockholm, 1989, pp. 3-17.

Hingel, A. 'Det regionale samarbejdes centrale rolle i den europæiske integration', *Nord Revy* No 2, Copenhagen, 1993.

Hjern, B. '1992 och Nordens regionalpolitiska gränsregioner', *Cerum,* Working Paper, 2, Umeå Universitet, Umeå, 1990.

Hedegaard, L. *En utopi for bærekraftig transport i Mare Balticum*, Foreningen Norden, Stockholm, 1992.
— 'Et Europa vi kan se med øjnene', interview med Nils Østergård, *Nord Revy*, 1, Copenhagen, 1992.
— 'Fremskudt regionalpolitik — en fortsættelse af udenrigs- og sikkerhedspolitikken med andre midler', *Nord Revy,* No 6, Copenhagen.
— and Noralv Veggeland. 'Den inverterte stat — regionalismens neste trinn', *Nord Revy*, No 5/6, Copenhagen, 1991.
— *et al.* 'Den baltiske bølgelængde', *Nord Revy*, No 2, Copenhagen, 1992.

Høyer, Karl Georg. 'Veien til Brussel går i gal retning', Upubl. stensil. Sogndal, 1991.

Hägerstrand, Torsten. 'What about nature in regional science?' in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag. 1993, pp. 155-161.

Haaland, J. I. (1990). 'Assessing the effects of EFTA-EC integration on EFTA countries: the position of Norway and Sweden', in: Robson, P. (Ed.), *Journal of common market studies*, special issue, 1990, pp. 374-406.

Illeris, Sven. *Regionalpolitik i EF og de nordiske land,* Copenhagen, 1990.
— 'Servicesamfundets geografi', *Nordisk Samhällsgeografisk Tidskrift*, No 11, 1990.
— 'Urban and regional development in Western Europe in the 1990s — A mosaic rather than the triumph of the "blue banana", in: *Scandinavian housing and planning research* 9, pp. 201-215.
— 'Regional development in Western Europe: a mosaic model', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 32-50.

Jacobs, Jane. *Cities and the wealth of nations. Principles of economic life*, New York, 1984.

Jensen, L. Thore. 'Decentral internationalisering', *Politologiske Skrifter fra Institut for Erhvervsret og politologi*, No 1, Odense Universitet, Odense, 1992.

Jensen-Butler, Chris. 'Development strategies in the southern European periphery: comparisons with the northern periphery', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 225-244.

Johansen, Harley E., Arvo Naukkarinen and Taina Väre. 'Local development efforts in Finland's rural com-munes', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 89-100.

Johansson, B. and Karlsson, K., 'Stadsregioner i Europa', *SOU, 34*, Stockholm, 1990.

Johansson, M. *Nordic regions and transfrontier cooperation*, Nordic Group for Regional Analyses, Nordic Council of Ministers, Copenhagen, 1991.

Judd, D. and Parkinson, M. 'Leadership and urban regeneration. Cities in North America and Europe', *Urban Affairs Annual Reviews*, No 37, London, Sage Publications, 1990.

Jussila, Heikki. 'The role of centres in fringe area development', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 145-162.

Jutila, Sakari and Wilbur R. Maki. 'Empirical investigations of political interregional economic development'. in: Lars and Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 97-106.

Keeble, David. 'The dynamics of European industrial counterurbanization in the 1980s', *The Geographical Journal,* Vol. 155, London, 1989.

Karlsen, J. K. 'Economic integration between the Nordic countries and the EEC — indications from data on direct foreign investments'. *Notat fra Næringsøkonomisk Institutt*, No 5, Bergen, 1989.

Karlsen, J. K. 'Business strategy and national policy concerning integration — Nordic direct foreign investments in the EEC', *Notat fra Næringsøkonomisk Institutt*, No 25, Bergen, 1990.

Klausen, K. K. *Political Integration and institutional change. The Nordic countries and the EEC*, Odense universitet, 1990.
— 'The Nordic countries and the institutional change — the Nordic countries and the EEC', *Politologiske skrifter for Institut for Erhversret og Politologi*, No 9, Odense, 1990.
— and Jensen, L. Thore. *EF og kommunerne*, Odense universitet, 1992.

Klekner, Peter. 'The role of agriculture in the development of fringe areas', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 121-130.

Knudsen, H. and Lind, J. 'The industrial relations of the internal market. A Danish perspective', in: *Forskningsgruppen vedr. Arbejdsmarkedspolitikkens Tilrettelæggelse og Administration*, Arbejdsnotat No 2, Aalborg, 1989.

Kockel, Ullrich. 'Provisory economy and regional development: Towards a conceptual integration of informal activities', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 101-120.

Konsolas, Nicholas. 'EEC regional policy and the integrated Mediterranean programmes', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 41-52.

Krieger-Boden, Christiane. 'The German-Danish border region: does the border matter and can it be overcome?', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 260-278.

Kronlund, J. 'EG och regionalpolitiken. Från nationell regionalpolitik till gemensam strukturpolitik', *Nord, 125*, Nordisk Ministerråd, Copenhagen, 1990.

Lagendijk, Arnoud and van der Knaap, G. A. 'Regional spill-over and the locational process in a European fringe: the case of the Spanish car industry', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 65-76.

Lind, J. 'Ideologisk udfordring eller økonomisk realitet', *Grus, 10. årg.*, No 27, Århus, 1989, pp. 19-28.

Lindeborg, L. 'Regionala samarbetsfrågor inom EG', *Plan, 45. årg.*, No 5-6, Stockholm, 1991, pp. 237-244.

Lindström, Bjarne. De europeiska gränsregionernas (AGEG/AEBR) årliga möte och kongress i Brixen, Syd-Tirolen, 11 to 13 October 1990, Ekonomiska sekretariatets meddelanden 1990:5, Mariehamn, 1990.
— 'Den nordiska nationalstaten och regionerna', *Nordisk Samhällsgeografisk Tidskrift*, No 13, Uppsala, 1991, pp. 30-36.
— Nationalstaten, regionerna och det framtida Europa. På väg mot en ny territoriell integrationsmodell? Meddelanden från Ålands högskola No 2, Mariehamn, 1992.

Linzie, J. and Boman, D. 'Regionalpolitiken är död, leve regionerna...', *Plan, 45. årg.*, No 5-6, Stockholm, 1991, pp. 272-277.
— *Mälarregionen i ett gränslöst Europa*. Regionplane- og trafikkontoret, Stockholm, 1991.

Lundqvist, Lars 'Traffic and environment in Nordic capitals', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 193-206.

Lyck, L. 'The Nordic countries and the internal market of the EEC', *Skriftrække*, No 15, Handelshøjskolen i København, Copenhagen, Handelshøjskolens Forlag, 1990.

Marksoo, Ann. 'On the role of urban centres of fringe areas in Estonia', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, p. 163-170.

Martin, Derek. 'Europa 2000 — hvad det betyder, hvordan det kan læses', *Nord Revy*, No 1, Copenhagen, 1991.

Matthiessen, C. Wichmann. 'Ørestadens placering på de europæiske hitlister er forlængst sikret', *Nord Revy*, No 2, Copenhagen, 1990.
— Byerne ved Øresund på den europæiske storbyscene, Initiativrådet, Copenhagen, 1991.

Møller, K. 'Danmark — en region i Europa — de fysisk rumlige konsekvenser af Danmarks integration i EF's indre marked', Planstyrelsen, Copenhagen, 1991.
— 'Stilhed før stormen — en erhvervsøkonomisk analyse af Danmark og det indre marked', *Grus, 10. årg.*, No 27, Århus 1989, pp. 9-18.

NordREFO. 'The long-term future of regional policy — a Nordic view on a joint NordREFO/OECD seminar', Reykjavik, 4 to 5 May 1988, Paris, p. 198.
— *Internationalisering och regional utveckling*, No 2, Copenhagen, 1990.
— *Decentralization and regional transformation. The political and economic reconstruction of the welfare state*, No 5, Copenhagen, 1990.
— *Strategies for the periphery*, No 4, Copenhagen, 1991.

Nord Revy. 'Regionalpolitiken är död. Länge leve en regional politik!', No 4/91, Copenhagen, 1991.

Ó Cearbhaill, Diarmuid. 'Creatures of the centre? The uneasy relationship of central government with regional and local authorities in Ireland', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 211-220.

Ó Cinnéide, Micheál. 'Approaches to the development of peripheral rural areas: some lessons from the Irish experience', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 77-88.

Ó Cinnéide, Micheál. 'Ways to develop the competitiveness of the periphery: the example of Ireland', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 209-224.

Owsinski, Jan W. 'Baltic region integration in and through modelling: perception, wishes and realities', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 162-174.

Parkinson et al. *Urbanization and the functions of cities in the European Community,* report to the European Commission, Liverpool, John Moores University, 1992.

Pedersen, J. Storm. 'The Baltic region. Functional and flourishing in the 1990s?' First draft, Roskilde Universitetscenter, 1992.

Persson, Lars Olof. 'Changing images of the periphery', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 245-259.

Peschel, Karin. 'Regional development in a changing Europe', *Arbetsrapport, Cerum*, 1990:15, Umeå Universitet, Umeå, 1990.
— 'The effects of European integration on regional development — some lessons from the past', NordREFO, 1990:2, Copenhagen, 1990.

— 'Perspectives of regional economic development around the Baltic', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 19-31.

Petrella, R. Four analyses of globalization of technology and economy. FAST programme, European Commission, Brussels, 1991.

Raumolin, Jussi. 'Transport, logistics, environment and integration in the Baltic Sea area', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 175-192.

Schultz-Nielsen, A. *Det inre markeds paradox*, Institut for transportstudier, Padborg, 1992.

Strijker, Dirk and Tjeerd Deinum. 'Relative regional welfare differences in the EC',. in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd, 1992, pp. 53-64.

Stöhr, Walter B. 'Local initiative networks as an instrument for the development of peripheral areas', in: Markku.

Sørensen, Christen. 'Vår for København — Malmø?', *Nord Revy*, No 1, Copenhagen, 1990.

Tolonen, J. 'Den europeiska integrationen; ett problem', *Retfærd, 13. årg.*, No 48, Copenhagen, Akademisk Forlag, 1990, pp. 41-51.

Tonboe, J. and Jørgensen, I. *The EEC and the eclipse of the Scandinavian model*, 1992.

Veggeland, Noralv. Om hovedstadsutvikling og 'Banan' dannelser. *Plan & Arbeid*, 3, Oslo, 1991.
— Teser om privat tjenesteyting og regionalpolitikk. Paper presentert på KAD's Nasjonal PTD-konferanse, Høylandet, NordREFO, Copenhagen, 1990.
— 'Norge i et regionenes Europa', *Stat og Styring*, No 5, Oslo, 1991.
— The regions of Europe: development on the basis of a concentration or a mosaic model? *Working Party 6*, OECD, Paris, 1992.
— Vestlandet i et europeisk perspektiv, Rapport til Kystamvegutvalget, Bergen, 1992.
— 'The circular motion of planning: top-down and bottom-up problems once again', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd., 1992, pp. 221-225.
— 'Regionalism or federalism? Two visions of a new Europe', in: Lars Lundqvist and Lars Olof Persson (Eds.), *Visions and strategies in European integration. A north European perspective*, Berlin, Springer-Verlag, 1993, pp. 19-31.

Wiberg, Ulf, 'Regioner och strategiska allianser', *Plan, 45. årg.*, No 5-6, Stockholm, 1991, pp. 245-249.
— 'The role of centres in fringe areas', in: Markku Tykkyläinen (Ed.), *Development issues and strategies in the new Europe*, Hants, England, Avebury, Ashgate Publishing Ltd., 1992, pp. 131-144.

Wlodarczyk, M. 'Europa på svenska parnassen; En essä om internationalisering och isolering i svenskt kulturliv', in: *Arbetsrapport, Cerum*, 1991:3, Umeå Universitet, Umeå, 1991.

Östhol, Anders. 'Nyregionalism — modell för Sverige?', *Plan, 45. årg.*, No 5-6, Stockholm, 1991, pp. 250-255.
— 'Regioner inför europeisk integration', in: Eklund, N. and Östhol, A. (Red), *Politik över gränser*, European networks, Cerum, 1991:1, Umeå Universitet, Umeå, 1991.
— and Eklund. 'Den storskaliga demokratins legitimitet — samarbetsdemokrati som svar på Europas organiserade schizofreni', *Nord Revy*, No 1, Copenhagen, 1992.

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