

*The European Environmental Policy with respect to Stationary
Sources*

Harmonisation versus Differentiation

Rob van der Laan

RIJKSUNIVERSITEIT GRONINGEN

The European Environmental Policy with Respect to Stationary Sources;
Harmonisation versus Differentiation

PROEFSCHRIFT

ter verkrijging van het doctoraat in de
Rechtsgeleerdheid
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. F. Zwarts,
in het openbaar te verdedigen op
maandag 2 december 2002
om 16.00 uur

door

Rob van der Laan
geboren op 15 oktober 1969
te Harderwijk

promotor: Prof. dr. A. Nentjes

referent: Dr. P.J. Eijgelshoven

beoordelingscommissie: Prof. dr. J.G. Backhaus
Prof. mr. M.G. Faure
Prof. dr. H. Verbruggen

Voorwoord

Het schrijven van een proefschrift is een exercitie die ik niemand kan aanraden. De Wet van Murphy is volledig van toepassing, wat van tijd tot tijd heeft geleid tot wanhoop bij hetzij ondergetekende hetzij andere betrokkenen. Dat dit proefschrift toch nog af is gekomen is te danken aan het feit dat er op elk moment iemand was die het halen van de eindstreep binnen een afzienbare termijn haalbaar achtte. Op dit moment overheerst echter de voldoening.

Ik wil de mensen uit mijn directe omgeving, zowel privé als in de werksfeer, gedurende de jaren die ik aan het proefschrift heb gewerkt danken voor hun belangstelling. Op professioneel gebied ben ik met name Andries Nentjes en Pierre Eijgelshoven erkentelijk voor het lezen en meedenken. Ik heb met name waardering voor het feit dat Andries altijd mijn keuzes heeft geaccepteerd, ook wanneer deze keuzes impliceerden dat het werk aan het manuscript stil kwam te liggen zonder concrete uitzichten op hervatting. Tenslotte ben ik de British Council en CSERGE dankbaar voor het faciliteren van een verblijf aan de CSERGE (UEA) in Engeland. Deze periode heeft het boek inhoudelijk mede vormgegeven, maar voor mij minstens zo belangrijk is dat dit indirect heeft geleid tot mijn ontmoeting met Édila.

Groningen, 27 oktober 2002

Rob van der Laan

Contents

Chapter 1 Introduction

1.1 Research questions, contents and methodology	1
1.1.1 Research questions and contents	3
1.1.2 Methodology	11
1.2 Definitions	12
1.2.1 Introduction	12
1.2.2 Harmonisation	13
1.2.3 Centralisation and its relationship with harmonisation	17
1.2.4 Distortion of competition	24

Chapter 2 Economic Perspectives on Harmonisation

2.1 Introduction	26
2.2 Distortion of competition as inefficiency – the economic view	26
2.2.1 The case against harmonisation	27
2.2.2 The case for international co-ordination	27
2.2.2.1 Transborder pollution	37
2.2.2.2 Strategic behaviour	39
Large country assumption	41
Oligopolistic markets	45
Non-neo-classical approaches	48
Conclusion on grounds for strategic standard setting	50
2.2.2.3 Product standards	51
2.2.2.4 Conclusions on grounds for international co-ordination	52
2.3 Distortion of competition as inequity—the political view	53
2.3.1 Mercantilistic view	54
2.3.2 Fair trade view	56
2.4 Differences between the economic view and the political view	59

2.5 Conclusions	61
-----------------	----

Chapter 3 Harmonisation in Community Primary Legislation

3.1 Introduction	64
3.2 Distortion of Competition and harmonisation in the Treaty of Rome before 1972	66
3.3 The emergence of a Community environmental policy (1972-1985)	72
3.4 The Single European Act (1987-1992)	85
3.5 Maastricht and beyond (1993-2002)	92
3.5.1 Introduction	92
3.5.2 The Maastricht Treaty	93
3.5.3 The Amsterdam Treaty	96
3.6 Conclusions	99

Chapter 4 The Action Programmes on the Environment

4.1 Introduction	102
4.2 The emergence of a Community environmental policy (1972-1985)	105
4.2.1 The first action programme (1973-1977)	105
4.2.2 The second action programme (1977-1982)	111
4.2.3 The third action programme (1982-1986)	114
4.3 The Action Programme of the Single European Act (1986-1992)	118
4.4 The Action Programme of the Maastricht Treaty (1993-1999)	120
4.5 The Action Programme of the Amsterdam Treaty (1999-2002)	123
4.6 Conclusions	126

Chapter 5 Secondary Legislation during the period of the emergence of a Community environmental policy (1972-1986)

5.1 Introduction	128
5.1.1 Research questions and scope	128
5.1.2 The level of harmonisation	133
5.1.3 Contents	136
5.2 The secondary legislation	140
5.2.1 Drinking Water Directive 75/440/EEC	140
5.2.2 Aquatic Environment Directive 76/464/EEC	146
5.2.3 Titanium Dioxide Directive 78/176/EEC	151
5.2.4 Groundwater Directive 80/68/EEC	155
5.2.5 Sulphur Directive 80/779/EEC	158
5.2.6 Mercury Directive 82/176/EEC	163
5.2.7 Lead Directive 82/884/EEC	167
5.2.8 Cadmium Directive 83/513/EEC	171
5.2.9 Mercury II Directive 84/156/EEC	174
5.2.10 Industrial Installations Directive 84/360/EEC	179
5.2.11 HCH Directive 84/491/EEC	184
5.2.12 Nitrogen dioxide Directive 85/203/EEC	189
5.2.13 Dangerous substances Directive 86/280/EEC	193
5.2.14 Asbestos Directive 87/217 EEC	201
5.3 Conclusions from the secondary legislation during 1972-1985	204
5.3.1 The level of harmonisation	204
5.3.2 Internal consistency	207
5.3.3 The need for centralisation	211
5.4 Summary of chapters 3 to 5 for the pre-SEA period (1972-1986)	212

Chapter 6 Secondary Legislation during the period of the Single European Act (1987-1992)

6.1 Introduction	216
6.1.1 Research questions	216
6.1.2 Contents	220
6.2 The Secondary legislation	221
6.2.1 Large Combustion Plant Directive 88/609/EEC	221
6.2.2 Incineration of Domestic Waste Directives 89/369 and 89/429/EEC	234
6.2.3 Titanium Dioxide II Directive 89/428/EEC	239
6.2.4 Urban waste water treatment Directive 91/127/EEC	244
6.2.5 Titanium Dioxide III Directive 92/112/EEC	247
6.3 Conclusions from the period of the Single European Act (1987-1992)	250
6.3.1 The level of harmonisation	250
6.3.2 Internal consistency	251
6.3.3 The choice for centralisation	254
6.3.4 Optimality of the pre-SEA legal bases	255
6.4 Summary of chapters 3, 4 and 6 for the period of the Single European Act	258

Chapter 7 Secondary Legislation after the Maastricht Treaty (1993-2002)

7.1 Introduction	261
7.1.1 Research questions	261
7.1.2 Changes in Primary Legislation	262
7.1.3 Contents	265
7.2 The Secondary legislation from the period of the Maastricht Treaty	266

7.2.1 Volatile Organic Compounds (VOC) Directive 94/63/EC	266
7.2.2 Incineration of Hazardous Waste Directive 94/67/EC	271
7.2.3 IPPC Directive 96/61/EC	276
7.2.4 Ambient Air Quality Directive 96/62/EC	279
7.2.5 Air Pollutants I Directive 1999/30	282
7.3 Secondary legislation from the Amsterdam period	287
7.3.1 Aquatic Environment II Directive 2000/60	287
7.3.2 LCP II Directive 2001/80	290
7.4 Conclusions from the period during and after the Maastricht Treaty	295
7.4.1 The level of harmonisation	295
7.4.2 Internal consistency	296
7.4.3 The choice for centralisation	298
7.4.4 The perceived adequacy of the legal bases	299

Chapter 8 Conclusions

8.1 Introduction	302
8.2 What are the economic arguments for and against uniform environmental standards?	303
8.3 The legal base of the directives	305
8.4 What are the reasons for harmonisation stated in legislation?	311
8.5 What has been the actual level of harmonisation in the environmental policy of the European Community?	315
8.6 To what extent is the level of harmonisation in the Community environmental legislation with respect to stationary sources in correspondence with neo-classical economic theory?	329

Annex Treaty articles	
Articles from the Treaty establishing the European Economic Community, the Treaty of Rome	332
Articles from the Treaty of Rome including the Amendments from the Single European Act	337
Articles from the Treaty of Maastricht on European Union	342
Articles from the Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related Acts.	349
References	358
Other literature used	368

Chapter 1 Introduction

1.1 Research questions, contents and methodology

Over the past decades, the European Community has been evolving towards a common market comprising an increasing number of Member States. The word ‘Europe’ generally refers to a geographical entity, but we will reserve the term Europe to indicate the political entities formally known as the European Economic Community or EEC (following the Treaty of Rome¹), the European Community or EC (following the Merger Treaty²), and the European Union or EU (following the Maastricht Treaty³) in the then current shape with the then current number of Member States. Alternatively, we will refer to the Europe defined in this way as the Community or the European Community, irrespective of the stage of development of this Community.

One of the cornerstones of Europe (or the Community) is the common market (internal market). The common market was created - amongst others - because it was seen as a suitable economic tool to achieve for its participants a higher level of prosperity than could be achieved without some degree of integration of national markets. In the 1957 Treaty of Rome, prosperity was conceived in the narrow sense of higher standards of living or higher real income per capita, but over the years the concept has been broadened. From the 1972

1. The Treaty establishing the European Economic Community was signed on March 25, 1957, and entered into force in January 1, 1958.

2. The Merger Treaty was signed on April 8, 1965, and entered into force on July 29, 1967. The Merger Treaty created one common Council and one Commission for the three Communities (the Convention on certain institutions common to the European Communities, which entered into force parallel to the Euratom and the EEC Treaty, already provided for one parliamentary Assembly and one Court of Justice).

3. The Maastricht Treaty was signed in February 1992 and entered into force January 1, 1993. It introduced two new policy ‘pillars’ in addition to the first pillar based on the EEC, ECSC and Euratom Treaties.

Paris Summit on, prosperity also included environmental quality as one of the criteria.

One of the problems to be solved within the Community was and is how the different objectives, such as a high and increasing income per capita and a high quality of the natural environment, can be achieved simultaneously. Neo-classical economics offers a (basically) simple answer to this question. The Heckscher-Ohlin theorem states that countries (in a European context read: Member States) should concentrate on the production of those kinds of products which require inputs that are relatively abundant in that country. Next to labour, capital and natural resources, environmental quality can be viewed as one of those inputs. Member States where the environment is relatively abundant should therefore concentrate on relative pollution intensive output and Member States where the environment is scarce should concentrate on producing non-polluting or relatively less polluting products. It should be clear that any effort to impose uniform environmental standards on Member States is in conflict with the Heckscher-Ohlin theorem since it would restrict Member States in exploiting relative differences in environmental scarcity. Of course, this is a very rough and oversimplified presentation of economic theory, but in this stage it is the most suitable way to bring out a fundamental economic insight in its bare outlines, which is that as a general principle Member States within the common market should have the discretion to establish their own environmental requirements, taking into account national environmental conditions and national preferences for environmental quality. The Heckscher-Ohlin theorem provides the neo-classical economic argument for decentralisation of environmental policy in the European Community.

Glancing at the actual development of environmental policy in the European Community over the past three decades, one sees a picture that seems to be very much in contradiction with the advice of neo-classical economics. With the support of the Council, the European Commission has been developing

a Community environmental policy from 1972 on. Principal instruments of this Community environmental policy have been directives that require harmonisation of environmental standards for similar industries in the various Member States. In its most strict sense of full harmonisation, this policy would imply uniform environmental standards. Industry would then use the environment with the same intensity independent of where producers are situated in the European Community. The consequences of a harmonised approach would be that in countries where environmental quality is scarce - for example due to population density, structure of industry, natural conditions or national preferences - pollution per unit of output would be as high or low as it is in countries where environmental quality is relatively abundant.

1.1.1 Research questions and contents

This dissertation has been inspired by this apparent discrepancy between the advice from economic theory and the practice of environmental policy. A first question, which will also be the main issue of this book, is whether the observation of a discrepancy is correct or perhaps a faulty perception. A next question is whether an explanation can be given for the discrepancy in so far as it turns out to exist.

When it comes to the first question of determining whether a discrepancy between economic theory and Community environmental policy does indeed exist, the first task is to investigate more thoroughly what economic theory has to say about environmental policy in an economic community and to see whether the neo-classical argument for decentralisation as laid down in the Heckscher-Ohlin theorem is impregnable. In other words, we have to look for economic arguments for co-ordination or perhaps even centralisation of environmental policy. Also, we should look at the issue whether this co-ordination should take

the form of harmonised standards or whether it should be implemented by way of other, more differentiated instruments. This task will be undertaken in chapter 2.

In framing the discussion for and against decentralisation of environmental policy we have two options: one is the economic theory of federalism and the other option is the economic theory of international trade encapsulated in the Heckscher-Ohlin theorem. At first sight the economic theory of federalism might seem the best choice. The European Union has characteristics of a federation: it is a union of sovereign states that have pooled some of their powers to secure prosperity and peace. The economics of federalism analyses which powers should be conferred to the Federation and which should remain with the (Member) States. In short, the central problem addressed by the economics of federalism literature is determining the optimum policy level (i.e. Federation vs. State) for a specific policy issue. This literature largely deals with issues relating to the United States of America, but it can to a certain extent also be applied to the European Community. Yet we have chosen the neo-classical economic theory of international trade as a framework for analysing the arguments for and against harmonising of environmental policy. Although it is true that the Heckscher-Ohlin theorem assumes sovereign States, there is a vast literature on problems which call for co-ordination – i.e. giving up part of the national sovereignty. In particular co-ordination of environmental policy has been analysed in depth and we have to discuss this literature. A second reason is that the European Union started with the European Economic Community with the express aim of liberating trade between Member States, creating a common market which would share the fruits of specialisation along the lines of comparative advantage as set out in the Heckscher-Ohlin theorem. A third argument for not choosing the economics of federalism as our point of departure is that it is very much based on the Tiebout (1956) model, which is summarised by Faure (2001, p.265) as follows: ‘The idea is that well-informed citizens will move to the community that provides the local services which are best adapted to their personal preferences.

This so-called ‘voting with their feet’ competition between local authorities will lead citizens to cluster together according to their preferences.’ The mobility of voters is already less than a plausible assumption for the United States, but even less so for the European Union. The original Heckscher-Ohlin model on the other hand assumes that labour and other factors of production remain within the national borders and only goods and services move between States. This seems the more plausible simplification for the European Community.

Although the economic theory of international trade guides our approach this does not mean that we reject the conclusions derived from the economics of federalism literature. The conclusions of both theories are very much the same. The Tiebout model assumes that differences between laws of countries reflect differences in preferences. Differences between e.g. environmental standards should therefore not be seen as negative but rather as positive for welfare. According to the Tiebout model, decentralisation rather than centralisation (harmonisation) should be the point of departure⁴. In the words of Esty and Geradin (2001, p.33): ‘centralised systems of standard setting should be seen as regulatory cartels which, like any other form of collusion between competitors, inhibit the operation of the market, raise prices, and reduce economic efficiency’.

The policy advice given on the basis of the Heckscher-Ohlin model and the Tiebout model is essentially identical: countries should be able to implement the national policies (including the environmental standards) they prefer in order to maximise welfare. The models thus argue for decentralisation as the point of departure. This does not imply that there do not exist situations where decentralisation (differentiation) may well not be optimal. The arguments against decentralisation in the Heckscher-Ohlin model discussed in the next chapter are

4. Some authors in the economics of federalism debate are rather ambiguous and do not distinguish between the debate on harmonisation/differentiation and the debate on centralisation/decentralisation (see section 1.2.3), assuming that centralisation and harmonisation are intrinsically linked. For clarity we will state the arguments from the economics of federalism both in terms of centralisation/decentralisation and in terms of
Continued on next page

similar to the arguments used against decentralisation in the Tiebout model although we will solely phrase our discussion in terms of the neo-classical model of international trade, the main results are relevant for the economics of federalism debate as well.

The second step in our analysis, following the determination of the exact contents of economic theory, is to investigate environmental policy as practised in the European Community to see where and when harmonisation has occurred and whether indeed this has resulted in uniform standards. A related question is to look at the arguments that have been used for choosing harmonised standards. This part of the study analyses three layers of policy making and legislation, going from the highest and most general level of primary legislation via the intermediate level of the action programmes to the most specific level of secondary legislation.

Chapter 3 investigates Community primary legislation. Primary legislation is synonymous with the Treaty of Rome (the EEC Treaty) and every official interpretation of, or amendment on, this Treaty. The Treaty of Rome has been regularly revised in the light of the accession of new Member States and the development of new areas of policy, of which protection of the natural environment is but one. What we will try to find out is whether it is possible to distil from the primary legislation a view on (a) the possible levels of harmonisation allowed on the basis of the articles and (b) whether the Treaty does indicate a preference for some specific level or type of harmonisation.

In chapter 4 we will discuss the intermediate level of the action programmes. The action programmes on the environment (hereafter also simply referred to as action programmes or programmes) constitute the first stage in the translation of abstract Treaty articles into practical goals and the actions required to reach these goals. In addition, the point of view towards harmonisation is

harmonisation/differentiation.

described in these programmes. The programmes are consequently the first useful delineation of the respective legislative powers of the Community and the Member States. The action programmes do not have the same legal status as (primary or secondary) legislation, being written by the Commission with relatively little involvement of other Institutions. Nevertheless, the Council often explicitly expresses its agreement with the programmes by resolution or statement. The questions of chapter 4 are (a) what are the possible levels of harmonisation allowed on the basis of the action programmes and (b) do the programmes indicate if there is a preference for some specific level of harmonisation?

Chapters 5, 6 and 7 concentrate on relevant environmental secondary legislation, mostly directives, to see to what extent harmonisation of environmental standards has been practised and which arguments have been used in support of such practices. In carrying out this task the area of research had to be restricted. Relevant here is the distinction between product standards on the one hand and standards for emission sources on the other. Product legislation is concerned with for example the exhaust gasses produced by cars and the flammability of rugs. There are strong economic arguments for having uniform legislation on product standards, for if those rules differ between countries it could be very costly for a producer in one Member State to make the product varieties that meet the national requirements of all other Member States. In case differing requirements are incompatible or the costs of meeting one specific national criterion are too high relative to the expected benefits, the good will not be offered in some countries where the product fails to meet the criteria. Thus, differentiated product requirements limit the possibilities for international competition, effectively dividing the common market in sub markets that can be defined on the basis of the products on offer.

Process legislation on the other hand, is concerned with the way products such as cars or drugs are produced. Process legislation concerns safety and health

conditions of the working place but also the emissions of pollutants and other types of pollution generated in the process of production. The production process, or specific parts or stages of the production process, are located at specific places in the Member States. The pollution generated in the process causes environmental damage at the local, regional, and national level in the first place (for the moment we abstract from transborder pollution). The economic arguments for differentiated environmental standards, which leave scope for exploiting differences in environmental conditions between Member States, are in particular applicable to environmental legislation geared to such production processes situated at a specific location, the so-called stationary sources. Our analysis of European Community environmental secondary legislation is therefore restricted to that legislation which has stationary sources as its focus or that has a considerable impact on stationary sources.

The body of Community environmental legislation concerning stationary sources, including primary and secondary legislation as well as the action programmes, has expanded and evolved over time. We shall distinguish five successive periods on the basis of significant changes in primary legislation. The first period goes from the signing of the Treaty of Rome (the Treaty on European Economic Community) up to the Paris Summit in 1972, when the protection of the natural environment was made a Community goal. The next period goes from the Paris Summit up to the Single European Act of 1987. These first two periods will be taken together in many of the chapters because they are not separated by a change in the (written) wording of the Treaty. The secondary legislation of these two periods taken together will be discussed in chapter 5. The third period covers the period of the Single European Act, and the secondary legislation of this period will be discussed in chapter 6.⁵ The fourth period is the period of the

5. The Single European Act was signed in February 1986 and entered into force on July 1, 1987. Whereas we will take July 1987 as the date that separates the two periods, it cannot be ruled out that legislators exhibit anticipating behaviour in the interval between signing and the

Continued on next page

Maastricht Treaty (the Treaty on European Union) of 1993 and the fifth period is the period from the Treaty of Amsterdam of 1999⁶ up to 2002. These two final periods will often also be taken together, for the secondary legislation this is done in chapter 7.

There are three central questions in chapters 5 to 7 on secondary legislation. The first question concerns the actual level of harmonisation in the environmental policy as indicated by the secondary legislation. For each of the directives investigated, we will present our opinion on the overall level of harmonisation that speaks from the articles and the preamble. At times, it will be seen that the level of internal consistency between distinct parts of the directive is very low, generally this is because the preambles appear to be in conflict with the instrumental articles of the directive.

The second question concerns internal consistency. On one level, the analysis with respect to the internal consistency translates into the question whether the level of harmonisation for the directive under scrutiny is in accordance with the limits (i.e. permitted levels of harmonisation) and objectives (i.e. desired levels of harmonisation) as set in primary legislation and the action programmes. This involves comparing the conclusions on the level of harmonisation set by a directive with the limits and goals determined on the basis of both the Treaty in the then current form and the then applicable action programme on the environment. On another level, the analysis with respect to internal consistency translates into the question whether the different parts of the environmental directives (i.e. the legal base, the preamble and the various instrumental articles) are consistent with each other.

entering into effect.

6. The Maastricht Treaty (in: OJ C191/01 of July 29, 1992) was signed in February 1992 and entered into force on January 1, 1993 and the Treaty of Amsterdam (in: OJ C349/1 of November 10, 1997), was signed on October 2, 1997 and entered into force May 1, 1999. Whereas we will take May 1999 as the date that separates the two periods, it cannot be ruled out that legislators exhibit anticipating behaviour in the interval between signing and the entering into effect.

The third and final question posed for each of the directives is whether the level of harmonisation set in this directive supports the decision by the Community Institutions to centralise this issue. Basically, we see a high level of harmonisation as a strong argument for centralisation on economic grounds. On the other hand, if the directive sets a low level of harmonisation, we require additional reasons to justify centralisation. This is because from an economic perspective it may well be optimal to let the Member States individually determine national policies and standards rather than centralise these at the European level in case centralisation is not based on a need for harmonisation.

Following the chapters on secondary legislation, we will have concluded the investigation of the three distinct levels of legislation and policy-making. These levels will have to be integrated per period in order to be able to draw conclusions on the overall level of harmonisation of the European environmental policy. This is because the levels do not operate in isolation from each other but rather form an integrated body of legislation. For example, from the wording of a directive the conclusion can be that the level of harmonisation is full harmonisation without possibilities for Member States to set lower or higher national environmental standards. However, it is possible that such possibilities for higher or lower national environmental standards can be found in the primary legislation or framework directives on which the directive is based. In the final sections of chapters 5 to 7, we assess how stringent harmonisation of standards was, has been and is by integrating the conclusions from the three policy levels.

The next step made in chapter 8 is that we will look at structural differences between periods. Given the conclusions on the overall level of harmonisation of Community legislation with respect to stationary sources for each of these periods, we will be able to observe developments over time concerning the views on the optimal level of harmonisation. Only following this integration per period can we answer the question we set out to answer in this book, that is: 'Is there a discrepancy between the level of harmonisation set in the

European environmental policy with respect to stationary sources and the conclusions with respect to the desirability of international harmonisation derived by neo-classical economic theory'. These conclusions will be drawn not only by looking at the conclusion with respect to the factual level of harmonisation, but also by looking at the arguments given by the European legislators for and against harmonisation.

1.1.2 Methodology

The analysis in the next chapters is both positive and normative. The positive aspect is that we identify and present the European environmental legislation with respect to stationary sources: establishing its legal base in the Treaties, identifying the aims of the legislator as announced in the action programmes and trying to discern what degree of harmonisation of environmental standards actually is involved in the directives.

The normative aspect is introduced in chapter 2 and also in section 1.2.3 of this chapter. Addressing whether environmental standards should be harmonised and decided upon centrally is a normative inquiry. Using the Heckscher-Ohlin theorem as the frame of reference means that efficiency is the one and only criterion in answering the question whether harmonisation of environmental standards is good or bad. Efficient policies are those which maximise welfare. Welfare is defined here as Pareto-efficiency: a policy is efficient if it increases welfare of at least one Member State without reducing welfare of one or more Member States.

A major part of the analysis in the next chapters is to compare the policy advice from normative economic theory (what should the European Union do if it wants to maximise the welfare of its population) with actual policies of the Community in setting environmental standards. Comparing facts with norms and

reporting the discrepancies is positive theory. Such discrepancies can be due to a diversity of causes. It could be that actual policies try to meet more than one criterion, e.g. fairness and efficiency, or the welfare of the specific group. Policies may also be the victim of flawed economic thinking, or what looks like flawed thinking may simply reflect the fuzziness of a political compromise. Our analyses will focus on revealing the discrepancies between political practice and welfare economic advice. Providing an explanation would require additional research.

1.2 Definitions

1.2.1 Introduction

Before turning to chapter 2, we will have to make some introductory remarks on the definitions used. The focal concepts in this dissertation are harmonisation, differentiation, centralisation and distortion of competition. In the next subsections, we will give our definition of these words. Given the fact that harmonisation is the central theme of this thesis, we will start with this concept in subsection 1.2.2 before turning to centralisation in subsection 1.2.3. In section 1.2.4 we will indicate how we see the relationship between harmonisation and centralisation. In section 1.2.5 we will introduce the concept of distortion of competition. It will be seen that this concept lies at the heart of the supposed conflict between neo-classical economic theory on the optimal rate of harmonisation and the level of harmonisation set by Community environmental legislation with respect to stationary sources.

1.2.2 Harmonisation

Harmonisation appears under many headings in the Treaty, such as harmonisation and approximation. In line with most of the authors, we will assume that such terms can mean exactly the same thing.⁷ From the definition of harmonisation, we can derive the definition of its opposite differentiation. Harmonisation is defined in this thesis as the deliberate equalisation of identical policy instruments and norms in different countries, i.e. unification of law.⁸ In this sense, it is a special form of co-ordination.

There is no definition of the word harmonisation to be found in neither the Treaty nor in the action programmes on the environment however, nor do legal scholars adhere to a single definition.⁹ Stein (discussed in Vogelaar, 1974, p.302) stresses the resolution of disparities between national rules through approximation. From such a perspective, approximation seems to imply a convergence to an average, or at least a bandwidth for Community legislation set by the national extremes. A similar interpretation is given by Hansson (1990, p.1) 'the co-ordination of economic policy actions and measures in order to reduce international differences in such actions' and also by Charnovitz (1993, p.267) 'a movement toward equivalent standards and regulations by different countries'.¹⁰ There is also another interpretation where harmonisation equals unification of law (e.g. Lauwaars and Maarleveld, 1987, pp. 7-8). This definition does not focus on the process but on the result.¹¹

7. Groeben (1967, p.132) appears to make a difference between the concepts: 'Als Rechtsinstrument kann die Rechtsangleichung also dort eingesetzt werden wo eine Rechtsvereinheitlichung nicht am Platze oder zwecklos ist'.

8. Identical to the definition used by Lauwaars and Maarleveld (1987, pp. 7-8).

9. Phillips concludes that 'es einen solchen Begriff nicht gibt und dass es nach der Lage der Dinge sich auch nicht durchsetzen wird' (quoted in Lauwaars, 1987, p.10).

10. See also Kropholler, quoted in Lauwaars and Maarleveld (1987, p.9).

11. We can highlight the differences between the two definitions by recalling into memory two concepts from economic theory that are in the same relation to each other, i.e. a Pareto optimal improvement and a Pareto optimal situation.

This book focuses on harmonisation in the field of environmental legislation. The form of harmonisation we will focus on is the international harmonisation of national environmental norms.¹² These norms in turn can be e.g. environmental quality standards (e.g. ‘x µg pollutants per m³’), emission standards (e.g. ‘x mg pollutant/day’) or emission reduction goals (e.g. ‘x% reduction of polluting emissions in y years’). With uniform emission standards or emission reduction goals on producer level, the obligations on comparable producers in different Member States are uniform. In case of harmonisation of environmental quality standards, the obligations on Member States are uniform whereas the burdens on comparable producers in different Member States will often differ.

Harmonisation cannot be defined by a cut-off point beyond or below which we cannot talk about harmonisation. Rather, we prefer to talk about the level of harmonisation. In the dynamic definition used by e.g. Charnovitz, harmonisation is any deliberate reduction of the margin between the strictest and the least strict environmental standards set by the Member States. Likewise, in the static definition harmonisation is any deliberate result that limits the possibilities for individual Member States to reduce or increase environmental standards. If the remaining possibilities for derogating national standards are small, we talk about a high level of harmonisation and conversely if the remaining possibilities for derogating national standards are ample, we talk about a low level of harmonisation.

The highest level of harmonisation is when there is one uniform norm and neither more lenient nor stricter national environmental norms are allowed. This special situation is defined as full harmonisation. Applied to emission standards,

12. We can distinguish several objects for harmonisation including not only harmonisation of national standards but also harmonisation of national instruments. In case of instrument harmonisation, countries adopt the same instruments to pursue their respective policies. Harmonisation of instruments implies that Member States do not have a choice between e.g. closing some plants or imposing an emission tax but rather that the Community determines
Continued on next page

full harmonisation means that all Member States have to apply the same uniform standard in similar production processes or in the production of similar goods.

The other extreme would be the case where there is no rule limiting the discretion of national governments to set standards for their national industry (zero harmonisation). If we move along the scale towards (from) full harmonisation, the degree of harmonisation increases (decreases).

Harmonisation can be set on a high, low or intermediate level of environmental protection. A high level of protection would mean that the uniform standard is not (much) below or even above the strictest standard set by a Member State before or without harmonisation. In an analogous way, harmonisation at a low respectively an intermediate level of protection can be defined.

It is conceivable that Member States are not restricted in setting national standards that are stricter than the uniform Community standard. This variant is called minimum harmonisation. It defies a standard below which no Member State is allowed to go but leaves Member States competent to adopt more stringent national environmental standards than the European standards (Jans, 1990, p.98). It shall be clear that in our discussion of harmonisation in section 1.1, we have interpreted harmonisation as full harmonisation.

There can be exceptions on both full harmonisation and on minimum harmonisation. Exceptions are defined here as possibilities for Member States to set national environmental standards below the uniform Community standards. Such exceptions decrease the level of harmonisation.

With minimum harmonisation, national standards will vary between the minimum set by the Community and the strictest national standard set by one of the Member States. The minimum standard can be set at a low, intermediate or high level of protection. A policy harmonised through minimum harmonisation could benefit the environment; the laggards are forced to maintain the minimum

which of the instruments is to be applied.

norms whereas the environmentally more ambitious countries are permitted to pursue their environmental policies. However, the environmental benefits depend on the voting procedures used when deciding on the standard. In the case of unanimous decision-making, the benefits can be nil as the minimum standards can be determined by the environmentally least ambitious Member State. When unanimity is required, minimum harmonisation could result in merely a formalisation of the national environmental standards in a European law with a low level of minimum environmental protection. Indeed, the use of minimum norms where Member States are allowed to set stricter environmental standards has been explained by the fact that the EC environmental policy is a lowest-common-denominator policy (Huelshoff and Pfeiffer, 1991, p.142).¹³ In the case of qualified decision-making procedures, the strictness of the environmental standard is determined by the Member State at the margin. That is, if the Member States are ranked on the bases of their preferences for a specific environmental standard, the Member State that secures the qualified majority required to carry the proposal will determine the minimum standard. The Member States that are outvoted but prefer less strict standards than those adopted by the Community will subsequently be forced to implement the stricter minimum standards, hence the environmental gains. According to Liefferink (quoted in Weale, 1996, p.607), the minimum norms may even be lower than the standard from the Member State at the margin because of the way the derogation from article 100a(4) SEA works (see section 3.4). Logically, this would occur if a country supporting a very strict standard would abstain from voting or would vote against the minimum standard. In such a case, the next marginal Member State with a preference for a lower environmental standard would be necessary to obtain a qualified majority and this Member State would be able to dictate the minimum norm.

13. Reh binder (1985, p.7) states that harmonisation leads to the lowest common denominator of environmental protection.

It will be seen that the most commonly used Community instrument for environmental legislation with respect to stationary sources has been the directive. A directive implies freedom of choice with respect to the national instruments of implementation. Differences between implementation by Member States affect the level of harmonisation. We will see, however, that the national freedom to choose the instrument of implementation is often severely curtailed since direct regulation by way of standard setting has been the normal practice in all Member States in the past decades.

1.2.3 Centralisation and its relationship with harmonisation

In this thesis, we will use a pragmatic definition of centralisation. Centralisation is when a policy or policy area is addressed at Community level. Thus, the mere fact that the Community makes e.g. a regulation on the maximum length of shoelaces implies that the policy matter of length of shoelaces is centralised. In contrast to harmonisation, centralisation has a clear delineation. It is also possible to define centralisation in another way that focuses on the transfer of powers. From this perspective, if the legislative powers with respect to a certain policy area are transferred to the Community this area is 'centralised' and if powers are retained or re-transferred to the national level this area is 'decentralised'. Using the pragmatic definition, we do not have to consider the transfer of powers but rather look at the application of powers in the sense that secondary legislation is enacted.

Harmonisation within the European Union has been accommodated by centralisation: competence in a policy area was transferred from the national to the Community level. In order to reach some level of harmonisation, it has to be established that the Community is the designated legislator in the first place. If there is decentralisation, this implies that there can be no harmonisation. .

Harmonisation is said to be full when a directive is issued which is intended to provide for a complete system of regulation in a particular field (Jans, 1990, p.90). From our perspective, this connotation of full harmonisation refers to the issue of centralisation rather than harmonisation as the definition of full harmonisation given here does not refer to the extent in which deviation from the norms set in the directive is possible. Notice that full harmonisation is used in two different connotations. In the first, harmonisation-related connotation used in subsection 1.2.2 it implies that Member States are not allowed to set national standards that are stricter than the Community standard. In the second, centralisation-related connotation used in the subsection, it implies that the whole policy area is centralised.

Determining exactly what policy area has been centralised can be difficult. For example, there were still polluters that remained outside the scope of the Mercury Directive, for example the paper industry and the steel sector.¹⁴ For these polluters, the Member States were to make national environmental programmes in accordance with the Aquatic Environment Directive.¹⁵ In addition, jurisprudence has established that there can be scope for national policies even where an issue has been completely covered by a Directive. In the Irish Fisheries case¹⁶, the Court decided that national legislators could draft laws during the transition period following the accession of the United Kingdom as long as the Community did not use its powers, taking into account article 5 EEC. In the first British Fishery case¹⁷, the Court ruled that the States were held to protect Community interests but that this did not imply that the powers were returned to the national States in case the Council could not reach agreement. In the second British Fishery case¹⁸, the Court again ruled that neglect by the

14. For further details of the Mercury directive see section 5.2.6.

15. See article 4 of this directive, which is discussed in greater detail in section 5.2.2.

16. Case 61/77.

17. Case 32/79 'Commission v. United Kingdom', in: Jur.1980, p.2403.

18. Case 804/79 'Commission v. United Kingdom', in: Jur.1981, p.1045.

Community does not return powers to individual Member States where such powers were completely and irrevocably transferred to the Community. In the Van Miert case¹⁹, the Council and the Commission did not use the powers conferred upon them by a Regulation because of conflicts of interest within the Council. The Member States can in such a situation draft national legislation, but the power to do so does not derive from a transfer of powers from the Community to the Member States but must rather be based on article 5 EEC: the Member States are to serve but Community interests.

The relationship between harmonisation and centralisation is very straightforward. Consider a situation with two independent countries A and B. If one country sets environmental standard X and the other country sets environmental standard Y these standards are different, if both Member States set environmental standard X (or Y) the standards are uniform. The terms 'uniform' and 'different' apply to the observation that standards are identical or not, independent of the reasons why these standards are uniform or different.

Assume now that countries A and B form Community C. Countries A and B are the Member States. Policy areas that are decided on at Community level are called 'centralised' and policy areas that are left to the discretion of the Member States are called 'decentralised'. The first possibility is that the environmental policy is decentralised. Countries can set their standards in complete isolation from each other and the result can be either uniform or different norms. If the result is uniform norms in both Member States, the explanation for this result can be coincidence, identical preferences, co-ordination between the Member States, et cetera, but it is not the result of a legal obligation on the Member States imposed by Community C to have identical norms.

The second possibility following the creation of the Community is that the environmental policy is centralised. Centralisation is a special form of co-operation, in that the co-operation is not on an ad hoc basis but rather that the

19. Cases 47/83 and 48/83, in: Jur.1984, p.1721.

policy area as such is taken away from the Member States and decided upon by the higher level, the Community. This can result in a law on Community level to have uniform environmental standards in both countries, or to have co-ordinated but different environmental standards in the respective countries. The outcome can be that both Member States have a uniform norm, in which case the norm is 'harmonised', or that the Member States have different standards, in which case the norm is 'differentiated'. Thus, we can talk about uniform and different independent of the fact whether the policy area is co-ordinated internationally, whereas we only use the terms harmonised and differentiated only if the policies are co-ordinated.

Centralisation and harmonisation are also strongly linked from an economic perspective. In chapter 2 we will identify the situations where international co-operation or even harmonisation can be an optimal solution. If a policy area requires co-operation or harmonisation, this in turn is seen as an indication that centralisation at Community level could well be a first best solution. Thus, wherever economic theory points to an international solution, this is seen as an economic argument for centralisation. Viscusi et al. (2000, p.16) discusses the arguments used for centralised policies.²⁰ Similar arguments turn up in the literature on the economics of federalism. Our representation of the list of arguments is:

- Community-wide implications. If national policies have (external) effects in all the Member States, centralisation will often be the first best approach. This applies for example to the situation of transborder air pollution. A Member State has little incentive to reduce its emissions when the environmental harm is hardly felt in that State but mainly outside its borders. A special type of externality calling for centralisation and discussed in the economics of federalism literature

20. The arguments apply to the distinction between State and National regulation in the context of the U.S.A., but these can be applied also to the European context. Secondly, the book discussed antitrust legislation, but, likewise, the results apply also to other policy areas.

as a special kind of externality, psychic spillovers based on existence values. Existence values assume that consumers in various countries attach some value to the existence of a minimum level of environmental norms in another country, for example because this minimum level results in the survival of some specie of animal or other natural values (Nentjes, 1993). Community wide implications are also at stake in cases where we can identify a set of policies or problems with international ramifications that all involve some subset of Member States but that taken together involve all the Member States. These could be dealt with separately, but trading off various problems may more easily result in agreement being reached for a large set of problems taken together rather than in isolated negotiations on all the different issues. The issue of transborder effects will be addressed in chapter 2.

- Efficiency where it concerns Community-wide marketed consumer products. If producers would have to comply with various and potentially conflicting national legislations regarding e.g. packaging. A result would be less competition and a potential division of the (European) market into national submarkets, leading to higher costs and consumer prices. This argument will be discussed further in chapter 2.

- Potential cost advantages in designing appropriate regulations. Costs of collecting and elaborating information for setting an emission standard for the Community might be lower than the costs of all national agencies doing essentially the same work in setting national standards. This transaction cost based argument is addressed in the economics of federalism literature as regulatory economies of scale. Applied to decentralisation, the argument is that it is cheaper to have one centralised bureaucracy specialising in determining the optimal standard(s) than to have various national bureaucracies each determining their national standards, applied to harmonisation the argument is that it is cheaper to have one common standard rather than various national standards. According to Adler (1998) 'the economies of scale argument does not justify

federal hegemony in the environmental policy in the 1990s, if it ever did. (T)he current generation of environmental concerns are heterogeneous and require specialised knowledge that is typically available only at the state level'. We will not delve into the question of transaction costs, but want to point out here that the economics of scale in regulation argument is most relevant for environmental as well as health and safety regulation of products. Setting European standards not only avoids fragmentation of the European market in national sub-markets but also avoids a lot of repetition in research and testing of medicinal drugs for example. As we shall see in later chapters there is a European centre in Sevilla for researching and formulating appropriate pollution control technologies (BAT and BATNEEC) for stationary sources in the European Union.

- Basic rights. Some issues are just too important to let these be decided on by the Member States as these involve the core values of the Community. For example, if a Member State could decide that slavery should be legalised this would infringe on the set of shared values of the Community and this could jeopardise the existence of the Community at large. In this context we must note that a 'right to a clean and healthy environment' was proposed by some Member States in the Intergovernmental Conference preceding the Amsterdam Treaty (Van Calster et al, 1998, p.24). However, the Amsterdam Treaty did not establish such a right.

- In the European context, we can add one political argument for centralisation. Centralisation is often considered beneficial in itself as a means to both reinforce the European identity of the citizens and to bolster the standing of Community institutions relative to the national institutions. This is the concept of spillover. In the words of Urwin (1991, p.55) 'in a functional sense, spillover was founded on the belief that contemporary economies were based upon a tangle of interrelated sectors. Once one economic sector could be integrated, the complexity of modern economies would force other sectors into similar structures and developments (...). Political spillover (...) was based on the assumption that

once supranational institutions had been set up in one sector, interest groups would look to that political level for the realisation of their demands, and that in time the group would begin to appreciate the value to themselves of integration.’ The same argument is picked up in the economics of federalism literature. Centralisation is seen as the outcome of a process which is not driven by a search for the general interest but the outcome of rentseeking by interest groups which see the central government and its policy as a suitable tool for redistribution of income in their favour. In the economics of federalism literature geared to the problem of harmonisation versus regulatory competition in environmental law (e.g. Faure, 2001) the major criterion for centralisation of environmental issues are basically the arguments listed above and next to that the argument that central regulation can prevent a race to the bottom between Member States. We shall see in chapter 2 that in the economic theory of international trade the arguments for international co-ordination of national policies to control pollution of stationary sources focus on two bottlenecks of uncoordinated national policies: transborder pollution and strategic setting of environmental standards, which might lead to a race to the bottom. This should demonstrate that both theories agree in their major conclusions and policy advice.

We could also make a similar list of arguments against centralisation. Since we take differentiation and decentralisation (national policies) as our point of departure, however, we are mainly interested in the deviation from the normal situation and we will not question the wisdom not to centralise certain policy areas.

In section 3.4 below we will return to the issue of the relation between centralisation and harmonisation. It will be shown that the introduction of the subsidiarity principle could be expected to increase the average level of harmonisation.

1.2.4 Distortion of competition

In the next chapters, we will find that harmonisation and distortion of competition are strongly linked. European legislation based on the harmonisation article stresses the need for harmonisation as an instrument necessary to counter distortion of competition. Distortion of competition is primarily an economic concept. Distortion of competition in its neo-classical economic context implies a loss of welfare, and for that reason it needs to be remedied. For example, if consumer prices do not properly reflect net production costs to society, there is a distortion that causes welfare to be below its maximum. Economic welfare theory offers some guidelines for appropriate policies to remedy distortion of competition. In some circumstances, an appropriate remedy to counter a distortion of competition is international harmonisation of national legislation.²¹ In other situations, international harmonisation of national policies is not required. Indeed, there are numerous situations in which harmonisation in itself would constitute a distortion of competition according to welfare theory. In such circumstances, the welfare maximising solution advocated by economic theory would be to remove the harmonised standard or target and allow for differentiation of national standards and targets.

One of the issues which needs thorough discussion is under which circumstances harmonisation is needed to avoid distortion of competition (as defined in economic theory) and under which circumstances harmonisation actually would create a distortion. The question will be analysed in depth in chapter 2 and the reference to distortion of competition in Community legislation will be discussed in chapters 3 to 7. Here we shall make a few remarks to elucidate the nature of the issue. From the argument in section 1.1 it follows that neo-classical economic theory views harmonisation of environmental standards

21. We can replace the words 'international' and 'national' by 'national' and 'local/regional' respectively with reference to settings other than the European Community.

as a type of regulation that decreases welfare in the European Community. In other words, harmonisation is seen as inefficient and in that sense harmonisation of environmental standards for stationary sources creates a distortion of competition.

Now we have a paradox. On the one hand, economic theory states that harmonisation of environmental standards creates a distortion of competition. On the other hand, Community legislation states that harmonisation of environmental standards is necessary to prevent that distortion of competition (in the form of different national standards) would arise. Is it possible to explain this paradox? One explanation would be that either neo-classical economic theory or the Community legislation makes an analytical error leading to a wrong conclusion on how to solve a problem. Another explanation is that economic theory and the European legislator have different definitions of what distortion of competition is. This would mean that the two have different views of what exactly is the problem that has to be solved. The issue will reappear time and again, and it is one of the points on which chapter 8 will draw a conclusion.

Chapter 2 Economic Perspectives on Harmonisation

2.1 Introduction

One of the key objectives of Treaty of Rome is the creation of a common market with undistorted competition. The principal instrument to prevent or eliminate distortion of competition mentioned in the Treaty is harmonisation. As mentioned in chapter 1, full harmonisation is defined as the deliberate equalisation of policy norms in different countries. In the optimum scenario, proposals on harmonisation are based on an analysis determining what exactly is the distortion of competition that is to be countered. Economic theory can provide the guidelines for such an analysis, using welfare maximisation as its criterion. During the past decades, however, harmonisation has been vigorously pursued without much discussion on the nature of the problem at hand and the desirability of the instrument of harmonisation. For example, the legal base designed for harmonisation (article 100 EEC, renumbered as article 94 by the Amsterdam Treaty) has been used to harmonise environmental legislation (emission norms) with respect to stationary sources. Community policy states that harmonisation is necessary to eliminate or prevent distortion of competition. Welfare economic analysis draws the opposite conclusion that differences in emission standards can be the efficient outcome of undistorted competition and therefore harmonisation is harmful rather than beneficent. Thus, at first sight there exists some discrepancy between harmonisation of environmental policy as practised in the European Community on the one hand and the policy advice derived from welfare economic analysis on the other hand.

In this chapter we shall investigate whether economic theory rejects harmonisation of environmental legislation under all circumstances or whether economic arguments can be found for harmonisation in particular cases. If

harmonisation is pursued without having a foundation in economic theory, it must be based on other views or on special interests. Crucial is here how one defines the concept of distortion of competition. We shall make a distinction between two main views. The first one, the economic view, interprets distortion of competition as a conjecture creating an inefficiency and condemns it for that reason. The other view is to see distortion of competition as a situation where firms do not operate under equal conditions. This inequity is considered to be unacceptable. We will refer to it as the political view. These two distinct views on the meaning of ‘distortion of competition’ lead to different answers to the question as to whether harmonisation is in order. The two interpretations of distortion of competition and their pleas for or against harmonisation show resemblance with the distinction between two competing theories of regulation. On the one hand the traditional model of public interest, more recently branded ‘normative theory as positive theory’, explains regulation as the visible hand of the government preventing and correcting inefficiencies where markets fail. On the other hand the new class of special interest theories founded by Stigler (1971) and Peltzman (1976) sees regulation as the product of rentseeking actions by special interest groups: equity would be a particular strong argument to obtain a more favourable treatment from the legislator.²²

2.2 Distortion of competition as inefficiency – the economic view

2.2.1 The case against harmonisation

Neo-classical economic theory of international trade is summarised in the Heckscher-Ohlin theorem: free trade results in an international distribution of

22. Good surveys of special interest theories of environmental regulation are Dijkstra (1999), Yandle (1999) and Heyes and Dijkstra (2001).

industries where countries specialise in industries producing products which require for their production inputs which are relatively abundant in that country. Free trade means that firms trade with each other on international product markets without intervention by national governments - in particular without restrictions on international trade with the purpose of protecting national industries. Competition on such a free international market will pressure firms into specialising in producing the products that they can make at lower costs than their (foreign) competitors. As a result, firms in countries where labour is relatively abundant - and therefore relatively cheap - will specialise in labour intensive products and producers in natural resource rich countries will specialise in producing natural resource intensive products. Specialisation increases the productivity of available national resources, thus raising the countries' potential income. The international exchange of products allows consumers in participating countries to spend their incomes on the bundle of internationally offered products that satisfy their wants best. The Heckscher-Ohlin theorem provides the proof that international free trade creates a pattern of specialisation based on comparative advantage that is Pareto-superior for participating countries compared to an economic organisation that puts restrictions on exports and imports.

The conclusions formulated in the Heckscher-Ohlin theorem are derived from an economic model based on a number of assumptions about the characteristics of the market. The principal ones are the following:

(1) The markets (for products as well as inputs, such as labour, capital and natural resources) have the structure of perfect competition. Perfect competition implies that agents - whether on the supply side or on the demand side - have no market power. That is, individual producers (firms), suppliers or consumers are of such a small size relative to the market that they are unable to influence the market price.

(2) Products are traded internationally, but inputs (labour, capital and natural resources) are traded only nationally. In other words, the inputs can be traded internationally only indirectly by being embedded in the internationally traded goods.

(3) The set of markets is complete. This means that there are markets for all scarce inputs employed in the production process and for all the outputs (goods and services). This assumption implies that there are no external effects, neither in production nor in consumption. In other words, there is a complete set of market prices that reflect the real costs of outputs and inputs.

(4) National governments do not interfere in the markets for inputs and outputs. However, the national governments provide a legal order in which (international) contracts can be concluded and enforced relatively safe. This implies e.g. the protection of property, contract law, liability legislation, and courts to settle conflicts between parties. Next to that, competition law might be needed to prevent the abuse of (collective) market power.

The assumptions underlying the Heckscher-Ohlin theorem provide a blueprint of how the economic world would have to look like in order for the invisible hand of the market to result in maximum welfare via national and international trade. Maximum welfare is defined here as Pareto efficiency. In the real world, the conditions stated in the free trade blueprint are not necessarily satisfied. Environmental economics concentrates on the complications due to the lack of markets for environmental resources. The environment can be viewed as a resource that amongst other functions is used as a sink for emissions and all other waste created by human production and consumption. Using the environment as a sink reduces its availability, both quantitatively and qualitatively, for satisfaction of other wants. In the present world, the environment is therefore not a good that can be wasted without economic cost, but rather a scarce input (Siebert, 1995). Its position differs from most other inputs in that a market for environmental inputs does not develop spontaneously, due to its public good characteristics. In this

subsection, we shall stick to the assumption that resources, including environmental resources, do not cross the national borders. That is, we concentrate on the case where emissions by the national industry cause environmental damage only in the country where the industry is established. Transborder pollution will be discussed in the next subsection 2.2. It has to be investigated how unpriced national environmental resources affect welfare in a world where there is free trade. Next we shall discuss how the distortions created by national pollution can be remedied.

The public good characteristic of pollution implies that inhabitants of the country – producers and consumers – share the damage caused by pollution with many others. In this sense, environment is a public good. Public goods have as a characteristic that the consumption of a unit by one consumer does not preclude consumption by another consumer. For a public bad, such as environmental pollution it means that the damage suffered by one citizen does not diminish the pollution load and damage born by other people. Although damage for an individual household or firm may be very low, aggregate damage summed over all agents can be very high. However, the individual agent has insufficient incentive to undertake actions to stop pollution. For example, the costs of a negligence court case which the individual could try in order to stop the polluter or to claim compensation for damages are considered to be too high relative to the individual damage and compensation the individual can expect if his lawsuit is successful. This reflects the public good - or rather public bad – property of pollution: a successful lawsuit, which would stop or reduce pollution, would result in benefits for many other people who did not bear the costs and risks of the lawsuit. Apart from that, in many cases the individual has problems with legal standing when bringing this type of lawsuit to court. As a result, environmental property rights, which are the precondition for the creation of a market for environmental resources, are not established. The result of the market failure is that environmental resources have no market prices. Producers and consumers

will use the environment as a sink for their waste as if it is a free good, even though it is actually a scarce resource. There is no restraint on the creation of environmental damage and the satisfaction of human wants for the environment in its other functions, such as provider of a healthy environment and unspoilt nature, is reduced more than the welfare created by polluting industry.

The phenomenon of an over-intensive use of the environment as a sink, implying production methods that are too pollution intensive, will occur in countries in autarky as well as in countries participating in a system of international (free) trade. In case of international free trade the absence of a price for the environmental resource implies that countries with scarcity of environmental resources do not see this reflected in a higher price of environment (i.e. pollution) intensive products and the producers in the country have no incentive to retain their pollution-intensive production or to switch to less polluting production methods. Countries with abundant environmental resources, for example because they are thinly populated or due to specific environmental conditions, cannot exploit their comparative advantage in producing environment intensive products. Therefore, the type of specialisation that would occur if the environmental sink function had a market and a price will not emerge. The Pareto efficient outcome of international trade will therefore not be realised: pollution is too high in countries where the environment is scarce and too low in countries with environmental abundance in comparison to the Pareto optimal level.²³

This defect can be corrected by environmental policies that set a price on the environmental input. The government will thus set a price that optimally includes the welfare effects on all individual producers and consumers. The steps to be taken by the government are in the first place the decision how much pollution, in terms of emission and other waste, is acceptable. The next step is to

23. In such a situation, expanding trade could even be welfare reducing for a country if the export-sector is pollution intensive and the use of the environment is not priced (Asako, 1979).

specify, apply and enforce the instrument needed to realise the emission target. The first best policy is to try to realise the emission (reduction) target by way of an instrument that really prices the residual emissions. This could be either an emission tax or a scheme of tradable emission permits. Of these two tradable emission permits imply the creation of a real market for the government created environmental scarcity. Taxation of emissions means that the government itself has to set the prices instead of relying on the market. But the government may be lacking the appropriate information to do so adequately. This provides a strong a priori argument for tradable emission permits as a more efficient instrument than emission taxes. A price on the use of environmental inputs integrates environmental decision making of firms and consumers on equal footing in their decisions on other inputs such as labour and capital and other priced resources. Application of the economic instruments of environmental policy is an incentive for the economic agents to use the environmental resources sparingly and next to that the priced environmental input is reflected in higher prices of environmental intensive products thus inducing a lower demand for them and substitution for cleaner products.

The outcome of such a regime which sets prices on environmental use in the context of a closed economy is maximisation of national welfare (Dijkstra, 1999). How restrictive national environmental policy is depends on the availability of environmental resources and national environmental preferences. Asako (1979) has investigated the consequences of autarky in an international context. He shows that in an international framework where all countries pursue the first best environmental policy of pricing the environment, countries with relative environmental abundance and consequently low prices for environmental inputs and for environment intensive products will exist next to countries where the environment is much scarcer, the environmental inputs have a higher price and environmental intensive products are expensive. If international trade is allowed, countries with relative environmental abundance will have a competitive

advantage in producing environment intensive products and specialise in the production of these products. The outcome will be a Pareto optimal international allocation of economic activity, including the use of the environment. In comparison with the autarkic situation, even the country specialising in the environment intensive (polluting) good and thus ending up with an environment which is more polluted as a result of the international trade, will have unambiguous welfare gains from trade provided the first best environmental policy is introduced (Anderson, 1992). It should be noted that as a result of international adjustments of outputs the prices of environmental inputs are equalised between the countries participating in international trade. In environmental resource rich countries they have risen and in countries with initial environmental scarcity they have decreased.

In practice, economic instruments are hardly ever applied in environmental policy. The dominant approach is direct regulation in the form of environmental standards such as emission standards. Basically, an emission standard defines an allowed quantity of emissions per unit of output.²⁴ The stringency of the standard is determined by the national emission target and quantity of relevant output. Therefore, how restrictive national environmental policy is, depends on the availability of environmental resources and national environmental preferences. Countries with relative environmental abundance as defined by the governments' emission targets and therefore with lax environmental standards will exist next to countries with relative environmental scarcity and strict standards. Emission standards compel firms to make costs in order to reduce emission to the mandatory level relative to output.²⁵ Since the emission control costs per unit of

24. There are many types of standards (see e.g. Helfand, 1991). We focus on standards that specify a maximum amount of pollution per unit of output for didactical reasons in the first place.

25. In setting the emission standards, the government may make errors by setting standards such that total emission reduction costs are not minimised; i.e. some standards are too weak
Continued on next page

output are lower if standards are weak, the countries which are willing to accept weak standards have a comparative advantage in products which have relatively high emissions given the set of relative input prices. Therefore, the countries with weak emission constraints tend to specialise in environment intensive products and the countries with relatively hard emission constraints specialise in the less environment intensive goods. However, specialisation will not go as far as the optimal specialisation resulting from the application of tradable emission permits or environmental taxes. The reason is that emission standards do not set a price on the residual emissions, in contrast with the case in which an emission tax or tradable emission permits are applied. Therefore, the environmental inputs are not (fully) priced and the costs of the residual emission per unit of product are not part of the product's cost and are therefore not reflected in the product's price. That is, all products produced with residual emissions are priced too low and in particular environmental intensive products will be priced too low compared to the products meeting more stringent emission standards. As the price of pollution intensive goods is too low, they tend to be produced in larger than optimal quantities relative to the less pollution intensive products. This means that total emissions, i.e. the number of products times the emission standards summed over all products, can exceed the target. To avoid that the national emission targets are exceeded, the emission standard will have to be more stringent than the emissions per unit under a regime where residual emissions are priced. For the countries participating in an international free trade system, the outcome is second best compared to the first best of Pareto efficiency. The opportunities for specialisation on the bases of environmental factor content are not fully exploited

and some standards are too strict. We shall abstract here from these types of inefficiency. It can be proved that if standards are set efficiently (equal marginal abatement costs per unit of output) the residual emissions per unit of output are higher for pollution intensive products than for pollution extensive products, although controlled emissions per unit of product are higher for pollution intensive products.

and the total costs of emission control are higher than the minimum cost of achieving the emission targets.

Compared to a world where economic instruments of environmental policy would have been applied, welfare is lower as a result of the widespread use of standards. This conclusion is based on some explicit and implicit assumptions, related to for example the intrinsic costs of using a specific instrument. It cannot be ruled out that the first best instruments do have higher intrinsic costs related to e.g. monitoring. If such costs are taken into account, the welfare analysis should compare the benefits of using first best instrument that prices the environment versus a second best instrument that does not against including the intrinsic cost differences between instruments. According to Lloyd (1992), the conclusion by Bohm and Russel (1985) - that no general statements can be made about the relative desirability of various policy instruments when the model is extended to include aspects such as location, monitoring costs and exogenous changes in technology, regional economics and natural environmental systems – carries over to environmental problems. This view can be countered with the observation that various simulation studies and assessments of the few emission trading programs that exist have pointed out the huge environmental benefits of economic instruments over standards however (Klaassen, 1996, Boom et al, 1998). Despite the fact that e.g. monitoring costs could potentially be less for non-economic instruments, one might expect this effect to be dwarfed by the huge benefits of economic instruments. We therefore expect that the differences between intrinsic costs of various instruments will be small in relation to the benefits of using a well-designed first-best rather than a second-best instrument. In the remainder of this book we will therefore largely abstract from comparing instruments on the basis of distinction other than the fact that they result in establishing a market price on the use of the environment that internalises all costs.

This book concentrates on Community environmental policy with regard to stationary sources as it has been enacted. This policy has up to now been mainly a policy of emission standards. Therefore, our discussion will focus on the instrument of standard setting from here on. The upshot of the foregoing is that given the fact that emission standards are the predominant instrument of environmental policy a second best Community welfare maximum can be achieved if national governments of Community Member States have the discretion to set national emission standards in accordance with availability of their environmental resources and national environmental preferences. From the economic perspective, the common market - and ipso facto the EEC - was created to ensure that the welfare gains of international specialisation would be realised and that Member States specialise on the production of goods in which they have competitive advantage. The Heckscher-Ohlin theorem implies that in so far as pollution does not cross borders the government of each member state in the EU can decide for itself how stringent the national environmental quality goals and the national emission standards should be. Any effort to restrict this discretion would reduce specialisation based on differences in environmental scarcity and hence prevent realisation of the Pareto-optimum. The worst outcome would be the case where Member States are forced to adhere to a set of uniform standards. For that reason, one might say that rules prescribing uniform regulations, or more generally all regulations reducing the discretion to set national standards, constitute distortions of competition in themselves - distortion of competition being defined as any measure that reduces the efficiency of international trade.

2.2.2 The case for international co-ordination

Our criticism of harmonisation of environmental standards for production processes does not mean there is no scope for co-ordination of environmental

policies within the EU. There are some cases that deserve a closer look: (1) transborder pollution, (2) the strategic use of environmental policy as an instrument of trade policy, and (3) product standards. Product standards are really outside the scope of this paper, but the subject of product standards is introduced briefly to highlight the different arguments that apply to product standards and process standards respectively.

2.2.2.1 *Transborder pollution*

A clear case requiring international co-ordination of environmental policy is transborder pollution. We can identify two distinct situations—dependence and interdependence. In the case of dependence, one of the countries exports a part of its pollution abroad. For example a country upstream on a river pollutes a country that is downstream. As the EU has signed the 1992 Rio Declaration, which states that States have ‘the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond national jurisdiction’²⁶, the emission standards in the upstream country would have to be made stricter to prevent environmental damage in the downstream country. From an economic point of view, it would be desirable to leave scope for Coasean negotiations on some residual transborder pollution and the compensations to be paid for that by the upstream country. Adherence to the principle of preventing damage to the environment of other States would delineate ownership of the natural environment among the states and provide the bases for Coasean contracts between States. However, in practice, this legal principle was and is not strictly adhered to. This is mainly due to lack of suitable enforcement mechanisms. The consequence is that governments of upstream countries do not take into account sufficiently the total benefits (abroad as well as

26. Principle 2 (quoted in: Anderson, 1992, p.98). This was a reiteration from the nearly identical Principle 21 adopted by the 1972 Stockholm Conference.

at home) of reducing emissions; consequently, emission targets of states tend to be less stringent than in the optimum.

Given environmental dependence, a special case of lowered welfare could arise if countries move from autarky to international trade. The environmental quality of the downstream country depends on emission in both the home and the foreign country, but the environmental quality of the upstream country only depends on its national emissions. The move to international trade could be negative in case no environmental legislation is in place in the upstream country and that country specialises in the production of the environment intensive good. In such a case the downstream country is faced with an increase of imported emissions and an increase of environmental damage. Therefore there is an economic argument to engage in some form of international co-operation. Note that this type of co-operation is not identical with harmonisation of national environmental standards to one and the same uniform level between the states. Negotiations could concentrate on the total of exported emissions of the upstream country (Revesz, 1992).

In the case of interdependence, countries that emit pollutants affect the natural environment in the other country and vice-versa. As the environmental condition in foreign countries does not enter in the home country's welfare function, there will be excessive pollution from a global point of view (see e.g. Mäler 1990, Nentjes 1994, Kryazhinskii et al., 2000). Countries then have an incentive to negotiate on reciprocal reductions of emissions. Countries are willing to reduce emissions more and make additional control costs if in return they get the benefits of a lower pollution load due to the extra emission reduction of the other countries participating in the negotiation. The negotiation will therefore focus on limitations to total emissions of each Party to the agreement. National emission ceilings resulting from an international agreement will be more stringent than national emissions in the case of uncoordinated policies. The European Union provides a platform for such negotiations between Member

States. The upshot of the above is that transborder emissions provide an argument for international co-ordination of national environmental policies. The co-ordination should focus on emission targets for each Member State. Next the Member State adjusts its emission standard as to keep the total emission below its ceiling. The result might be an even larger differentiation of national emission standards than before the agreement. Faure (2001, p.275) concludes on the basis of the economics of federalism literature that the economic argument to harmonise environmental rules with respect to problems that are not transboundary is relatively weak. However, uncoordinated national policymaking is not optimal when it involves externalities such as e.g. transborder pollution and according to Faure (2001, p.269) the most important reason for (centralised) Community action with respect to the environment is probably the transboundary character of the pollution problem to be regulated. We have seen that the neo-classical model concludes that the case for harmonisation is weak even for problems with transborder aspects as generally there will more appropriate imposing forms of international co-ordination. Transborder pollution certainly does not provide an argument for harmonisation leading to internationally uniform emission standards (Nentjes 1994, Trebilock and Howse 1998).

2.2.2.2 *Strategic behaviour*

From the literature of international trade it is well known that although free trade can raise welfare of all participant countries compared to a regime where countries protect their national industries, there still can remain the possibility for a single country to increase its welfare to the detriment of other countries by way of import duties or other trade restrictions (see e.g. Ethier, 1988). If such measures are retaliated against by the countries faced with the negative consequence of the foreign trade instrument, all countries lose compared to the free trade regime. To prevent or mitigate such developments, international

agreements such as the General Agreements on Tariffs and Trade (GATT) and international organisations have been established to see to it that national governments play the game of international trade according to the rules.

Since international commitments restrict national governments in their discretion to raise trade barriers through import duties and direct trade restrictions, there can be an incentive to introduce protection of national industry in another, less visible way. Various types of national regulation, and among them environmental regulation, may serve this aim. The bulk of the literature on this subject takes for granted that national governments have the objective of maximising national welfare. Although casual observation suggests that in reality other considerations such as protecting employment in specific sectors often are more influential, we shall follow the literature in its assumption of welfare maximisation. In that context strategic behaviour of national governments aiming at improving national welfare at the cost of other countries is feasible only if the government policy can change the terms of international trade. The government of a small country with export and import industry operating under conditions of perfect competition and without sectors which have a considerable part of world trade (in terms of export or import) is not in such a position.

The literature distinguishes two types of situations where strategic behaviour, i.e. trade policy under the guise of environmental policy, is feasible. In the first place, a country can have a large share (in terms of imports or exports) of the world market and an industry with perfect competition. In such a case, measures taken by the government of the country with a large market share will affect the world market price. For example, a tax or a very stringent environmental standard would increase the price of that good on the world market. This case will be discussed first under the heading 'large country assumption'.

The second case of strategic behaviour to be discussed arises where the industry has an oligopolistic market structure. With specific measures, such as a

subsidy or lax environmental standards, the government can help the national oligopolistic export industry to set its price at such a level that profits for the national industry are maximised. In his overview of the literature regarding the wisdom of trying to improve the competitive position of the home producers by means of an environmental policy Withagen (1999) makes the same distinction between the situation where the goods markets are competitive internationally and where the international market can be described as an oligopoly.

Large country assumption

An assumption in the Heckscher-Ohlin model is that the national markets are perfectly competitive. In the model of perfect competition, the invisible hand of the market brings balance between demand and supply. The mechanism results in a situation where marginal cost equals marginal benefit on all markets. On the market for final consumption goods this implies that the marginal cost of a product (its price) equals its marginal benefit to the consumer and on the market of inputs this implies that the marginal product of an input should equal its marginal costs, and so on. In the context of the Heckscher-Ohlin theorem, the optimum strategy for countries is generally to refrain from any interference with the resulting outcome. In case of external (environmental) effects, the first best environmental policy should result in internalisation of the externalities. According to Barrett (1993), if the world price of a product is determined by the world market and cannot be affected by the policies of a national government and pollution is national, then the government does not have an incentive to act strategically. Therefore it will choose the level of pollution control and the stringency of the emission standard such that the marginal cost of pollution control equals the marginal environmental benefit of controlling pollution.

Only in some specific cases is it optimal for a country to use a trade instrument. Perfect competition on the markets does not imply that there are no opportunities for governments to act strategically. However, this is limited to the case where the country has the means to affect the product's price on the world market. The first result is that a 'race to the top' can emerge. By this we mean that a country may set the emission standard for its export product more stringent than is Pareto efficient. An import country can do just the reverse, setting its standards too low. Just as a monopolist sets a price higher than marginal costs to maximise its profits, the government of a country may try to raise the price of a certain good exported by its industry in order to increase national welfare. More in general, it applies whenever the industry is perfectly competitive (firms at home and abroad are price-takers) and the national industry has such a large share in world output that a higher price at home raises the international price of the product and consequently its price in all countries. The means through which a government can increase the world price is through a tariff, hence the description as this theory as the optimum tariff theory. More in general, a government can increase national welfare by imposing an export tax if the country is a net exporter and an import subsidy if the country is a net importer. Thus, a net exporting country can use its 'market power' to increase the world price and thus receive a rent even though individual producers do not have market power. The tariff or subsidy introduces distortions in the market and therefore decreases total world welfare, but the welfare of the country that exploits its market power increases. In other words, such strategic behaviour is a 'beggar my neighbour' type of policy with losses of the neighbour exceeding the benefits for the strategically behaving country.

The optimum tariff theory proves that a country can improve its welfare by setting a tariff to capture a rent if the government has market power on the international market. If there is also a (national) environmental externality, the governments needs two instruments – i.e. one trade instrument to capture the rent

that maximises national welfare and one environmental instrument that puts a price on the use of the environmental input (see e.g. Withagen 1999). This is no more than an application of the well-known principle by Tinbergen (1952) that the number of policy targets should not exceed the number of policy instruments available. The government may be tempted to use the environmental policy to increase the world price of its export product and thus receive a rent. In theory, the urge to resort to environmental instruments for trade goals are more pressing when trade instruments are banned. Treaties banning the use of tariff imply that the country cannot reach its first best outcome. Since the country cannot improve its welfare by changing the terms of trade by means of a tariff or subsidy, it might want to resort to the environmental policy instrument to fulfil two tasks – determining the pollution level as well as the price of the internationally traded good. In case of the state being a major exporter, the emission standard is set more stringent than in case two instruments are available. The more stringent standard raises the (marginal) cost of the export good and pushes up its price in the world market. The government accepts the net costs of over-abatement of pollution because of the higher benefits of a higher price for the exported good. If the state is a major importer, the government will lower the emission standard. It accepts higher environmental damage because these costs are exceeded by the benefits of having the import goods at a lower price (see Dijkstra 1999 and Ulph 1997 for the mathematical underpinning).

It should be remembered that using the stringency of environmental standards as an instrument of trade policy is as much a ‘beggar my neighbour’ policy as is the use of tariffs and subsidies. Welfare is lower for all countries than it would have been without strategic behaviour. There is a clear case here for international co-ordination so as to avoid the strategic setting of environmental standards. But such co-ordination would not require harmonisation in the sense of uniform standards. Rather, environmental standards would be set in a non-strategic way by taking into account the national environmental scarcity. In

countries with environmental scarcity the standards will be more stringent than elsewhere. In practice, this might not be so easy due to information asymmetries. On the other hand, one might doubt whether national governments really have the information and control to be able to co-ordinate and fine-tune their environmental and trade policy resulting in the type of strategic behaviour assumed by the optimum tariff theory.

Whereas the aforementioned view can result in (too) high national environmental standards for the national industry producing output for exports, the political discussion on environmental policy and international trade often shows fears of the opposite, i.e. a 'race to the bottom'. The worries are not so much that governments might frustrate free trade by setting too stringent standards but rather that governments may refrain from setting appropriate environmental standards. More specifically, the suspicion is that governments of which the industry faces competition in the international market will set too lax standards, resulting in a 'race to the bottom' or 'ecological dumping' (Withagen, 1999).

By setting a relatively lax environmental standard for the production of the product that competes with imports, the government protects the home industry against imports to a certain extent. But such protection is not the ultimate aim of the policy, which is welfare maximization. The government accepts that due to lax standards the home industry pollutes more and the ensuing environmental damage decreases welfare, because that welfare loss is more than compensated by the impact the lax standard has on the price of the product on the world market. The price will go down, the country will buy its import products at a lower price and the consumer surplus will increase. Thus, net welfare increases for the import country. In conclusion, in case of perfect competition on the world market and a government that maximizes national welfare (the sum of the consumer and producer surplus minus environmental damage), actions geared to relaxation of environmental standards make sense only if the country is a net

importer and consumes such a substantial share of world output that government actions do affect the price of the product on the world market with perfect competition.

Oligopolistic markets

Imperfectly competitive markets create rents, and thus there is an incentive for the governments to try and obtain a share of this rent. Both the producers and the governments can therefore act strategically. Many models consider only the case where there is strategic behaviour by the government only (e.g. Rauscher 1994). In the literature it has been demonstrated that a strategy to lessen environmental norms can be maximising national welfare when competition in the international common market is imperfect. In the economic literature, Cournot oligopolies that export to the international market and compete there with foreign Cournot oligopolists and governments using emission taxes as the instrument of environmental policy are usually assumed. The environmental regulation can be used to manipulate the price of the national export industry in such a way that its market share and profits are increased. The national emission tax will be set at a lower level and an emission standard will be less stringent for the exporting oligopolist than in the case of an international product price that cannot be changed by government action. Loss of environmental quality at home will be more than compensated by increased profits of the export industry due to a larger market share on foreign markets (Barrett 1994, Kennedy 1994). Note that the government policy is just the opposite here of its strategic behaviour in the case of an export industry with perfect competition on the world market.

This case resembles the use of export subsidies by a country to increase its market share, which under certain conditions increases national welfare. But other governments have an identical incentive to subsidise their industry. Brander

and Spencer (1985) have demonstrated that in a symmetrical equilibrium of a two stage game (first governments set their policies, next firms make their decision) both countries will end up with the same subsidy rate and at a Pareto inferior Nash equilibrium. Ulph (1997) has shown that in case an emission tax is applied strategic lowering of taxes would have the same result.

The plausibility of the strategic behaviour by the governments also depends on their assessment of the plausibility of firms moving to countries with less strict environmental policies. It is generally assumed in literature that capital is fixed in the short run, and the producers will not be able to shift their installations to other countries. In the long run, capital is mobile and there will generally be opportunities for producers to move production to other countries. There are of course also industries that are fixed also in the long run, for example the extraction of natural resources (bauxite, oil) is per definition limited to a certain specific area or location. These extractive industries apart, whether a race to the bottom is plausible depends on the timeframe.

The question whether there is an incentive to set emission taxes strategically low to attract polluting industries has been discussed in recent literature (Oates and Schwab 1988, Markusen, Morey and Olewiler 1995, Ulph 1994, Rauscher 1995, 1997). It turns out that a rat race to low emission taxes is possible, in particular if national environmental damage is low. However, in case of high national environmental damage emission taxes that are set strategically will be higher than in a co-operative optimum. Even a 'not in my backyard' case may emerge, in which scenario no country wants the export industry even though the result—the non-existence of this industry—would lower the welfare of all countries together.

Ulph (1992, 1996) focuses on strategic behaviour by the producers. It is concluded that the use of standards induces less strategic behaviour by producers than does the choice for taxes. In the 1992 model standards Pareto dominate the use of emission taxes but in the more general 1995 model the choice between

emission taxes or emission standards depends on the relative importance of producer and consumer surplus.

In the above, we have assumed that oligopolistic firms compete with quantities (Cournot conjecture). Another point of departure is that firms compete in prices (Bertrand conjecture). In this case, in the words of Barrett (1993, p.163), ‘competition will force down prices to equal marginal costs. Profits would be increased if the government could increase marginal costs by tightening the pollution standards, and the government would have an incentive to do so until the additional profit obtained by tightening the standards a little bit just equals the difference between the marginal cost of abatement and the marginal damage. When firms compete internationally by choosing prices, it is optimal for the government to impose ‘strong’ pollution standards. This result holds whatever the market structure (provided there is imperfect competition).’ As we have seen in the previous subsection, a similar policy would maximise national welfare in case of an export industry that operates under conditions of perfect competition.

We can conclude that a welfare maximising government behaving strategically in regulating firms operating on a oligopolistic world market might choose to set standards either too low or too strict compared to the Pareto-efficient solution; it depends on the specific environmental and market conditions what the outcome may be. Since it is inefficient there is an argument here for international co-ordination of environmental policies. But similar to the case of perfect competition and a large country discussed above, it does not imply that reducing inefficiencies would require approximation or even equalisation of environmental standards: Co-ordination does not imply harmonisation.

Non-neo-classical approaches

On the basis of neo-classical theory, we can have either too high or too low environmental standards compared to the Pareto efficient situation. However, there are also other arguments that result in the conclusion that standards are too high or too low.

Often, a fear for too low environmental standards does not originate from the worry that importing countries might depress the environmental standards. The analysis is much less sophisticated. The argument simply runs that domestic producers lose from national solo runs to implement tighter pollution control because the cost of such regulation has to be paid only by them and foreign competitors may therefore improve their competitive standing (Bommer, 1996). These fears do not depend on market power by a country, and are therefore more generally applicable. Producers have argued that high environmental norms only serve to displace production to countries with lower environmental standards, but one cannot easily imagine a producer calling for higher national environmental standards.

It is evident that in this discussion the government is not assumed to maximise national welfare. Instead, it is supposed or expected to protect employment, output and profits in the sectors that see their position threatened by the lax environmental standards abroad. Export industries fear loss of sales and in the worst case industries may migrate to the countries with the most lax environmental standards. To prevent such a race to the bottom international co-ordination may be required. But again, economic theory does not provide arguments that this should lead to an international agreement to apply uniform standards everywhere.

The argument for centralisation and harmonisation based on fear for destructive competition resulting in a 'race to the bottom' is also present in the economics of federalism literature. The underlying idea is that countries will

react to lower environmental norms in other countries by reducing environmental norms themselves in order to allow their industry to stay competitive. The environmental standards in all countries would be less strict in all countries compared to the situation where countries would not fear for the competitive position of their industry, with the difference between the desired environmental standard and the resulting environmental standard depending on the possibilities of industry moving as a result of international environmental cost differentials.

Empirical evidence has shown that the concern for a rat race to low standards is over-exaggerated. Studies that looked at the relocation of industry have found little evidence that there is a strong link between location and environmental policy (e.g. Leonard, 1988). Only in the case where the polluting input constitutes a large component of overall costs and the opportunities for introducing cleaner production methods are limited will higher environmental standards have a significant effect on competitiveness. This does not imply of course that national governments believe that it is not worthwhile to set environmental standards strategically in case of competitive national markets.

On the other hand, Porter (1991) has a very heterodox view of how a stringent environmental policy can affect international trade that results in too stringent environmental standards. He observes that industry usually has an oligopolistic market structure. Research and development are major instruments of firms to gain an advantage over competitors. Next to that, he implicitly assumes that competition is not always that hard and under such conditions types of X-inefficiency are developed within the oligopolistic firms. Costs are eating away potential profits. Under such condition, an external shock in the form of an ambitious environmental policy of the government with stringent environmental requirements can awake the firm out of its state of lethargy. The high environmental norms stimulate research and the development of new technologies. The high potential costs of pollution control also urge the firm to identify the slack in the organisation, to reduce X-inefficiency (e.g. by reducing

waste in raw materials and fuels) and to restructure production. Innovation and cutting X-inefficiency result in the end in lower costs of output and new products (such as production of pollution control technology which in due time opens up new export markets). This theory is quite the opposite of the orthodox model of international trade. In our view there are no good arguments to see it as a beggar-thy-neighbour policy since in the end everyone can benefit from such innovation in products and production processes. Neither does such a national policy of whipping national industry to innovative action require international co-ordination.

Conclusion on grounds for strategic standard setting

This short survey of the literature brings out that the argument for non-co-operative national setting of emission standards or taxes breaks down if the assumptions of the Heckscher-Ohlin theories are not fulfilled. Even though strategic use of national environmental policy instruments does not necessarily take the form of a race to the bottom, it is detrimental to the welfare of Member States, in particular in case of reciprocal strategic use. There is therefore an economic argument for international co-ordination of environmental policy, even though 'the incentives to behave strategically will typically not be significant' (Barrett, 1993, p.164). However, the argument for co-ordination should not be understood as an argument for full harmonisation in the form of uniform environmental taxes or standards or even lower levels of harmonisation. The first best solution requires co-ordinated EU policy to fight imperfections in competition hand in hand with international and inter-EU agreements on emission ceilings per country. The more successful such policies are the less reason there is for co-ordination by way of differentiated emission standards or emission taxes.

2.2.2.3 *Product standards*

The third case for international co-ordination of (environmental) regulation arises in the case of product standards. It is relevant in the case that pollution is generated in the process of consuming the product whereas in the foregoing we have assumed that pollution is generated in the production process. If the pollution is generated in the consumption process, the optimal instrument should also be directed at consumption. The first best instrument would be a consumption tax on the polluting products.²⁷ This tax should be identical for both home produced and foreign products so as not to influence production. The consumption tax will not influence the comparative differences relating to production, and thus production will occur where this is best. The tax rate depends on the relative abundance and valuation of environment in the respective countries, thus tax rates need not be harmonised internationally.

The EU approach has been to set product standards, in the case of consumption related pollution. Differences between product standards of Member States result in fragmentation of the market. If every Member State were allowed to adhere to its own standards with respect to product safety, level of bio-degradability, packaging, et cetera, the process of specialisation would be severely curtailed. The cost of entry into a foreign market would be raised as a producer would have to meet the specific requirements of every individual Member State. This is a situation where full harmonisation will increase competition, thus contributing to efficiency in production (Nentjes, 1993). Nevertheless, there is an alternative approach. Country X could accept products that comply with the legislation in country Y and vice versa. Reciprocal acceptance thus prevents competitive distortions and increases efficiency.

27. Another option is to have a national pollution tax on production coupled with an identical import tax (Snape, 1992).

The distinction made before between product norms and process norms is complicated by the (political) question whether the producer or the consumer should be responsible for the pollution during each of these phases. Traditionally, a distinction is made between product standards and process standards, however this distinction has become blurred with the introduction of life-cycle analysis. For example, the Commission introduced a proposal for a Council Regulation on a revised Community eco-label award scheme in 1997 that endorsed such a life cycle approach. The life-cycle approach introduces competition between manufacturers on the ground of the environment. From a neo-classical perspective, competitive distortions can emerge when producers in locations with different environmental characteristics are faced with uniform environmental standards. The life cycle approach will fail from a neo-classical perspective if a life-cycle approach involves uniform rules on production processes independent of the environmental impact.

In conclusion, products standards that involve life-cycle analysis should be treated differently than classical product standards. Whereas full harmonisation can be an efficient solution to regulate classical product legislation, there are dangers in harmonising product legislation that is based on a life-cycle analysis if this does not take into account differences in environmental characteristics amongst Member States.

2.2.2.4 Conclusions on grounds for international co-ordination

We conclude that there are arguments for international co-ordination of environmental policies of EU Member States. However, only in the case of polluting products, there is a strong economic argument for co-ordination in the form of full harmonisation of product standards. In all the cases, co-ordination of source standards does not even require low levels of harmonisation that reduce

differences in national emission standards for sources. Pollution caused by transborder emission and strategic use of environmental policy as instrument of trade policy requires co-ordination, but national differences in environmental characteristics should be taken into account. This implies that harmonisation is not optimal from an economic point of view. Control of transborder pollution requires co-ordination of controls on total emission ceilings of Member States. To prevent strategic standard setting, Member States have to agree on differences in environmental conditions and preferences and accept differences in standards that reflect such differences in (perceived) environmental scarcity or abundance between Member States.

2.3 Distortion of competition as inequity—the political view

In the previous section we discussed the economic theory based on the welfare maximising Pareto criterion. This is one of the main views. We have called the other main view that appears to have influenced the European environmental policy with respect to stationary sources the political view. In reality, the political view seems to have two different roots. In practice, these two roots are difficult to distinguish. They will be shown to lead to similar policy advice. The first root is the mercantilistic theory, the second root is based on an equity rather than a purely economic criterion.

2.3.1 Mercantilistic view

The mercantilist argument concentrates on specific national sectors that seem to have a handicap in competing on the international market. This handicap can be a relatively high input price or national legislation that increases production costs, for example. The mercantilist doctrine overlooks that a relative handicap in one sector means comparative advantage in other sectors. Instead it seeks to eliminate the handicaps. According to mercantilist theory, a country should achieve a net export position with a surplus on the balance of payments. It is clear that mercantilistic doctrine takes a nationalistic point of view based on the assumption that trade is a zero-sum game: a surplus for one country means a deficit for the other. This is quite the opposite to the criterion of Pareto efficiency used in neo-classical welfare economics. There the view is that we can raise welfare in at least some countries without lowering it in other countries.

Although the doctrine will not be explicitly adhered to nowadays, it may still linger in the heads of decision-makers and some of their advisers. For example, Porter (1990, p.XII) observes that ‘to many members of Congress, competitiveness meant that the nation had a positive balance of trade’ and Arden-Clark (1993, 150) observed that ‘the need for foreign exchange earnings, whether real or perceived, drives much of the international level economic and industrial policy-making processes’. In order to safeguard and possibly increase its foreign exchange surplus, a country should therefore be allowed to implement measures to rebalance any short-term economic disadvantage. Such correction could include measures that discriminate between similar products on the basis of the environmental content of the production process. Between particular countries tariffs on imported products could be set on to compensate price differences due to lax foreign standards (Arden-Clarke, 1993).

Regarding this issue, the industrial lobby will be supported by environmental organisations, just as producers are supported by labour employed

by them where it concerns the international harmonisation of labour laws. They will defend the position that countries that take the lead in raising environmental standards should not be penalised on world markets for having higher costs of environmental protection. Governments of States that are environmental leaders must be permitted to take trade measures that level the playing field between environmentally sound and unsound goods (Arden-Clarke, 1993, pp.80-81). The environmentalists are also inspired by the fear that in the absence of harmonisation of national environmental regulations a race to the bottom between governments would ensue, initiated by pressures from national producers (Vogel, 1995, p.11).²⁸

The question is whether competitive distortions can also arise if the Member State itself chooses to set standards that are stricter than the minimum standard. The opportunistic mercantilistic theory would propagate harmonisation of the standards of other countries to the level of the relatively high national standard of your own country. Minimum harmonisation is not incompatible with the mercantilistic theory as long as the agreed upon Community minimum standard is not below the desired national standard. If the desired national standard is higher than the harmonised minimum standard, the home government should aim for a higher harmonised standard.

28. Vogel (1995, pp.58-59), summarises this type of reasoning, which contributes to the expansion of environmental regulation in Europe at the EC level as follows: 'In the case of national standards, nations that had adopted more stringent national pollution control than other member states might find the goods produced by their industries placed at a competitive disadvantage. They might therefore be forced to choose between excluding goods produced by member states with weaker regulatory requirements or lowering their own standards to those of their competitors. The former threatened economic integration; the latter made national regulatory policies hostage to those of the least strict member state'.

2.3.2 Fair trade view

In this view, the aim is to achieve equal or equitable competitive positions for firms competing within the same industry in different Member States. This approach is characterised by demands for a level playing field. A level playing field requires that 'identical' producers should operate under a uniform legislative regime.²⁹ From this perspective, relatively lax environmental policies in one country constitute an implicit subsidy to its producers that should be neutralised (Trebilock and Howse 1998, p.13). Thus, the main goal of the inequity argument is to achieve some form of fairness rather than efficiency.³⁰ If domestic tax or regulation is not applied to similar products that are imported the domestic products will have an 'undue' competitive advantage (Charnovitz, 1994).

The application of this argument to environmental policy is fairly recent. This is due to the fact that environmental policy as such is rather new and the fact that the recent world-wide integration of markets (the reduction of tariffs through GATT, the creation of the common market) has highlighted differences between national policies that used to be offset through custom's duties et cetera. Industrial interest groups in sectors that face such handicaps—like labour intensive industries in states with relative labour scarcity and environment intensive industries in countries with strict environmental standards—will use the level playing field argument in their lobby for protection. If the lobby is effective, politicians will echo their arguments (Morris 1993, p.23, Richardson 1990, p.266). Aftalion (1999) remarks that 'for fear of unfair competition, in case

29. Similarly, the need for European legislation concerning the protection of personal privacy is being defended on the basis that a level playing field has to be ensured (Hustinx, P.J., in: NRC Handelsblad, August 23, 1999, p.7).

30. Classical competition policy can also have links with equity however, as a 'possible objective of competition policy might be the dispersal of power and the redistribution of wealth: the promotion of economic equity rather than economic efficiency' (Butterworths Competition Law, Issue 0, July 1991)

Member States had different pollution standards, the Commission almost always mandates uniform emission point standards’.

In extremis, the ‘level playing field’ argument would not even accept cost differences arising from differences in natural endowments. The more moderate view is to counter only differences in cost conditions created by differences in national legislation that arise out of divergent national preferences rather than endowments. However, this distinction is blurred - witness the protests from producers from the Western world against unfair competition from countries such as India and China where real wages are much lower. The application of the level playing field argument is not limited to Europe. According to Scott Barrett (1993), legislation has been introduced in the US Senate which would allow the US to impose duties on products produced under less strict environmental standards than those in the US itself.³¹

In the mercantilistic and the fair trade context, the term distortions of competition has a different meaning than in the economic free trade context discussed in the previous section. In the free trade context, a distortion of competition arises if the market equilibrium somehow does not reach the social optimum of Pareto efficiency. This occurs whenever some costs are not internalised in the market price. In the mercantilistic and fair trade context, competition is hence being distorted if foreign producers do not have to conform to labour laws or environmental legislation equally strict as those faced by local producers. Thus, the alternative interpretation of the concept of distortion of competition’ does not focus on results, i.e. the efficient allocation of production in the EU, but on starting conditions.

31. See also Morris (1993, p.123) and Richardson (1990, p.266): ‘The recent appeal in the United States of policy convergence over policy tolerance appears to rest in suspicions of unfairness. One might typify it as, ‘If they only stopped cheating on the system and played like we do, then the field would be more level; if we only ‘wised up’ and played like they do, we could share all their advantages.’

Applying the inequity interpretation to environmental regulation implies that inequality amongst national emission standards concerning a specific industry creates distortions that should be eliminated or offset. As the legal scope for offsetting the inequity at the border is nullified as a result of the creation of the common market, this leaves the elimination of inequities through harmonisation as the remaining solution. A very clear use of the argument used by industry is given by Morris (1993, p.171)³²: ‘As a general proposition, business believes that, to minimise trade and economic distortions that may arise from such differences, and to promote trade across national borders, the goal should be to harmonise environmental regulations and standards or to achieve mutually recognised essential requirements if harmonisation is not attainable. Harmonisation of standards, and international agreements to deal with rules about production and processing methods going beyond these designed to render a product ‘fit for use’ are the best way to avoid undesirable competitiveness consequences’. Such thoughts by producers will be independent of whether the businessmen are American or European.

Harmonisation could thus provide the level playing field desired by industry. It is implicit from this perspective that differences in factor scarcity and national preferences between states should not play a role in designing environmental policies. Emission standards should be identical in all EU Member States just as national labour conditions and legal minimum wages should be equalised. In the Titanium dioxide case³³ (see section 5.4.1) the Commission argued that harmonisation in order to remedy distortions of competition had been the prime reason for legislation. It proved the existence of such competitive distortions and the need to do something about it by pointing out that prices for products varied up to 20% between Member States and that the differences were increasing. Thus, whereas economists would look at the production costs in

32. Morris was the Senior Vice President of the US Council for International Business.

33. Case 300/89 Commission versus the Council, in: ECR 1991, I-2867.

different regions and expect specialisation on the basis of comparative advantage amongst regions with different relative costs, the Commission looked the other way around and interpreted differences in relative costs not as an opportunity for welfare augmenting trade but as a distortion of competition in itself.

The question is whether competitive distortions due to unequal conditions of competition can also arise if the Member State itself chooses to set standards that are stricter than the minimum standard. From the fair trade theory, it cannot be called unfair if the differences in abatement costs between national and foreign producers are due to strict national standards because there is no requirement to set stricter national standards. See also Rehbinder (1985, p.211), who argues that 'if distortions of competition result from such measures, as would be expected when a member sets stricter emission or specification standards although not necessarily in the case of stricter ambient quality standards, this will primarily disadvantage the member state concerned and can be easily remedied by it'. Any other reasoning would result in the conclusion that the fair trade theory aims at full harmonisation of environmental standards. The fair trade theory, however, aims to reduce unfair advantages due to either insufficient or non-existing environmental standards. In consequence, the fair trade theory requires the setting of a threshold standard where higher standards would be allowed but where lower standards would be unfair. This view is compatible with what we have labelled minimum harmonisation in chapter 1.

2.4 Differences between the economic view and the political view

If we compare the economic free trade case with the mercantilistic and fair trade case, some differences stand out. Countries that are environment abundant, either on the basis of quantities or on the basis of differences in valuations of the environment, will under a free trade regime specialise in environment intensive

products and they will be allowed a competitive advantage for these products by countries importing the products. Under the fair trade regime, the effects of national environmental policies are isolated from effects on the world markets through either subsidies on national production or tariffs on import of foreign environment intensive products. In case the country with the stricter environmental standards is a net exporter for the affected products, the more expensive national production would receive a subsidy based on differences in emission standards or environmental investments might be subsidised directly. If all producers are identical and have equal abatement technologies the tariff should be based on the cost difference resulting from these differing standards. In this situation, the price effects on the world market are perfectly offset and trade flows are unaffected. To assure efficient national compliance with the emission standards, the subsidy should be based on most efficient compliance with the emission standards. If the country with the stricter environmental policies (i.e. the environmentally scarce country) is a net importer of environment intensive products, the national producers are shielded from foreign competition by tariffs in order to raise the costs of imports to national production costs.

Finally, we should notice the (implicit) assumptions underlying the mercantilistic fair trade line of thought. The first assumption is that even very small differences in production costs can have large effects on trade flows. No country would voluntarily set stricter environmental standards because the losses from losing exports would exceed the gains from the higher environmental quality, no matter how small the increase in environmental standards. If this assumption would not hold, and world trade and production patterns are fairly inelastic, the effect of differences in national and foreign production costs on national production and employment would be small.

The second implicit assumption underlying the mercantilistic fair trade line of thought is that countries will not respond to higher environmental standards in other countries by raising their own national emission standards or that such

reactions by other countries are not anticipated when deciding on the national standard. If other countries would respond to strategic standard setting by one country and this is not anticipated by this country, raising foreign production cost through tariffs or lowering national production costs through decreasing environmental standards could result in a race to the bottom that would decrease both national and world welfare. Every measure with the intent or effect of protection of the national industry in one country would ignite a new round of protective measures in other countries.

The third implicit assumption is that consumers do not make a distinction between similar products produced with production methods with different environmental effects. If consumers do value protecting the environment and can distinguish between products on the bases of the environmental pollution during production, the higher environmental costs could be offset by a premium on environmental extensive products. If the consumers have the knowledge and willingness to pay for the natural environment, consumers can base their consumption basket on the bases of balancing costs and benefits including a life-cycle analysis of the environmental impact of the production process. Such preferences could run counter a mercantilistic policy that does not value the natural environment sufficiently.

2.5 Summary

A prime objective of the (EEC) Treaty of Rome is to raise the standard of living, i.e. to increase welfare, by establishing a common market for goods and services where competition was undistorted. The question answered in this chapter was whether and if so what kind of arguments for harmonisation of environmental standards of Member States can be derived from neo-classical theory and from the alternative mercantilist and fair trade doctrines. The different

answers were related to the different definitions of what is meant by distortion of competition.

According to standard economic trade theory, the welfare gains from international trade depend on the existence of similar industries in different Member States operating under different 'conditions of competition', including differences in environmental scarcity. These different conditions are embodied in different relative production costs of goods. International specialisation will result given that international trade is allowed, making all countries better off economically. The theory implies that, apart from some special cases where policy co-ordination is required, there is no need for harmonisation of environmental standards for production processes. Prescribing equal emission standards for sources prevents environment abundant countries from exploiting their competitive advantage and it blocks specialisation by protecting potentially polluting industries in countries where environmental endowments are scarcer.

Whereas in general there is no need for international harmonisation of environmental policies on the basis of neo-classical economic theory, there are circumstances that require international co-ordination. The first case is where pollution crosses the national borders of Member States. In this situation, an externality arises that needs to be rectified at the international level. The second situation is when Member States have an incentive to act strategically. We identified two situations in which strategic standard setting could occur. The first case of strategic standard setting can arise where the country has such a large share in the world market that its national standard setting affects the world price. The environmental norms would be set along the line of the optimal tariff theory rather than so as to maximise world welfare. The second case for strategic standard setting is where the competition in the international market is imperfect. Where the market structure can be described as oligopolistic, governments have an incentive to weigh environmental costs and benefits against the profits made by the national producer. The third case that requires international co-ordination

of environmental standards is product standards. Different product norms would cause divisions of the common market along lines that mark differences in national product legislation. Full harmonisation of product standards can be a valid strategy to protect the common market.

Apart from the last case – product harmonisation – international coordination does not mean that harmonisation of environmental standards is the best solution. In general it is not. If it occurs, neo-classical theory would see it as a distortion of international competition: an inefficiency lowering the welfare gains from international trade. We have confronted this ‘neo-classical liberal economic’ view with an interpretation of distortions of competition which can be named the ‘distortion as unfairness’ view of competition. Given its antecedents in the history of economics it can also be called the mercantilistic political view. It considers competition to be undistorted if similar industries operate under equal conditions. This approach is characterised by calls for a level playing field, which implies that identical producers should operate under a uniform legislative regime, i.e. harmonisation of environmental standards.

In the remainder of the book we will identify which of the views, the neo-classical economic view or the fair trade view, has been behind the drafting of environmental legislation with respect to stationary sources by the European Community.

Chapter 3 Harmonisation in Community Primary Legislation

3.1 Introduction

In chapter 2, it has been concluded that in order to maximise welfare, governments should have the opportunity to determine the appropriate emission standards at the national level. International harmonisation or even co-ordination is a first best policy only under some specific circumstances. The problem to be analysed in this book is to what extent these policy recommendations derived from welfare economics were incorporated in the environmental policy of the European Community. In other words, the question is whether the EC has left it to the governments of Member States to set national pollution standards or whether there has been a drive for (full) harmonisation, in the sense of equalising emission standards or environmental quality standards. The criterion is what degree of autonomy individual EC Member States have in setting environmental standards. To answer this question we will have a close look at the primary legislation, action programmes and secondary legislation of the Community enacted during the respective periods identified in chapter 1. This chapter makes a beginning and focuses on the primary legislation. As we shall see, the changes in the Treaty of Rome reflect the evolving views of the Council on environmental policy and on harmonisation as a main instrument for environmental policy.

Notice that primary legislation often does not offer any answers with respect to the degree of centralisation. The degree of centralisation concerns the questions which policy areas are transferred from the national authorities to the Community authorities and can generally only be determined bottom up, i.e. from reading the secondary legislation. For example, once secondary legislation on ozone has been adopted, this policy area has been centralised to the extent that the secondary legislation covers it (i.e., to the extent that it falls within the scope).

Only very rarely does the Treaty itself delineate the scope of the policy areas that are centralised and can we forgo the bottom up approach. The degree of centralisation will therefore not be addressed in this chapter. However, every item of secondary legislation (regulations, directives, et cetera) has to be based on a legal base from the Treaty (primary legislation).

One aim of this chapter is to get indications on whether the economic or the political definition of distortion of competition has been used in the Treaty. The first step is to identify the articles that (implicitly) refer to harmonisation, fair competition and competitive distortions. Section 3.2 covers the primary legislation from the first period that goes from the entering into force of the Treaty of Rome on January 1, 1958, up to the Paris Summit in 1972. At this Paris Summit, protection of the natural environment was made a Community goal. Because we will focus on the period up to the Paris Summit, this allows us to analyse in the following sections and chapters whether the definitions used in the Treaty of Rome are different from the definitions used in the Community environmental policy.

Another aim of this chapter is to identify the articles on which the environmental policy could be based since the Paris Summit, and establish to what extent these legal bases allow or require a specific level of harmonisation such as e.g. full harmonisation or minimum harmonisation. The (set of) Treaty articles that were appropriate for environmental legislation changed after each revision of the Treaty. Section 3.3 will cover primary legislation from the second period that runs from the 1972 Paris Summit up to the entering into force of the Single European Act on July 1, 1987. Section 3.4 covers the period from the Single European Act until the Maastricht Treaty. Section 3.5 will cover the period starting with the Maastricht Treaty (the Treaty on European Union) up to now. The Maastricht was signed in February 1992 and entered into force on

January 1, 1993.³⁴ In section 3.5 we shall also discuss the articles from the Treaty of Amsterdam, which entered into force May 1, 1999.³⁵

For clarity, we will indicate every article with the article number and a code that indicates the version of the Treaty. Pre-Amsterdam article numbers will be used for the period up the Treaty of Amsterdam for easy of reference to older literature. The code for articles in the Treaty of Rome up the Single European Act is TR, articles following the Single European Act have the code SEA, articles following the Maastricht Treaty have the code TEU, and articles following the Treaty of Amsterdam have the code TA. The relevant parts of the most relevant articles from the Treaty can be found in the annex at the end of this book.

3.2 Distortion of Competition and harmonisation in the Treaty of Rome before 1972

The preamble of the Treaty of Rome states ‘that the removal of existing obstacles (to the common market – RL) calls for concerted action in order to guarantee steady expansion, balanced trade and fair competition’. This formulation puts the concept of fair competition to the foreground. We assume that there is a close link between ‘fair competition’ from the preamble and ‘competitive distortions’, which are mentioned in subsequent articles, and that fair competition implies removal of competitive distortions. However, this does not answer the question which definition of competitive distortions is used. For this we will have to look at the articles in the Treaty.

The first explicit reference to competitive distortions is in article 3TR. The Treaty of Rome has several layers, and article 3TR very generally states the goals of the EEC. This article includes the phrase that ‘the activities of the Community

34. In: OJ C191/1 of July 29, 1992.

35. In: OJ C349/1 of November 10, 1997.

shall include (...) the institution of a system ensuring that competition in the common market is not distorted'. The standard legal interpretation is that it has a very general meaning. All practices that restrict competition, discriminate and distort competition in some way are forbidden (see e.g. Kapteyn 1987, p.485). The general formulation of distortion of competition in the Treaty could be interpreted in line with both the neo-classical economic theory and the mercantilistic-fair trade theory. Hence article 3TR sheds little light on the matter which interpretation is used. We have to turn to articles that further clarify and specify the concept of distortion of competition.

The next reference to distortion of competition is in article 85TR. Article 85TR focuses on the prevention, restriction or distortion of competition as the object or effect of concerted practices of firms. Some examples are specified, such as price fixing, controlling production or investment and discrimination. They refer to cases that clearly can be brought under the caption of inefficiency, as such distortions of competition decrease total welfare, according to standard welfare economics. However, the competitive distortions that are mentioned can also be considered as creating inequities, enriching the producers in a price fixing cartel to the detriment of the customers. This 'vertical' inequity is, however, different from the 'horizontal' inequity between producers that causes the unfair situation according to the mercantilistic-fair trade theory we discussed before. Also forbidden are concerted practices placing other trading parties at a competitive disadvantage. In our opinion, article 85TR primarily reflects the liberal economic (antitrust) view. In the past decade the Commission has recognised the necessity of crafting its competition policy on economic analysis. Clear examples are the changes in the application of this article to vertical agreements. That does not imply that infringements of competition law cannot be stated in terms of fairness. Thus, whereas there are strong indications that point to the neo-classical economic origin of article 85TR, it cannot be ruled out that fairness arguments are featured via this article.

Article 92TR prohibits distortion of competition resulting from State aid: distortions of competition arise if certain ‘undertakings’ or the production of certain goods are favoured by the State. According to economic theory, competition is distorted - in the sense of creating allocative inefficiency - if the subsidy affects the firm’s decisions on output, investment, entry or exit and such.³⁶ Inclusion of article 92 in the Treaty can therefore be interpreted as being inspired by the neo-classical economic view. But it is also true that state aids favouring certain ‘undertakings’ imply unequal treatment of firms in different legislations, improving the conditions of competition for only a selected group of firms. This means that article 92TR also safeguards fairness of competition. It does not offer an unambiguous answer on the primacy of either the liberal economic or the mercantilistic point of view.

Articles 100TR, 101TR and 102TR provide the general legal base for harmonisation of legislation at Community level. Article 100TR states that the Council shall issue legislation for the ‘approximation’ of provisions laid down by law, regulation or administrative action in Member States that ‘directly affect the establishment or functioning of the common market’. Article 101TR establishes the procedure to be followed when the Commission finds that a difference between national provisions ‘is distorting the conditions of competition in the common market and that the resulting distortion needs to be eliminated’.³⁷ Article 102TR stipulates that Member States should take care to avoid the creation of distortion of conditions of competition through new national provisions.

36. A pure lump-sum national subsidy, even if granted on a discriminating basis, would not hurt the efficiency criterion and therefore does not distort competition. This interpretation can, however, be countered by the argument that subsidies to producers that do not affect the relative competitive position do hardly exist in the real world. For example, lump-sum grants to firms making structural losses enable them to stay in the industry, frustrating long run adjustment.

37. We should remark here that even though both articles address differences between national provisions, article 100 talks about directly affecting the establishment or functioning of the common market whereas article 101 concerns ‘distorting the conditions of competition in the common market’.

For our analysis article 101TR is essential since it postulates that differences in national regulations can distort the conditions of competition. The 1956 Spaak report, that was to lay the foundations for a European Economic Community, might be helpful to get a clearer picture of the kind of national provisions that can distort the condition of competition. As we shall see it is quite ambiguous in its analysis and conclusions.

In the section on distortions, the Spaak report begins with a number of observations that reflect the efficiency view. Egalisation, far from being a starting condition for the common market, is a consequence (Spaak, 1956, p.61) and egalisation is therefore not to be brought about through harmonisation. The report refers to adjustment through the rates of exchange and the general wage and price level. The report then concludes that the domain for correction or elimination of disparities is therefore restricted to areas where relative prices are affected. Examples are disparities in fiscal and social security systems. Differences between countries, for example where social security is financed by premiums on labour only or not, may lead to differences in financial burdens for labour intensive industries in different countries. Such differences, which disadvantage specific industries, constitute a distortion of competition according to the Spaak report - unless they are compensated by other disparities which create specific, offsetting advantages. The conclusion that there is distortion of competition wherever relative prices are affected by differences in regulation does not follow from neo-classical economic theory, as has been explained in chapter 2. Differences in regulations often reflect differences in natural and social conditions and in national collective preferences. The Spaak report neglects this. Focusing on the charges for similar industries in different countries is a style of arguing that reflects the mercantilistic-fair trade view. To give the flavour of the argument, we present a full quotation:

‘Pour qu’une distorsion particulière se produise, le condition première est qu’une industrie se trouve plus ou moins chargée que la moyenne de l’économie

ou elle est placée. Il apparaît cependant qu'une industrie apparemment désavantagée cesse de l'être si la même surcharge relative existe dans la même industrie des autres pays. Au contraire, ce désavantage se maintient si cette surcharge n'existe pas ailleurs, et s'accroît si la même industrie est relativement déchargée dans l'autre pays considéré. Enfin une industrie qui est désavantagée par certaines dispositions peut être au contraire avantagée par autres et, par conséquence, il convient de considérer dans quelle mesure les distorsions particulières s'ajoutent les unes aux autres ou se compensent l'une l'autre. A supposer même que les cours de change soient équilibrés, ils ne peuvent compenser les distorsions spécifiques et il reste nécessaire de dégager les moyens appropriés.'

This quote from the Spaak report is echoed in the interpretation of distortions given by the former Commissioner Von der Groeben (1974, p.134). He defines a distortion of competition where 'ein Wirtschaftszweig mehr oder weniger belastet ist als der Durchschnitt der Gesamtwirtschaft desselben Landes und wenn eine entsprechende Mehr- oder Minderbelastung des gleichen Wirtschaftszweiges in einem anderen Mitgliedstaat nicht vorliegt'.

The phrasing in the Spaak report seems to lean towards the political interpretation of distortion of competition. In other words, the view that competition should be fair prevails in this part of the Spaak report and as such it conflicts with the view that (differences) in national provisions could be conducive to efficiency. However, the Spaak report also stipulates a cautious policy in the domain of harmonisation. Taken as a whole, the Spaak report does not seem to be fully consistent, reflecting the efficiency view in one place and the fairness view in another. It calls for a careful analysis of each specific case to assess whether indeed a convincing argument for harmonisation can be made.

Article 102TR indicates that harmonisation does not require strict equality of national provisions because 'if the Member State (...) causes distortion

detrimental only to itself, the provisions of article 101 shall not apply'.³⁸ According to Kapteyn (1987, p.486), this sentence should be read as 'if the distortion is only to the detriment of the State's own industries, the provisions of article 101 shall not apply'. This implies that there is only a need for harmonisation in terms of a floor below which Member States are not allowed to go but above which Member States are allowed to set stricter standards that do not negatively affect industry in other Member States. In this sense, articles 100TR-102TR define harmonisation as minimum harmonisation. We conclude that articles 100TR to 102TR should be viewed as reflecting predominantly the equity interpretation of the concept of distortion of competition, which conflicts with the efficiency view. However, this is partly repaired by admitting efficiency through the backdoor of upward divergence from a mandatory minimum.

From the articles in the Treaty of Rome and preamble from their inception in 1958, we draw the conclusion that in the Treaty of Rome the term distortion of (conditions of) competition is used in a rather ambiguous way. In particular article 85TR seems to express the idea that the common market is an institution to increase welfare by creating the conditions for efficient production. Elsewhere, as in articles 100-102TR, equity or fair play seems to be the primary goal, although with amendments.

38 Article 100a SEA added with the Single European Act to compensate for the deletion of the unanimous voting procedure, offers a more far reaching escape: on grounds of major needs referred in article 36 SEA, or relating to protection of the environment or the working environment' a country may take national provisions even after adoption of harmonisation. The Commission has to confirm that the national provisions involved are not 'a means of arbitrary discrimination or a disguised restriction on trade between Member States'. This formulation leaves scope for national provisions that disadvantage national industry as well as similar industries in other member states.

3.3 The emergence of a Community environmental policy (1972-1985)

The goals of the Community are stated in article 2TR: ‘The Community shall have as its task, by establishing a common market and progressively approximating the economic policies of Member States, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standards of living and closer relations between the Member States belonging to it’. This results in the conclusion that the Community was primarily an organisation to further intra-Community trade (Vogelaar, 1974, p.320). Protection of the natural environment was not addressed by the Treaty at this stage. That should not come as a surprise since at the time the Treaty was written and came into force the Member States had hardly any national environmental policy. Activities such as collection of solid waste and exploiting and maintaining sewerage systems were the responsibility of local authorities. So there was nothing to co-ordinate at Community level.

However, after the period of very rapid economic growth of the sixties it was clear by 1971 that economic growth had resulted in a worsening of the condition of the natural environment throughout the EEC. The environmental deterioration and degradation needed to be addressed. Furthermore, it was felt that this task was to be undertaken not at the national but at the Community level. The point of departure that there was a need for a Community environmental policy, results on two obvious questions: (a) what was the scope for environmental legislation given the contents of the Treaty, and (b) why was environmental policy to be centralised at Community level. We will start with the first question relating to the scope for environmental legislation in the Treaty of Rome.

From its beginning on, the Community had been empowered to design legislation that could have either a positive or a negative side effect on the natural

environment. This was the case where the environment was affected while pursuing the goals from article 2TR (see Nentjes, 1993, Jans, 2000) or activities from article 3TR such as for example article 3(f)TR ‘the institution of a system ensuring that competition in the common market is not distorted’ and article 3(h)TR ‘the approximation of the laws of Member States to the extent required for the proper functioning of the common market’. The list of activities in article 3 TR is not exhaustive, however. If an action necessary for the attaining one of the goals from article 2TR is not mentioned in the list of article 3TR that does not preclude EEC legislation (Groeben, 1974, p.78). The line of reasoning is that if harmonisation of national laws is required to further the internal market, this does not exclude regulations affecting the environment³⁹: ‘Neo-functionalists’ would argue that the internal market had a logic leading to environmental policy at European level to counteract market failures’ (Weale, 1996, p.602).

Apart from adopting legislation on the environment aimed at the (economic) goals from article 2TR, the scope for environmental legislation was very limited. Due to the principle of attribution, the Community was not allowed to enact legislation in policy areas that were not transferred or conferred by the Member States to the Community. Since the protection of the natural environment was not included in the goals pursued by the EC, the principle of attribution blocked environmental legislation that did not coincide with economic goals conferred upon the Community. To say it in plain words: the Treaty of Rome did allow harmonisation of national environmental regulation when this was necessary for the functioning of the Common Market, but the Commission and Council had no authority to enact legislation with the exclusive aim of protecting the natural environment of Member States. The attribution of powers required for the

39. See e.g. DG Voorlichting, Communicatie, Cultuur (1990, p.6): ‘Another reason is that an internal market will only be able to function properly if the twelve Member States of the Community - all of which presently show different grades of ‘greenness’ - can achieve
Continued on next page

Community to make such ‘real’ environmental legislation occurred with the Paris declaration of 1972, which was issued by the occasion of the Paris Summit of the council. This meeting was of historical significance since it put protection of the environment on the political agenda of the Community. This implied that only as of the Paris Summit there was scope for environmental legislation that exceeded economic legislation with environmental aspects.

A second question was why the environmental policy was to be centralised at Community level rather than allowing Member States to decide on their own national environmental policies. Whatever the explanation for the Community’s involvement and centralisation efforts, we should keep in mind that any change at the level of primary legislation had to be backed by all Member States without exception. The choice for centralisation of environmental policy therefore had to be supported by all the Member States at the time of the vote. This largely rules out the kind of strategic enacting of legislation that is possible where it concerns secondary legislation that is adopted on the basis of qualified majority voting.

Many possible explanations for the desire to centralise environmental policy are offered in the literature. For example, Vogel (1995b, pp.58-59) distinguishes between political, economic and geographic reasons for harmonisation of environmental regulations at the Community level. The political explanation offered by Vogel is that the EC Institutions issued environmental regulations in order to preserve their legitimacy in the face of the emergence of environmental legislation at other – national, regional, local – levels:’ EC environmental policy represented a way for Community officials to address the ‘democratic deficit’ - the gap between the Community’s power over and accountability to the electorate of its Member States. Environmental regulation also provided an opportunity for officials in Brussels to assert their competence in a new, rapidly growing and highly visible area of public policy while at the same time preserving the momentum of European integration, which in other

consensus on common environmental standards and apply these’ (translation by author).

respects had stagnated during the 1970s'. From this perspective, the expansion of the Community was just as politically inspired as the creation of the Community as such following the Second World War. Another possible – alternative or supplementary – political explanation is the idea that citizens within the Community have the same basic rights. These rights included the right to look for a job in another Member State that is part of the common market and the right to freely import and export goods within the EEC. It could be argued that the basic rights also include rights like proportional representation (see the developments in the voting for the European Parliament) and classical human rights such as free speech (see the German attempts to have a code on human rights included). It is a possibility that the idea of a basic right to a clean natural environment played a role in the formation of the EEC environmental policy at the European level.

The economic explanation focuses on the common market, the backbone of the EEC. Again in the words of Vogel, 'in the case of national standards, nations that had adopted more stringent national pollution controls than other Member States might find the goods produced by their industries placed at a competitive disadvantage. They might therefore be forced to choose between excluding goods produced by Member States with weaker regulatory requirements or lowering their own standards to those of their competitors, The former threatened economic integration; the latter made national regulatory policies hostage to those of the least strict member state'. We will return to this issue later, when we will look at the precise wording of similar arguments in official Community documents.

Geographically, Vogel points to environmental interdependence. We have stated before that centralisation or international co-operation may be required to solve environmental problems with transborder aspects but this does not imply that harmonisation of national legislation is required nor desired from an economic perspective. The only way to establish what kinds of arguments

actually have resulted in the emergence of a centralised Community environmental policy is to look at official statements and publications.

The Commission first addressed ‘environmental problems in the light of the principles and rules of the common market’ in a ‘Communication to the Council on a European Communities programme concerning the environment’ of March 1972.⁴⁰ The new environmental objective was to be incorporated in article 2TR, ‘which will henceforth have to include the protection of the environment’.⁴¹ The communication states that ‘marked disparities between the measures taken by the authorities in Member States (in particular the establishment of maximum permissible levels for pollutants in products or waste) reflecting a different evaluation either of the nature and harmfulness of pollution, or of the desirable quality objectives for the environment, or of the methods of allocating the costs of measures to curb pollution and improve living conditions, or of the inspection and control methods of repressive measures, are bound to cause distortion of competition and diversion of investment incompatible with the proper working of the common market (...).’⁴² Apparently, the view is that differences in ‘desirable quality objectives’ for the environment can cause competitive distortions.⁴³ Hence, the proposed programme includes ‘defining common quality objectives for the environment’.⁴⁴ The Commission also draws attention of present and future Member States to the danger there would be in allowing competition to develop between them in order to attract investment at the expense of the

40. On 22 July 1971, the Commission adopted the First Communication on Community policy concerning the environment (doc.SEC(71)2616 final), in: the Bulletin of the European Communities, Supplement 5/72: 6.

41. Bulletin of the European Communities, Supplement 5/72: 7.

42. Likewise, disparities in legislation, regulations and administrative action concerning products that in themselves or by their use are likely to cause nuisance, can create technical barriers to trade which have to be eliminated in application of the provisions of the EEC Treaty as between Member States and where appropriate between the Community and third countries by means of international agreements.

43. See also pages 24-25.

environment. From the perspective of the Commission, transborder movement of capital as created by differences in environmental burdens constitutes a competitive distortion. Centralisation is needed as ‘the differences between measures taken in various member countries, which would seem to reflect a different appreciation as to the effects of pollution, the objects of anti-pollution campaigns, or even of who should pay for them, would definitely lead to distortions of competition and of investment incompatible with the proper functioning of the common market’.⁴⁵

On the other hand, the Community objective must be to preserve as far as possible the freedom of judgement of national, regional and local authorities. Harmonisation should be sought only insofar as it is essential to provide a maximum of protection throughout the Community and to ensure free trade and undistorted conditions of competition. It must take account of the advisability of adopting methods suited to the different situations since disparities in geographical and natural conditions and in the ‘vocations’ of the regions can in some cases entail the application of different standards. The grounds for deviating from full harmonisation are defined very broadly, including ‘economic and social characteristics’⁴⁶ or ‘economic and social needs’⁴⁷ varying ‘according to the type of existing or planned economic activities in the regions concerned, their state of development, the social characteristics and the natural conditions in these regions’. Quality objectives for the environment ‘may vary from region to region in accordance with ecological, economic and social characteristics peculiar to each’.⁴⁸

In conclusion, two objectives are mentioned. The predominant objective is to prevent distortion of competition. This can be achieved with the instrument of

44. Ibid., p.21.

45. Ibid, p.58.

46 Ibid., p.23.

47 Ibid., p.24.

48. Ibid., p.23.

harmonisation. The secondary objective is to protect the environment. If one takes the objectives together, an option to satisfy both requirements is to set harmonised standards at a high level of environmental protection. However, one cannot define a high level of protection without taking into account the receptive capacity of the environment: one can argue that maximum protection of the environment is achieved when standards are set equal to the receptive capacity of the environment. When the receptive capacity of the environment differs, a similar level of protection will result in different environmental standards in different Member States. It is clear that the Communication to the Council stresses harmonisation over differing environmental standards. The reasoning behind harmonisation is that it provides a peg or a floor for standards to prevent what otherwise might become a race to the bottom. The balance between harmonisation and differentiation is most clearly shown in the next quote:

‘The obligations imposed on industry should be harmonised at Community level, allowing some differentiation as a result of the diversity of natural and regional conditions applicable to industry, in order to avoid distortions of competition between adjacent countries that are members of the same customs union. Failing such harmonisation, there could be serious consequences, for example Member States might be tempted to attract capital and investment by means of less strict pollution control.’⁴⁹

As was mentioned in chapter 2, economic theory has analysed strategic use of instruments of environmental policy. If harmonisation with differentiation (e.g. minimum harmonisation) is to be geared to prevention of strategic standard setting, possibly leading to a race to the bottom and if such harmonisation would result in a set of standards approximating the standards that would have existed in case of free trade, perfect competition and non-strategic standard setting, then the harmonisation policy would be Pareto-efficient. In such a case, one might argue

49. Ibid., p.26.

that the Communication reflects the view that distortion of competition should be prevented to increase efficiency.

On the other hand, the Communication also leaves ample scope for the equity interpretation. This brings us to the second goal. If harmonisation means full harmonisation of emission standards for sources without exceptions, the efficiency criterion cannot have been the guiding principle. The first part of the text suggests that differences in environmental quality objectives are not acceptable and are in themselves a distortion of competition. This certainly conflicts with the efficiency view. We conclude that the Communication leaves us uncertain as to how distortion of competition in relation to environmental policy is interpreted by the Commission.

This Communication to the Council of March 1972 only reflects the point of view of the Commission - which is not necessarily identical to the point of view of the Council, the principal legislative body. However, in the 1972 Paris Summit Declaration, the Council set protection of the environment as a Community objective on the political agenda on a very straightforward way: 'economic expansion, which is not an end in itself, must as a priority help to attenuate the disparities in living conditions. It must develop with the participation of both sides of industry. It must emerge in an improved quality as well as an improved standard of life. In the European spirit special attention will be paid to non-material values and wealth and to protection of the environment so that progress shall serve mankind'.⁵⁰ As the quality of life depends on the quality of the environment in which people live, the Commission was asked to draw up an action programme on the environment before 31 July 1973.⁵¹ There is no reference made here to the necessity of having a Community environmental policy to avoid distortions of competition. Compared with the Commission's Communication, this is a reversal of priorities.

50. In: Bulletin of The EC, no.10, 1972.

51. Ibid., p.20.

Rather than formally changing the Treaty, the environment was interpreted into the Treaty: it was stated that the goal of a harmonious development (article 2TR) did include that environmental aspects needed to be taken into account. Consequently, suitable articles in the EEC Treaty could be used for the pursuit of environmental goals per se from then on.⁵² However, whether environmental policies would or could be realised hinged on the suitability of the Treaty articles. As the environment was not explicitly mentioned anywhere in the Treaty, legislators had to resort to articles in the Treaty which were not designed for - and hence at times unsuitable for - environmental applications. Only very few articles within the Treaty could be used to base environmental legislation on - these were the harmonisation article 100TR and the reserve article 235TR of the EEC Treaty. The relevant parts of the texts of these articles can be found in annex II.

Article 100TR, the harmonisation article, states that 'the Council shall (...) issue directives for the approximation of such provisions laid down by law, regulation or administrative action in Member States as directly affect the establishment or functioning of the common market'. The scope of this article is defined very broadly. The first criterion is that the result of legislation based on this article entails an approximation of national provisions. Even though the article itself speaks of approximation rather than harmonisation, this article has been used as the legal base to enact harmonised legislation.⁵³ The second criterion is that the resulting legislation is enacted in the form of a directive. The harmonisation cannot be used for legislation aimed at either one polluter (which would require a 'decision') or directly binding on a wider group (which would require a 'regulation'). The third criterion is that the resulting directive should further the cause of the common market. This is where economists and EEC institutions could start disagreeing. For example, look at the reasoning applied by

52. See the Decision in case 92/79, point 8: 'It is by no means ruled out that provisions on the environment may be based upon article 100 of the Treaty'.

53. The use in practice will be illustrated in section 2.3.

the Court in case 92/79, in which the Court argued that the harmonisation article was a valid base for environmental legislation. The reason was that in the Court's opinion 'provisions which are made necessary by considerations relating to the environment and health may be a burden upon undertakings to which they apply and if there is no harmonisation of national provisions on the matter, competition may be appreciably distorted'. As one can verify, this is very similar to the view reflected in the Spaak report, which we have labelled the mercantilistic-fair trade view. Neo-classical economists would not call this a competitive distortion, however, and would therefore doubt the validity of article 100 as a valid legal base. Anyway, with this ruling of the Court, the legality of article 100 as a legal base for environmental directives had been given.

We want to make a few more remarks on the harmonisation article that will clarify the scope and usefulness of this article for environmental legislation. Firstly, although this is not made explicit in article 100TR, the way this article is often interpreted is that only differences in national laws matter as an argument for harmonisation as (allowances for) differences in natural endowments are not explicitly mentioned in this article. This can be read from the wording in the directives that use and explain the choice for article 100TR as the legal base. The question is whether one can talk of approximation or harmonisation if national legislation is harmonised in the case where the underlying environmental and economic conditions in the respective Member States are different. In other words, how appropriate is harmonised legislation in the Member States if the problems that these Member States face differ to some extent? This issue is comparable to the issue of discrimination with its inherent problem of determining which aspects are relevant or irrelevant in judging whether there is unlawful 'discrimination of' or lawful 'discrimination between'. The text of article 100TR itself does not seem to preclude that local circumstances (and hence the differences that cause comparative advantages) are taken into account. The article does not explicitly indicate whether there is a gap between the

harmonisation article and economic theory. In chapter 5 we will see that secondary legislation in practice allows for differences in local circumstances to be taken into account.

A second question is whether article 100TR can be used to enact minimum harmonisation. Minimum harmonisation implies setting a minimum requirement with the possibility for individual Member States to set stricter norms. Minimum harmonisation can take the form of for example a minimum environmental quality standard or a standard setting a maximum to emissions. As we have seen in subsection 3.2, article 102TR accepts that Member States set more stringent standards if these are only to the detriment of its own industry. If we apply this article to process norms, this implies minimum harmonisation.⁵⁴ In plain words, a Member State can subject the industry that is located on its territory to stricter environmental standards than the Community standard when this would hurt only this industry (e.g. through higher abatement costs and lower production) and not the foreign industry. On the other hand, it is hard to imagine a situation where a national environmental product norm that is stricter than the Community norm will only be to the detriment to the national industry. The most likely consequence is that foreign produced goods can only be imported if adopted to meet the stricter national environmental standards. This clearly is a disadvantage to the foreign industry.⁵⁵

According to Jans (1990, p.102), it is not the legal base but the content of the measure in question that determines whether or not minimum harmonisation is implemented. One can conclude that although article 100TR can be used as a legal base for harmonisation of standards for emission sources for flawed

54. We can also refer to the wording of the harmonisation article to reach the same conclusion. Approximation means limiting the scope or diversity of national legislation, but not the complete and full harmonisation. Minimum harmonisation effectively results in such approximation.

55. To some extent, this disadvantage for foreign producers could be off-set by the fact that the nationally produced good can be more expensive due to compliance with the higher national environmental norms, but it is far from certain that this would be sufficient ground to allow

Continued on next page

economic reasons, the negative consequences for economic efficiency of such harmonisation are mitigated by its property of minimum harmonisation. Only the ‘laggards’ among Member States might be restricted in their preferences for a national standard below the European minimum. All the others are free in principle to set the standard of their choice above the minimum.

Article 235TR, the reserve article, reads: ‘if action by the Community should prove to be necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and this Treaty has not provided the necessary powers, the Council shall (...) take the appropriate actions’. Article 235TR poses a criterion identical to article 100TR, namely that the resulting legislation should be necessary in the course of the operation of the common market. Despite this similarity, the scope of this article is wider than that of article 100TR. The main difference between the harmonisation article and the reserve article is that the latter does not prescribe an ‘approximation’ or harmonisation of national legislation, and hence offers a more open approach to environmental problems. The second difference is that article 235TR does not specify the instrument to be used for environmental legislation, thus allowing for example ‘decisions’ and ‘regulations’ to be based on this article.

As was already noted, both article 100TR and 235TR stress that legislation based on these articles should further the cause of the common market. This implies that before the 1972 Paris Summit only one category of environmental problems could be tackled, i.e. those environmental problems that clashed with the common market objective if left to the discretion of the individual Member States. These articles therefore up to 1972 provided a legal base only for what we may call pseudo environmental policies, i.e. those policies that have a link with the protection of the natural environment but where the primary goal is economic.⁵⁶ The significance of the reinterpretation of the Treaty appears to be

deviation from the Community product standard on the basis of article 102TR.

56. We should remark in this respect that this conclusion is different from the one reached by
Continued on next page

that from 1972 on article 100TR and 235TR could also be used as a legal base for proper environmental policies where environmental considerations come first and common market objectives are of secondary importance. The reinterpretation of the Treaty was significant as the environment was explicitly given attention even though the environment was formally still of a lesser importance than the economic goal of furthering the common market. The declaration was a factor that tilted the balance a little towards real environmental policies. In the Bulletin of the EC 9/10 of 1971, it is said that ‘the present provisions of the Treaty give the Community powers which are inadequate and poorly suited to coping with such wide-ranging and urgent needs (the needs addressed in the general action programme mentioned in this communication - RL). This is why the Commission, as President Malfatti announced to the European Parliament on 10 February 1971, ‘will possibly make use of EEC Treaty article 235 to give the Community power to legislate directly on matters concerning the environment policy and to implement the action programme referred to above.’ The requirement that the measure adopted on the basis of article 235TR needed a link with the common market apparently was no longer considered to be of primary interest from the point of view of the Commission. There was no such reference to article 100TR. In chapter 5 we will show to what extent the alleged preference for and view on article 235TR was adopted in the secondary legislation enacted following the 1972 Paris Declaration.

Liefferink. Liefferink (1996, p.7) concludes that where the double legal base (articles 100TR and 235TR) was used that these directives ‘were not exclusively or primarily motivated by the logic of the common market’. A close reading of article 235 indicates however that the purpose was to further the common market, even though there is less stress on harmonisation. Rehinder (1985, footnote 12, p.18) points to much of the literature on the weakness of these articles as the legal base for environmental legislation.

3.4 The Single European Act (1987-1992)

The environmental policy of the Community became of age in July 1987 with the entering into force of the Single European Act (SEA). This was indicated by the addition of article 100a SEA and the inclusion of the specific environmental articles 130r, 130s and 130t SEA in the Treaty. The Single European Act could have been seized as an opportunity to redraft articles 2 and 3 to formalise the 1972-reinterpretation of the Community goals but this opportunity was not used. Thus, the basis for the Community environmental policy remained the re-interpreted article 2.

Article 100 was supplemented by article 100a SEA, which summarises as:

- By way of derogation from article 100 the following provisions shall apply for the achievement of the internal market.
- The Commission, in its proposals concerning environmental protection will take as a base a high level of protection.
- If, after the adoption of a harmonisation measure by the Council acting by a qualified majority, a Member State deems it necessary to apply national provisions relating to protection of the environment, it shall notify the Commission of these provisions. The Commission shall confirm the provisions involved after having verified that they are not a means of arbitrary discrimination or a disguised restriction on trade between Member States.

Article 100a SEA associates harmonisation with the improvement of environmental quality, rather than just the removal of trade barriers (Vogel, 1995, p.60). Practically, there was little change as this article could be used for environmental legislation in the same way as article 100TR had been used. In this way it supplanted rather than supplemented article 100TR with respect to most legislation.⁵⁷ As we have seen, article 100TR did imply minimum harmonisation

57. There still existed an article 100 but its importance in the environmental sphere diminished following the SEA.

for emission standards for sources. Article 100a(4) adds a procedure for Member States wishing to deviate from the environmental harmonisation measure. The first phrase of this article is: 'If, after the adoption of a harmonisation measure by the Council acting by a qualified majority, a Member State deems it necessary to apply national provisions on grounds of major needs referred to in article 36, or relating to protection of the environment or the working environment, it shall notify the Commission of these provisions'. Member States were allowed to enforce ('apply'⁵⁸) national environmental legislation on the basis of article 100a(4) SEA. The criterion to decide whether or not national standards are allowed is that (1) they can be no means of arbitrary discrimination or (2) they can pose no disguised restriction on intra-Community trade.

We have seen in the previous section that article 102TR allowed for stricter national environmental process standards but that it did not open the way for stricter national environmental product standards. Article 100a(4) did allow for such stricter national environmental standards for products despite the negative effects on the common market. Even though diverging national product norms could result in a partitioning of the common market, these negative effects were outweighed by the positive effects listed, including the protection of the natural environment. The Danish beer bottle case⁵⁹ is a famous example of a situation where a Member State wished to introduce more stringent environmental protection despite effects on the common market even though this case did not involve article 100a(4) SEA. It should be noted that this type of

58 'Apply' or 'application' in our view is no more and no less than enforcing regulations. These regulations can both be anterior - drafted before Community legislation - or posterior. Jans (1990, p.109) comes to the same conclusion, and argues that the primary function of article 100a(4) is to compensate Member States for the risk of being outvoted in the Council irrespective of the fact whether national legislation was already in place. However, other writers - according to Jans (1990, p.108) a majority - focus on the difference between article 100a(4) SEA and article 130t (discussed below) that uses the verbs maintaining and introducing to argue that 100a(4) was intended to apply to new national provisions only. Hence, apply and maintain are being used as synonyms, an approach that we do not agree with.

59. Case 302/86, Commission vs. Denmark.

derogation following harmonisation is quite unusual. The standard interpretation by the European Court of Justice is that there are no other ways of derogation from a harmonisation measure than those included in the measure itself (Sevenster, 2000).

Given the fact that article 102TR already permitted stricter national environment process legislation, article 100a(4) was superfluous from this perspective. It is possible to invoke article 100a(4) in order to set emission standards that are lower than the bottom-line defined in the directive (notice that this type of deviation would not be allowed on the basis of article 102TR). Of course, such derogating legislation could be enacted only on grounds other than environmental protection listed in article 100a(4) SEA and article 36 SEA.

The voting requirement plays an important role in the exception of article 100a(4) SEA as it is only applicable where secondary legislation is adopted by a qualified majority. Does this imply that a country should vote against adoption of the rule in order to be able to invoke the clause allowing national legislation? This could result in the awkward situation that a green country favouring a high level of environmental protection in the Community and in its national jurisdiction should oppose a proposal for full Community harmonisation of standards if this country prefers to set higher national standards, in turn endangering the adoption of the Community standard in the first place. The perverse choice seems to be between very high national standards without Community legislation or mild Community standards without the possibility to exceed the standards within the country involved. As we shall see this apparent dilemma was solved later in the Amsterdam Treaty.

The use of article 100a SEA as the legal base for secondary environmental legislation with respect to stationary has been limited, as we will see in chapter 6. There are two reasons for this. Firstly, notice that the goal of the article was to help create the internal market rather than the common market. This internal market is defined in article 8A SEA as an area without internal frontiers, which is

more limited than the common market from article 3 SEA that includes positive integration (common policies) as well as negative integration (removing internal barriers) (Kapteyn, 1990, p.473). Thus, article 100SEA remained important for the achievement of other objectives such as the removal of distortions of competition and other elements of the objective of the common market. Indeed, the environmental policy with respect to stationary resources largely made continued use of article 100SEA rather than article 100a SEA. As no recourse was taken to article 100a SEA for environmental legislation on stationary sources, there is no indication of the application of the exception of article 100a(4) in these circumstances. The second reason for the limited use of article 100a SEA was the appearance of the environmental articles 130r to 130t SEA.

The environmental articles provided an explicit legal base for environmental policies by the Community. The necessity, or indeed the desirability, of such a separate legal environmental base has been questioned. The necessity has been questioned because the reinterpretation of the Treaty effectively pre-empted the need for separate legal base in addition to articles 100(A) and 235 SEA. The desirability has been questioned on the ground that the environment should be integrated into other policy areas and therefore a distinct environmental article creates a separation that is not desirable. In any case, the provision of a separate title on the environment did in itself add some weight to the environmental cause vis-à-vis other policy areas that had already been mentioned explicitly in the Treaty.⁶⁰

The new title (XVII) in the Treaty specifically on the environment consisted of three articles (130r to 130t). Article 130r SEA states that protection of the natural environment is one of the goals of the Community policy. Instead of being interpreted into the Treaty as had been done from 1972 on, starting with

60. The Dutch 1995 version of the Treaty consisted of 6 parts and covered 77 pages. Of these parts, part 3, 'the policies of the Community' provided the bulk of the articles (46 pages) in 17 titles, of which the title XVI on the environment is one. The environmental title covers little
Continued on next page

the Single European Act in 1987 environmental protection was explicitly mentioned in the Treaty. The articles use the wording ‘action by the Community relating to the environment’, which implies a much wider set of actions than harmonisation. In addition, it states some of the principles of the Community’ environmental policy, i.e. the rectification of pollution-at-the-source principle and the polluter-pays principle.⁶¹ Article 130s SEA includes the procedures that have to be followed in the process of enacting legislation that incorporates such environmental policies. Article 130t SEA stresses that a member state is allowed to maintain or introduce more stringent protective measures and sets a minimum of protective measures. In this respect the relation between articles 130r, 130s and 130t SEA is similar to the relation between articles 100, 101 and 102TR. However, the legal base for differentiation is clearer and elaborate.

Article 130r(3) reads: ‘In preparing its action relating to the environment, the Community shall take account of: (...) (ii) environmental conditions in the various regions of the Community; (iii) the potential benefits and costs of action or of lack of action; (iv) the economic and social development of the Community as a whole and the balanced development of its regions’. This was the first time that the Treaty stated specifically that regional environmental and economic aspects needed to be taken into account in setting environmental protection measures although this view had been expressed already in the Commission’s Communication of 1972.

Article 130r(4) reads: ‘The Community shall take action relating to the environment to the extent to which the objectives referred to in section 1 can be attained better at Community level than at the level of the individual Member States’. Article 130r(4) is the so-called subsidiarity principle. This is the main

over 1 page.

61. Article 130r also included the integration principle, i.e. environmental protection requirements shall be a component of the Community’s other policies. This widened the scope for environmental policies based on other Treaty articles besides the harmonisation article, the reserve article and the environmental articles, see e.g. the first Tsjernobyl case C-62/88 based
Continued on next page

instrument for delineating the competencies of the individual Member States and the Community as such vis-à-vis each other.⁶² Article 130r(4) should be read as setting restrictions on the ambitions and scope for Community actions formulated in 130r(1). If article 130 were to be used as the legal base for environmental legislation, meticulous implementation of this subsidiarity principle implied that the question for every proposal for legislation should be whether it was indeed necessary to centralise the policy in order to achieve the objectives better than Member State could.

Article 130t states that: ‘The protective measures adopted in common pursuant to article 130s shall not prevent any Member State from maintaining or introducing more stringent protective measures compatible with this Treaty’. These articles combined imply that even in the rare case where (a) the environmental issue is centralised through legislation based on article 130s and 130r(4) SEA and (b) the resulting Community policy involves harmonisation taking into account 130r(3), countries would generally still be allowed to diverge from the harmonised policy on the basis of 130t. Legislation based on article 130s therefore cannot be but minimum harmonisation. As a logical consequence, secondary environmental legislation adopted on the base of article 130r SEA is therefore unlikely to contain a minimum harmonisation clause because the general principle that Community protective measures laid down a minimum standard had now been incorporated by the Treaty itself (Jans, 1990, p.100).⁶³ In

on article 113 EEC. We will not discuss these other potential legal bases:

62. According to Jans (1994, p.13) article 130r does not preclude Community policies aimed at local environmental policies.

63. A point of discussion is whether the Member States can by agreement limit the invocation of article 130t, that is, reduce the possibilities to deviate from the harmonised Community standard. In other words, can the content of Community environmental legislation as such prevent Member States invoking article 130t. The prevailing view is that the Treaty at all times takes precedence over secondary legislation, but another view is that article 130t was not really intended to have legal consequences but rather a codification of existing practice (Jans, 1990, p.104). A condition must be that the use of article 130t can be limited by common accord only if the directive is agreed upon unanimously. After all, the Treaty was agreed upon unanimously and Member States thus should not be faced with the erosion of the Treaty by normal

Continued on next page

contrast to article 100TR, article 130r-t SEA in principle allows for a directive that sets different environmental norms for all individual Member States. This is because articles 130r-t SEA do not mention harmonisation as instrument but use the more general wording of ‘actions’ and ‘measures’.⁶⁴ In this sense, the environmental articles are more flexible.

As we said before, article 130r SEA mentions some principles of Community environmental policy: ‘Action by the Community relating to the environment shall be based on the principles (...) that environmental damage should as a priority be rectified at source and that the polluter should pay.’ The source principle is thought to imply a preference for emissions standards rather than environmental quality standards (Jans, 1994, pp.19, 29). This point of view is reinforced by the design of e.g. the Aquatic Environment Directive 76/464, where emission standards are prescribed first and environmental quality standards are introduced as an alternative, requiring additional activities on the part of the Member State. This, according to Jans, indicates the second-best nature of environmental quality standards. The polluter pays principle is primarily an economic principle; polluters have to pay for the control measures they have to make to meet standards.

In conclusion, it is hard to draw strong conclusions about the degree of harmonisation in secondary legislation based on the environmental articles relative to the legislation based on the reserve article or the harmonisation articles. The incorporation of the environmental articles offers an additional argument for centralisation: harmonisation needed to protect the environment

(qualified majority) voting procedures. If the Member States unanimously want to change the Treaty, they are able to do so by common international agreement and hence should also be able to do so within the Community framework. Thus, if the Directive gives a minimum and a maximum emission norm, national norms cannot set standards lower than the minimum by invoking article 130t. One complication is that the minimum norms were presumably included to regulate the competitive conditions and that the functioning of the internal market may well be outside the scope of article 130s, implying the need for an additional article such as 100a (Jans, 1990, p.105).

64. Article 176 TA does mention the word harmonisation but does not require it.

even if not necessary to avoid distortion of competition in the common market. As we have seen in chapter 2, transborder pollution between Member States provides an argument for Community action. From July 1987 on, it could be based on the environmental articles. However, it has also been argued in chapter 2 that emission ceilings for Member States are the most appropriate instruments, which might imply even more differentiation of emission standards than existed before centralisation. The same ambiguity surrounds the differences between article 100a SEA vis-à-vis article 100TR. Although the word harmonisation rather than approximation is used in article 100a SEA, it also introduces an escape clause, undermining harmonisation of environmental standards on the basis of certain non-economic goals. Consequently, whereas the scope for centralisation had clearly been increased by the Single European Act, the general degree of harmonisation aimed for cannot be read from the availability of legal bases alone. Of course, irrespective of the level of harmonisation prescribed by individual articles from the Treaty, the overall level of harmonisation will depend to a large extent on the choice that the legislator makes between the legal bases that are available.

3.5 Maastricht and beyond (1993-2002)

3.5.1 Introduction

The Maastricht Treaty, i.e. the Treaty on European Union, was signed in February 1992. This was not the only constitutional change in 1992 however. In Porto, the Agreement on the European Economic Area (EEA) was signed on the second of May 1992. The EEA was meant to result in a high level of legal convergence between the then 12 Member States and Austria, Finland, Iceland, Liechtenstein, Norway, Sweden and Switzerland. In the EEA Treaty, there was

also a chapter on the environment, which contained three articles (73EEA-75EEA). Indeed, a large part of the EEC environmental legislation was extended to the other EEA countries via article 74EEA. Following the example set by article 130t SEA, article 75EEA states: ‘the protective measures referred to in article 74 shall not prevent any Contracting Party from maintaining or introducing more stringent protective measures compatible with this Agreement’. In this respect, the EEA wide centralisation of some environmental measures was in line with the intra-Community policy of allowing higher standards set by environmentally more advanced signatories. In this sense, standards and policies were extended to external countries.

3.5.2 The Maastricht Treaty

On January 1, 1993, the (Maastricht) Treaty on European Union entered into force. With the SEA, the subsidiarity principle had been introduced with respect to environmental policies. In the TEU, the subsidiarity principle was transferred to article 3b TEU: ‘The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein. In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of scale or effect of the proposed action, be better achieved by the Community. Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty.’ The subsidiarity principle was promoted to a general policy principle applicable to all policy areas. The transfer of the subsidiarity principle to article B⁶⁵ stressed its

65. With the Amsterdam Treaty that entered into force in May 1999 this was renamed as article 2 of the Treaty on European Union.

central role in EC policies and confirmed the shifting preference to greater national autonomy: ‘(...) The objectives of the Union shall be achieved as provided in this Treaty and in accordance with the conditions and the timetable set out therein while respecting the principle of subsidiarity as defined in article 3b of the Treaty establishing the European Community’.

According to the Commission, the subsidiarity principle as a concept featured in the Treaty well before this date. To quote the Commission: ‘the concepts of the Directive, of mutual recognition and of partnership reflect a previous preoccupation with it (the subsidiarity principle - RL). However, its insertion in the general provisions of the Treaty, and the definition given in the Treaty, add enormously to its significance’ (European Commission, 1995, p.37). According to Liefferink (1996, p.1), the growing importance of the subsidiarity principle was a reflection of the growing scepticism on the path that had been followed: ‘The Maastricht Treaty on European Union had met with little enthusiasm, not only in traditionally Euro sceptical countries such as Denmark and the UK, but also for instance in France, Germany and the Netherlands. The Europeanisation of policy was now seen as a threat to national autonomy, rather than as an adequate response to the challenges of the increasingly global society’. Whatever the reason, it is without any doubt that the extension of the subsidiarity principle to the whole treaty made the environment less exceptional compared to the other policy areas and therefore in itself indicated the acceptance of environmental protection as a policy area on par with the classic areas.

Another major change in the Treaty was the redrafting of article 2 TEU. Article 2 TEU reads: ‘The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing the common policies and activities referred to in articles 3 and 3a, to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of

employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among the Member States'. The mere fact that article 2 TEU was redrafted is remarkable in that this had been willingly omitted in the Single European Act. This time, there was an explicit reference to environmental protection next to a number of other objectives. The 'continuous and balanced expansion' of article 2TR/SEA had been replaced by 'a sustainable and non-inflationary growth respecting the environment' of article 2TEU. Indeed, the environment is effectively mentioned twice in one sentence, as sustainable growth already implies that the environmental constraints are taken into account. The incorporation of sustainable growth hints at an integration of economic and environmental concerns. In the system of the Treaty, the goals stated in article 2 TEU necessitate amongst others the activities enumerated in article 3 TEU, which was now augmented by item (k): 'a policy in the sphere of the environment'.

The harmonisation article 100a TEU did not change relative to 100a SEA in ways that are relevant for our subject. Neither did article 130r TEU, apart from the fact that the contents of article 130r(4) SEA could not be found in article 130r TEU as a result of the aforementioned repositioning of the subsidiarity principle to the beginning of the Treaty. However, there were some noteworthy additions. For example, in the second section, after the statement that the Community's environmental action should aim at a high level of protection and respect a number of principles, the next phrase was introduced: 'In this context, harmonisation measures answering these requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic reasons, subject to a Community inspection procedure'. This explicit reference to harmonisation in article 130t TEU confirms that the environmental articles could be used for harmonised environmental legislation in a similar way as the harmonisation article had long been used as a

base for environmental legislation. The choice between the environmental articles and the harmonisation article could indeed be a difficult one⁶⁶, and a choice that depended amongst others on formal requirements such as voting procedures. Articles 130t and 235 TEU were maintained exactly identical to the identically numbered articles in the Single European Act, but article 130s was expanded from two sentences in article 130s SEA to a hefty article with five subsections. Most of these defined in greater detail the voting procedure in various circumstances. Also, for the first time, the status and role of the action programmes on the environment was referred to by the Treaty (we will discuss the action programmes in chapter 4). Another novel feature were sub-articles 130r(4) TEU: ‘Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environmental policy’, and 130r(5) TEU: ‘Without prejudice to the principle that the polluter shall pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member state, the Council shall, in the act of adopting that measure, lay down appropriate provisions in the form of temporary derogations and/or financial support from the Cohesion Fund to be set up no later than 31 December 1993 pursuant to article 130D’. The Treaty thus explicitly acknowledges that the costs of certain environmental measures may outstrip the resources available in a Member State despite its obligation to ‘finance and implement’. Consequently, the political scope for setting (i.e. agreeing on) harmonised standards was expanded.

3.5.3 The Amsterdam Treaty

After the aforementioned rounds of alterations in and additions to the Treaty, coupled with the integration of the EEC, the ECSC and the ECAE Treaties, the

66. See the reference to article 100a TEU in article 130s(2) TEU.

system of the Treaty was getting obscured. It was therefore decided to renumber and integrate all these parts, together with some new policy areas that were added by the Amsterdam Treaty (TA) that entered into force in May 1999. Member States such as France, Germany and the UK did not ‘discern a pressing need for environmental issues to be considered in the reshaping of the Treaty’⁶⁷, but the environment was nevertheless addressed in this Treaty. Indeed, proper environmental policy only received a solid base in the (Amsterdam) ‘Treaty Amending the Treaty on European Union, the Treaties establishing the European Communities and certain related Acts’.

Article 2 TEU was changed again (but stayed numbered as article 2 TA). This article now highlighted even more explicit than article 2 TEU had done that ‘the Community shall have as its task (...) to promote throughout the Community (...) a high level of protection and improvement of the quality of the environment (...)’. In addition to this addition in article 2, a new article 6TA⁶⁸ was inserted, that stated that ‘environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in article 3, in particular with a view to promoting sustainable development.’ This sentence was taken from article 130r(2) TEU. Again, a specific type of environmental policy was broadened to cover all sorts of environmental protection throughout the Treaty. Article 6TA requires that the environmental dimension is taken into account in every decision in such areas as agriculture, transport, energy, et cetera.

Article 100a TEU was renumbered as article 95TA. The main change concerned the small text in sub-article 100a(4) TEU, which was expanded and in turn distributed over several sub-articles (95(4) up to and including 95(9) TA). The task of the Commission from 100a(4) TEU to ensure that the unilateral provisions

67. Van Calster et al, 1998, p.13.

68. Provisionally numbered article 3C.

adopted by a Member State were not a means of arbitrary discrimination or a disguised restriction on trade was complemented by the phrase ‘and whether or not they shall constitute an obstacle to the functioning of the internal market.’

The Amsterdam Treaty also provided the solution for the dilemma with respect to article 100a SEA and Member States voting behaviour discussed in subsection 3.4. It follows from the Treaty that the ‘environmental guarantee’ (the option to set more stringent environmental standards by a Member State) is available even if the Member State in question voted in for the directive containing the standard from which the Member State wishes to derogate. As we have argued, the possibility offered in the harmonisation article to set more stringent national environmental standards is relevant only in the case of uniform norms or upper bounds on standards. The situation that recourse needs to be taken to the exception included in the harmonisation article could occur in case of product standards but it does not apparently apply to process standards. Another change was in article 95(3) TEU, which clarified that a high level of (environmental) protection was not only the goal of the Commission but also that of the European Parliament and the Council.

The environmental chapter was changed only slightly. Article 174 TA was identical to article 130r TEU apart from the fact that a little part was transferred to article 6 TA and hence removed from the environmental chapter. The only difference between 130s TEU and 175 TA is that the date to set up the Cohesion Fund was removed, as this was already operating. The Commission (1995, p.49) reported that four Member States received support for their environmental policies from this Cohesion Fund. Article 176 TA was perfectly identical to 130t TEU.

In conclusion, the most noticeable change was that protection of the environment was absorbed in article 2TA. In the words of Wasmeier (2001, p.159), ‘the Amsterdam Treaty made clear that protection of the environment was no longer a separate objective of the European Community that can be considered

‘second class’. Since the objective of a ‘high level of protection and improvement of the quality of the environment’ was incorporated into article 2TA, it has been an essential and fundamental purpose of the Community’.

3.6 Conclusions

The European Community has made great headway with its environmental policy, especially when we take into account that there was no such thing as an environmental policy up to 1972. This progress can be seen from the quantity of environmental directives that have flowed from Brussels in the last 30 years, many of which will be discussed in chapters 5 to 7. Each of these directives required a legal base from the Treaty. In this chapter, we have given a survey of how the respective legal bases have evolved over time, which set of legal bases was available at any given time and whether the legal bases incorporated the economic or the political definition of distortion of competition.

The *raison d’être* of the EEC Treaty of 1958 was to promote economic growth through the creation of a common market. There always has been scope for primarily economic policies with environmental aspects: international harmonisation would be possible whenever national environmental legislation would frustrate the common market. Even up to the Single European Act environmental secondary legislation required a close link with the common market. Gradually, however, options to introduce legislation aimed principally or solely at protection of the natural environment were introduced in the Treaty. At the present, 2002, stage of the evolution of the Community’s environmental policy its major pillars in the Treaty are articles 94TA - 97TA and articles 174TA - 176TA.

Articles 94TA - 97TA have grown out of the original harmonisation articles 100TR - 102TR that required harmonisation if national policies frustrated

the functioning of the common market. For stationary sources the articles imply minimum harmonisation: a national emission standard more stringent than the bottom-line set by the harmonisation directive is allowed since that does not hurt industries in other Member States. This can be seen from article 97TA that states that there is no need to issue directives that set harmonised standards so long as the measure that caused the distortion of competition is only detrimental to the Member State that caused it. The addition of article 100a SEA in 1987 (renumbered as 95TA) seemed to provide a legal base even for national emission standards that are lower than the Community standard if this would be necessary in the pursuit of specific non-economic goals. Thus, the Treaty has generally offered possibilities for harmonised environmental legislation as well as for differentiated legislation.

Articles 174TA - 176TA were originally inserted as 130r SEA - 130t SEA in 1986 to make explicit that environmental protection was a Community objective and may require Community action (whether or not through harmonisation) even if such measures were not needed to prevent distortion of competition. The harmonised standards might be differentiated since differences in environmental economic and social conditions have to be taken into account. The environmental articles explicitly allowed Member States to set more stringent source emission standards than the Community norm. Note that such environmentally stricter standards have to be notified to the Commission, but that article 176TA does not require the Commission's approval. Such measures must be compatible with the Treaty, which would be no problem as we have argued before.

We conclude that both sets of articles (94TA - 97TA and 174TA - 176TA) define harmonisation as minimum harmonisation: more stringent national standards than the harmonised emission standard or set of standards are allowed. Articles 94TA - 97TA offer scope for less stringent standards, but only after

approval of the Commission, which will not be given if the Commission has a strict fair trade point of view.

Article 235TA is unchanged compared to the original article 235TR: it is the reserve article allowing Community action to attain one of the objectives of the Community where the Treaty has not provided the necessary powers. Now that in article 2TA environmental quality is an explicitly stated Community objective, article 235TA is a reserve article for environmental policy for the unlikely case that articles 94TA - 97TA and articles 174TA - 176TA would not provide sufficient legal base.

From chapter 5 on, we will look which articles have been used as a legal base for environmental secondary legislation in practice and how frequently. From this relative use of the harmonisation article that probably requires a relatively high level of harmonisation and of the reserve article and the environmental article that include no references to harmonisation, the views on the appropriate level of harmonisation can be determined.

Before we turn to the secondary legislation as such, however, in chapter 4 we will try to distil views on and motives for a Community environmental policy and the role of harmonisation in such a policy from another source of information, i.e. the action programmes on the environment. As in this chapter, we will look for clear indications that demonstrate the ideas of the Community on the desirability of harmonisation of environmental policies.

Chapter 4 The Action Programmes on the Environment

4.1 Introduction

In the previous chapter on Community primary environmental legislation we have tried to find answers to the questions:

- Which definition (definitions) of distortion of competition has (have) been used in the Treaty at various times?
- Which articles from the Treaty could provide the legal base for environmental legislation and which level (levels) of harmonisation of environmental standards is (are) required by or compatible with these articles?

The question on the degree of centralisation was not posed in chapter 3 because primary legislation generally does not offer precise definitions or delineation of the policies areas that are (to be) centralised.

We have concluded in section 3.6 that the harmonisation articles in general set minimum harmonisation on stationary sources whereas the environmental articles and the reserve article did not specify the level of harmonisation. The overall level of harmonisation will depend on the choice between the legal bases available at any period, the overall uniformity of the standards applicable in the Member States depends on the choice of Member States to set stricter environmental standards than the Community (minimum) standard.

In this chapter, we will try to assess the Community views on the definition of distortion of competition and the resulting views on the optimal the level of harmonisation and centralisation from another source of information – the action programmes.

The action programmes on the environment (hereafter also referred to as APE or action programme) on the environment are the first step to define the abstract environmental component of the Treaty into workable goals. The action

programmes can explain the view of the Commission on the policy areas that will have to be centralised and the interpretation of Treaty articles and the required or desired level of harmonisation they embody. In cases where the action programmes are endorsed by the Council, they also show the view of the Council. There are big differences amongst the action programmes concerning the level of detail, et cetera.

From a legal perspective, action programmes fall outside the scope of the normal distinction between primary and secondary legislation. The first action programme on the environment was endorsed by way of a 'Declaration of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting in the Council'. France insisted that its juridical base was too weak to adopt it as a Decision of the EC Council as such (Liefferink, 1996, p.6). The next action programmes were adopted by a 'Resolution of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting in the Council'. A Council Resolution only shows the stated political will of the Member States to apply the measures contained in the programme without implying any legal obligation to do so. This lack of legal enforceability disappeared with the fifth action programme, which was concluded in the 'normal' way - i.e. on the basis of a proposal by the Commission and with opinions by the European Parliament and ECOSOC.

In this chapter we will present the action programmes in chronological order, allowing for quick reference to the previous chapter. The division in sections follows the division based on Treaty-periods from chapter 3. It should be kept in mind, however, that the action programmes are not perfectly synchronised with these periods; there can be more than one action programme within any one Treaty period and one action programme can be applicable during several Treaty periods. This can be seen in table 4.1 below:

Table 4.1: Action programmes on the environment				
Number	Name	Concluded	From-To	Primary period
1	APE1973 ⁶⁹	22.11.1973	-	Treaty of Rome
2	APE1977 ⁷⁰	17.5.1977	1977-1981	Treaty of Rome
3	APE1983 ⁷¹	7.2.1983	1982-1986	Treaty of Rome
4	APE1987 ⁷²	19.10.87	1987-1992	Single European Act
5	APE1993 ⁷³	1.2.1993	1993-2000	Treaty of Maastricht
6	APE2001 ⁷⁴	Proposal	2001-2010	Treaty of Amsterdam

As we have seen in the previous chapter on primary legislation, the period up to the Paris Summit of 1972 was characterised by the lack of specific environmental primary legislation and neither were there environmental action programmes. The first action programme on the environment was drafted only in the second period that starts with the green reinterpretation of the Treaty of Rome in 1972. This second period, covered in section 4.2, saw the drafting of no less than three environmental action plans. We will identify these action programmes by the years in which they were adopted, i.e. APE1973, APE1977 and APE1983. As the primary legislation did not change until the Single European Act in 1985, we can a priori expect some degree of communality between these three action programmes due to the legal restrictions set by the Treaty.

The first action programme on the environment was APE1973. There have been regular extensions of and additions to APE1973 by subsequent action programmes. The additions are the result of the fact that subsequent action programmes generally do add to rather than replace previous action programmes. Secondly, the interpretation and relevance of specific parts of the action

69. OJ C112/1 of December 20, 1973.

70. OJ C139/1 of June 13, 1977.

71. OJ C46/1 of February 17, 1983.

72. OJ C328/1 of December 7, 1987.

73. OJ C138/1 of May 17, 1993.

programmes can change over time as a result of changes in the Treaty and in the interpretation of the Treaty because of the hierarchical relation that exists between the Treaty and the action programmes. The (single) action programme adopted during the period of the Single European Act will be discussed in section 4.3 and the (single) action programme during the period following the Maastricht Treaty will be discussed in section 4.4. The conclusions based on the analysis of the action programmes will be presented in section 4.5. Whereas we will focus on the items that are most closely related to the subject of research, i.e. harmonisation in relation to stationary sources, it should not be forgotten that the action programmes generally do not state explicitly which parts are relevant or applicable to stationary sources.

4.2 The emergence of a Community environmental policy (1972-1985)

4.2.1 The first action programme (1973-1977)

The first action programme for the environment was officially adopted by Council declaration on November 22, 1973. The summary reinterpretation of the Treaty by the Paris Declaration of 1972 culminated in a programme of almost 50 pages, offering some insights into the line of thinking of the Community.

The action programme was organised hierarchically along the lines of the Treaty, with in part I a preamble, a listing of the objectives and principles, and a summary of the tasks to be undertaken and when. The stated objective is to improve the quality of life, the living conditions and the environment of the citizens of the Community through preventing pollution and nuisance, maintaining the ecological balance, protecting the biosphere, governance of natural resources, improving working and living conditions, integrating the

74. Proposal published on January 24, 2001, as COM(2001)31.

environment in allocation of space and structural planning and looking for international solutions.⁷⁵ In part II of the action programme, there was a detailed, 37-page description of the specific actions to be undertaken. Given the wide range of actions listed, it is hard to summarise or characterise the Community policy on the basis of this programme. It exhibited the desire to set norms and standards as soon as possible but simultaneously the environmental problems faced were not yet clearly identified and prioritised because of a lack of information and understanding of the effects of polluting substances on the environment and on human health. Nevertheless, goals and guiding principles were identified.

The principles from part I may give an indication of the desired levels of harmonisation and centralisation. These principles were in turn translated into detailed descriptions of the tasks to be undertaken. These lists can also illustrate the preferences for the type of legislation that was desired and the level of harmonisation that was pursued. The eleven guiding principles for the Community environmental policy are stated in title II of part I. The principles are very diverse but a large number of these principles are economic rather than environmental or ecological principles. The economic principles include the efficiency criterion (protection of the natural environment must be achieved at the lowest costs for the Community) and the polluter pays principle (pollution prevention and abatement costs should in principle be paid by the polluter). One of the goals of the polluter pays principle was to prevent competitive distortions with respect to trade and investment which would occur if not the polluter but the state and in the end the taxpayer would pay for (part of) the pollution control investment.⁷⁶ According to the action programme, temporary exceptions and deviations from the polluter pays principle could be allowed but only if these did

75. APE/1973, Part I, title I, p.5.

76. *Ibid.*, p.9.

not cause significant distortions of international trade and investment.⁷⁷ It also explicitly stated that differences in enforcement of environmental legislation can result in competitive distortions, and hence should be avoided.⁷⁸

The sixth principle from the programme states that (economic) activities undertaken in one country may not worsen the environment in another country. Apart from the fact where the sum of domestic and foreign produced pollution is below the absorption capacity of the environment, strict adherence to this principle would result in a reduction of transborder pollution, possible to zero transborder pollution. Basically, strong adherence to this principle would make the rest of the Community action programme superfluous, as the need for co-ordination has been removed. The resulting environmental independence of all Member States would remove any environmental advantage of centralisation of environmental policies at the Community level. However, the technology simply was not able to measure the origin of local pollution, and hence this principle had little real impact on the behaviour of Member States. Thus, transborder pollution would still require some form of international co-ordination or centralisation.

The issue of centralisation was addressed in principle 10: 'In each different category of pollution, it is necessary to establish the level of action (local, regional, national, Community, international) that befits the type of pollution and the geographical zone to be protected should be sought. Actions which are likely to be the most effective at Community level should be concentrated at that level; priorities should be determined with special care'. This principle seems to point to a proper environmental policy: principles of sound environmental policy decide the centralisation issue. The principle is a subsidiarity principle *avant la lettre* where the focal criteria for the distribution of tasks between the Community and the States are the type/category of the pollution and the (geographic) area to

77. On the basis of a 1974 decision, the Member States could also aid firms under certain circumstances (APE1983, point 12, p.7).

78. *Ibid.*, p.31.

be protected.⁷⁹ However, this delineation of tasks is quite unspecific, giving no clear clues as to what has to be done at the EC respectively the national level. Even if and where it is specific enough to offer some guidance on the delineation of the tasks to be performed at Community level, the criterion centralises more tasks at Community level compared to a delineation on the basis of the orthodox economic theory summarised in chapter 2. Looking in the action programme at the list of actions to be undertaken at the Community level, these included for example⁸⁰ determining the (minimum) use-dependent environmental quality standards for each type of environment, (emission) norms for aquatic pollutants⁸¹ and harmonised products specifications with respect to contents. Economic theory considers only co-ordination of emission norms in case of transborder pollution, preferably as ceiling to total emissions per Member State, and harmonisation of product norms as appropriate subjects for Community action.

The issue of harmonisation is addressed in principle 11: ‘Major aspects of environmental policy in individual countries must no longer be planned and implemented in isolation. On the basis of a common long-term concept, national programmes in these fields should be harmonised within the Community. Such policies should have as their aim the improvement of the quality of life. Therefore, economic growth should not be viewed from purely quantitative aspects. Such co-ordination and harmonisation should in particular make it possible to increase the efficiency of the action carried out at the various levels to protect and improve the environment in the Community, taking into account the regional difference existing in the Community and the requirements for the satisfactory operation of the common market. This Community environment policy is aimed, as far as possible, at the co-ordinated and harmonised progress of

79. For air pollution, some aspects to be taken into account when determining the optimal level of centralisation are mentioned in articles 50-54, APE1977. Subsidiarity formally entered the Treaty following the Single European Act.

80. Ibid., p.9.

81. The first standards mentioned involved environmental quality standards, which would have
Continued on next page

national policies without however hampering potential or actual progress at the national level. However, the latter should be carried out in such a way as does not jeopardise the satisfactory operation of the common market. Co-ordination and harmonisation of this nature will be achieved in particular: by the application of the appropriate provisions of the Treaties, by the implementation of the action described in this programme, by the implementation of the environment information procedure’.

The degree of harmonisation, and hence the freedom left to individual Member States to set national environmental standards, cannot be read from this principle. Factors that seem to point to full harmonisation are that national environmental programmes need to be co-ordinated and environmental policies need to be harmonised on the basis of a common long-term concept. Such a common long-term concept can only come about if the Member States can agree on the goals to be pursued. Consequently this implies a ‘harmonisation of preferences’. Secondly, principle 11 also states that national policies can only be allowed where these do not interfere with the functioning of the common market. This again points to a hierarchical relation between the original and first objective of establishing a well functioning common European market on the one hand and the protection of the natural environment on the other. What this exactly means remains obscure as long as it is hidden whether the functioning of the common market is seen from a mercantilistic fair trade point of view or from an efficiency point of view. The first view would in the most extreme case imply identical standards in all Member States whereas the second view would result in no harmonisation of standards for stationary sources at all.

In contrast with the phrases stressing the importance of uniformity through Community action, principle 11 also states that co-ordination and harmonisation should respect regional differences within the Community and it should not frustrate progressive environmental policies by individual Member States at any

consequences for the (derived) emission standards.

time. This points to the differentiation of environmental standards that is endorsed by economic theory and also suggests that emission standards more stringent than the harmonised bottom-line should be allowed, similar to article 100TR. To get a clearer picture, we will try to infer some conclusions from the operational articles in APE1973. In part II of the programme, two lists of pollutants are given that are to be the primary object of Community scrutiny. It is said that (centralised) Community norms and standards are to be set only when this is necessary, but that the Member States are allowed to use stricter standards.⁸² At the core of the secondary legislation proposed are environmental quality standards. The programme states that these quality standards should be set through common accord between the Member States.⁸³ This phrase in combination with the option to set more stringent standards suggests minimum harmonisation of the environmental quality standards. It does not say to what degree these minimum standards should be differentiated to take into account variables such as natural conditions. More generally, it is stated that the environmental quality standards will be determined at Community level wherever necessary, but Member States can adhere to stricter standards.⁸⁴ Consequently, differences in national preferences will be reflected in the national environmental quality standards if these preferences favour a more ambitious environmental policy. Nevertheless, according to the action programme, this is not desirable in border regions. In border regions standards should be harmonised across similar industries that operate in identical natural and geographic conditions to prevent competitive distortions.⁸⁵ Notice that this notion is markedly different from the economic point of view, where differences in relative endowments and preferences should be reflected by different environmental standards, which do

82. *Ibid.*, p.14.

83. Part I, title III, chapter 1, part B, article 2.

84. Part II, Title I, chapter 2, under A. See also chapter 3, sub 2.

85. APE1973, part II, title I, chapter 6 sub 3.

take into account co-ordination measures to contain transborder pollution between the regions.

In conclusion, the protection of the environment was closely related to, and needed to be integrated with, a good functioning of the common market.⁸⁶ Without a doubt, producers in a Member State that allows emissions of pollutants without restrictions will have a competitive advantage compared to a competing producer in another Member State that is faced with a very strict environmental policy. As we have seen in chapter 2, such a differentiated policy will not decrease total welfare as long as there are no external effects (transborder pollution) and the difference in environmental policy reflects local preferences rather than strategic behaviour. In the situation without transborder pollution and without strategic use of environmental policy by Member States to improve their competitive position to the detriment of other Member States, there is also no economic reason to co-ordinate or centralise environmental policies. It thus appears that there is a gap between the principles from the action programme and economic theory. Requiring an identical minimum environmental quality in all Member States looks like placing environmental quality in the category of basic rights. But more probably the mercantilistic-fair trade view plays a role here: conditions of competition between similar industries in different Member States should be equalised at a common minimum level.

4.2.2 The second action programme (1977-1982)

On May 17, 1977 a new action programme on the environment was adopted by Resolution by the Council. The first action programme had contained a list of actions to be undertaken 'within the next two years'. This programme was extended, and up to the end of 1976, APE1973 had resulted in 36 proposals by

the Commission. Of these proposals, the Council had approved of 17.⁸⁷ Many areas mentioned in APE1973 were still awaiting proposals by the Commission however. From the early nineteen seventies on, Member States also were actively drafting national environmental legislation. From the point of view that differences between national environmental policies could cause competitive distortions, it was worrying that the Member States had sent a total of 138 notifications relating to national environmental legislation to the Commission by the end of 1976. These notifications were submitted following the 1973 Notification Agreement, intended to inform the Community of national policies and to allow the Community to draft centralised legislation to counter potential negative effects.⁸⁸

APE1977 was designed for a period of 5 years (1977-1981). The main purpose was to continue the policies set out in the first programme. Indeed, it was stated in APE1977 that the principles and objectives from APE1973 were still applicable and they were reaffirmed. Consequently, the principles discussed in detail in the previous subsection were copied straightforward into the new programme: Principles 10 and 11 from APE1973 on centralisation and harmonisation respectively, were copied into APE1977 as articles 22 and 23. This continuity implies that we can maintain the conclusions we drew on the bases of APE1973. However, there were new items in the second action programme that help us in interpreting these principles.

It was stated that the locations of abandoned nuclear facilities needed to be cleaned. The stated underlying reason was the high population in the Community, necessitating re-use of land and avoidance of un-esthetical abandoned installations. Whatever the questionable merits of the arguments (e.g. assuming that every Member state is densely populated), the economic analysis from

86. *Ibid.*, p.9.

87. APE1977, p.5.

88. The Notification Agreement was in: OJ C9/1, 15.3.1973 and OJ C86/2 20.7.74.

chapter 2 would not find such arguments relevant in order to argue for centralisation. The transborder effects of ‘ugliness’ are negligible and land use is an entirely domestic issue. In addition, it is not up to the Community to decide on national preferences (what is esthetical?). Requiring cleaning of the sites of abandoned nuclear facilities can however be defended from the mercantilistic-fair trade point of view of preventing competitive distortions.⁸⁹ Cleaning up nuclear power stations is costly and would rise the price of electricity. Mandatory cleaning up could create a level playing field.

In conclusion, APE1977 offered little new. With respect to the first programme, we have indicated reasons to believe that the principles were not explained in line with economic theory. Thus, we can expect that legislation based on this action programme was over-centralised and over-harmonised when compared to the economic guidelines. This conclusion is strengthened by the example given above of a policy that was centralised on dubious grounds. Finally, the conclusion was confirmed by the third action programme: The best indication of the desired level of harmonisation in APE1973 and APE1977 can be found in article 2 from APE1983 that reflected on the first two programmes: ‘the central concern was that, as a result of very divergent national policies, disparities would arise capable of affecting the proper functioning of the common market. That could happen with different product standards that lead to barriers to free circulation of goods or with policies that imposed different charges on firms and so created distortions of competition’. The proper functioning of the common market could be affected by policies that imposed different charges on firms and so created distortions of competition. Thus environmental policies in the Community would be focused on areas that would result in competitive distortions if left to the national authorities. This observation uncovers the

89. Article 198 APE1977, p.32. Competitive distortions can according to the action programme also come about as a result of national legislation involving taxing and subsidising of waste policies by companies.

reasoning by the Commission. It is implied that distortions of competition are created where policies impose 'too different charges' on firms. This is especially the case in areas close to the national borders. Common policies are to be adopted since differences between national laws in the Member States in such areas with generally identical environmental and geographical conditions will result in effects on the relative competitive positions of industries on different sides of the border. In hindsight, the environmental policy pursued was a pseudo environmental policy after all: harmonisation of environmental regulation to serve the economic aim of a well functioning common market although based on a flawed economic reasoning. This observation was in line with the then current Treaty articles: articles 100TR and 235TR at the time did only allow for 'pseudo' environmental policies.

4.2.3 The third action programme (1982-1986)

The third action programme, APE1983, hints at the replacement of the pseudo environmental policies from the previous programmes by proper environmental policies. Whereas the previous actions programmes were primarily economically inspired, now, in the words of APE1983, 'the common environmental policy is motivated equally by the motivation that the resources of the environment are the basis of - but also constitute the limits to - further economic and social development and the improvement of living conditions. It aims therefore not only to protect human health, nature and the environment but also to ensure that resources are well managed, in particular by introducing qualitative considerations into the planning and organisation of economic and social

development'.⁹⁰ From this statement we can deduce that internal market considerations no longer dominated the Community environmental policy.

The reduced interference of economic considerations in environmental policy could imply less harmonisation. This is because the drive for harmonisation within the Community environmental policy was at least partly caused by the need to make use of primarily economically oriented articles in the Treaty. This goes especially for article 100TR that was clearly designed at a time when environmental considerations were outside the Communities scope. To summarise, the less the role for economic objectives within the environmental policy, the less the need to use the harmonisation article as the legal base for environmental policy, and consequently the less the need for harmonised environmental legislation. As an apparent consequence, Principle 11 from APE1973 (copied as article 23 APE1977) that focused on co-ordination and harmonisation was omitted in APE1983.⁹¹ Nevertheless, it was stated in APE1983 that the policies needed to be based on the same objectives, priorities, and principles as the previous programmes.⁹²

APE1983 indicates that two definitions of competitive distortions were used within the Community environmental policy. The first definition is the political definition where competitive distortions apply to different starting conditions for firms, the second definition is the economic definition where competitive distortions apply to the fact that some external costs are not internalised. An example of the political definition of competitive distortions is that the Council explicitly and prominently stated in the preamble that the situation where Member States implement different policies that could cause distortion of competition needed to be avoided. It appears that competitive distortions are defined here as non-identical starting conditions for producers.

90. APE1983, article 3. Article 2 APE1983 is quoted in section 4.6 below.

91. See also point 21, p.10.

92. Ibid., point 5, p.4.

Thus, harmonisation is the instrument that saves the day. The ECOSOC in her advice also mentions competitive distortions in a similar context: if Community legislation is not implemented and applied properly, and if non-compliance is not punished uniformly, competitive distortions can ensue.⁹³ This also points to the use of the political definition of competitive distortions.

The economic definition of competitive distortions is used in point 12 of APE1983: To prevent competitive distortions the polluter pays principle (PPP) should be adhered to.⁹⁴ The PPP is implemented by enforcing norms and levies reflecting differences in (environmental) costs. Harmonisation is therefore not an instrument, but rather an (unlikely) result. However, this economic definition is rashly pushed aside by level playing field considerations. APE1983 states that the introduction of the PPP could be postponed where the financial burdens endangered employment and that even when PPP-norms are implemented, Member States are allowed to offer financial aid under certain conditions. From the economic definition of competitive distortions it follows that national State aid is bad in that it distorts the reflection of real costs of pollution control in the price of the product. This is irrespective of whether the final situation will be more or less differentiated than the situation without aid where producers would (presumably) face differentiated environmental norms. Using the political definition, however, State aid can result in desired harmonised identical burdens on firms in different Member States and thus can remove competitive distortions.

From the intermingled use of these conflicting definitions of distortion of competition, it is not clear whether the legislation adopted under this action programme would be highly harmonised or highly differentiated. One strong indication that harmonisation would still be pursued despite the statement from article 3 quoted above, is that article 9 of APE1983 states that the Commission

93. ECOSOC, C205, p.28, of August 9, 1982. See also APE1987, articles 2.2.2 and 2.2.5.

94. Ibid., p.7. Another reason is that 'apportioning the costs of protecting the environment to polluters, as provided by this principle, constitutes an incentive to them to reduce the pollution

Continued on next page

proposes to create an environmental fund to help regions cope with the implementation of Community legislation. Apparently, the legislation is too expensive, and thus inappropriate for these regions. Such a situation can easily arise from harmonised environmental legislation at Community level. A financial instrument would help in implementing harmonised norms that are too ambitious for some regions.

Principle 10 APE1973 on the level of centralisation was copied in article 9 of APE1983. Initially, Principle 10 APE1973 favoured Community involvement: there seemed to be a distinct bias towards Community legislation as opposed to national policies because the negative competitive aspects of environmental legislation need to be addressed at Community level. The third action programme still struggles with the same issues, but the balance seems to shift to the differentiation-decentralisation side. With respect to decentralisation, in the preamble the Council explicitly endorses the Commission's intention to be guided by respect for different economic and ecological circumstances and structures in the respective Member States and the desirability of Community action as such. The Commission calls this subsidiarity principle one of the three essential principles on which to base a general strategy to protect the environment.⁹⁵ The mere size of the action programme also indicated a new balance between national and Community responsibilities: whereas APE1973 and APE1977 were about 50 pages long, APE1983 did not have more than 16 pages.

In conclusion, we can say that the Commission is still struggling with two different arguments (differentiation is needed to reflect regional differences and harmonisation is necessary to prevent competitive distortions) but it cannot find a clear criterion to make a balance between those two arguments. This is reflected in statements such as 'in order to protect nature it is necessary to harmonise

caused by their activities and to discover less polluting products or technologies'.

95. Ibid., point 9, p.5,6.

national policies but regional diversity has to be taken into account'.⁹⁶ It even tries to reconcile the concept of competitive distortions with both of these arguments through the idea of the polluter pays principle. On the other hand, on the basis of the indications offered above we can conclude that the balance swung towards differentiation. This increased attention for regional differences could possibly be the result of the Greek accession in 1981 plus the fact that England and Ireland got a firmer foothold in Community policy making.

4.3 The Action Programme of the Single European Act (1986-1992)

During the third period - from the adoption of the Single European Act up to the Maastricht Treaty - one action programme was adopted: APE1987.⁹⁷ It was intended to cover six years (1987-1992). The main goals were improving and maintaining the quality of the environment, protection of human health, and rational use of natural resources.⁹⁸ The APE consisted of nine parts, covering prevention of pollution, sector specific measures, use of natural resources, research and international co-operation.

In the previous section we concluded that the introduction of the subsidiarity principle in the Treaty by the Single European Act of 1987 was in line with the trend set in APE1983. The subsidiarity principle was also quoted in the action programme by the Council, which recalled that the Community only acts when goals can be reached better at Community than at the national level.⁹⁹ Of course, subsidiarity as such had already existed since the first programme, indicated by the fact that article 22, annex 1 of APE1987 that embedded a subsidiarity principle was similar to Principle 10 from APE1973 but during the

96. Ibid., preamble (p.2), point 8 (p.5), point 21 (p.10) and point 27 (p.13).

97. In: OJ C328 of December 7, 1987.

98. Ibid., p.2.

seventies it had not been cheered as a leading principle and the first action programme almost seemed to see a common approach to environmental problems as a value in itself.

Despite the inclusion of the ‘new’ subsidiarity principle, the programme itself was still over 40 pages long and there is no mentioning of areas that would be better served by national environmental legislation. The need for integration with other (Community) policy areas was stressed. Thus, economic, common market considerations still played a role in APE1987. One of the first considerations by the Council was that it needed to be prevented that Member States would implement different policies that could cause distortions of competition.¹⁰⁰ It was also obvious to the Commission that national environmental policies could easily result in restriction of trade or distortion of competition.¹⁰¹

The programme stated that environmental differences should be taken into account. Indeed, it was explicitly admitted that (harmonised) Community policies could have severe effects in less developed regions or in specific sectors of industry. APE1987 stated that economically less-developed regions and the worst hit enterprises could be given a delay with respect to the implementation of EC environmental policies.¹⁰² According to the Commission, it may be required that governments help enterprises with investments needed for compliance with environmental norms.¹⁰³ Some environmental state aid had already been allowed since 1974, and this could be compatible with or even aid the PPP in the end.¹⁰⁴ The fund that was advocated was adopted during the Maastricht Summit.¹⁰⁵ This Cohesion Fund was to be used to finance environmental policies in Spain,

99. Ibid., p.2.

100. Resolution of October 19, 1987, in OJ C328/1 of December 7, 1987, page 1.

101. APE1987, article 2.1.2, p.7.

102. Resolution, articles 2.3.17 and 2.4.5.

103. Ibid., articles 2.3.14 and 2.4.5.

104. Ibid., articles 2.5.3 and 2.3.15.

105. See subsection 3.5.2.

Portugal, Greece and Ireland. Our comment here is that from an economic point of view such co-ordinated subsidies can be defended as an instrument to soften the adjustment pains for industry in transition to a regime of (more stringent) environmental policy and help to prevent distortion created by different levels of national environmental subsidies between Member States.

In conclusion, we can see a relation between centralisation/harmonisation and subsidiarity/differentiation. The subsidiarity principle was interpreted so that centralisation and harmonisation were still necessary to prevent competitive distortions. Thus, the subsidiarity principle did not have the effect of bringing policy principles closer to the economic principles from chapter 2.

4.4 The Action Programme of the Maastricht Treaty (1993-1999)

In 1993, the fifth action programme was adopted. As we have seen in the previous chapter, the Maastricht Treaty enforced the role of the subsidiarity principle in the Treaty by taking it from the environmental chapter and putting it prominently at the beginning of the Treaty. APE1993 consequently had to abide by the subsidiarity guideline as incorporated in the treaty.

APE1993 'Towards Sustainability' was to cover a long period – up to the year 2000 – including a mid-term review by late 1995. The first 20 years of Community environmental policy had resulted in about 200 measures, but the environment was still deteriorating.¹⁰⁶ Therefore, a new approach was advocated. However, both economic and environmental considerations continued to play a role in the design of Community legislation.¹⁰⁷ Turning environmental concern

106. Ibid., article1, p.11.

107. Chapter 7, APE1993, p.67

into competitive advantage was one of the objectives of 'Towards Sustainability'.¹⁰⁸

The principles of APE1993 were sustainable development, preventive and precautionary action, sustainability and shared responsibility. Shared responsibility was defined as mixing actors and instruments at the appropriate levels, without calling into question the division of competence between the Community, the Member States, regional and local authorities.¹⁰⁹ The central role for the subsidiarity principle was stressed and it should serve to take full account of traditions and sensitivities of different regions of the Community.¹¹⁰ However, there was also a call for better co-ordination, which could imply some level of centralisation. The exact level of centralisation can therefore not be read from the principles, but has to be distilled from the action foreseen at Community level. What did the new strategy for environment and development imply?

Article 13 states that the programme takes into account the diversity of situation in various regions of the Community and, in particular, the need for economic and social development of the less wealthy regions of the Community. This could imply policies at regional level (decentralisation) or centralised policies including many grounds for differentiation. Article 16 selects a number of environmental issues that pursuant to the principle of subsidiarity compromised 'matters of particular seriousness which have a Community-wide dimension, either because of Internal Market, cross-boundary, shared resource or cohesion implications and because they have a crucial bearing on environmental quality and conditions in almost all regions of the Community'. The issues selected were climate change, acidification and air pollution, depletion of natural resources and biodiversity, depletion and pollution of water resources, deterioration of the urban environment, deterioration of coastal zones, and waste.

108. Ibid., point 4.1, p.31.

109. Ibid., point 33 p.17.

110. Ibid., preamble, article 2 (p.11) and point 32 (p.16). See also a Council Resolution in: OJ Continued on next page

The list is quite long and the items differ considerably in their degree of ‘transborderness’: from global (climate change) to European (acidification) to problems common to selected Member States (such as the pollution of specific rivers). Each of them requires a different approach and a varying degree of involvement of the Community level (i.e. a varying degree of centralisation) but APE1993 does not make these qualifications and therefore the introduction of the concepts is not as helpful as it could have been.

In addition to these issues, five sectors had been identified for special attention. The criterion for selection was ‘where the Community as such has a unique role to play and where a Community approach is the most efficient level at which to tackle the problems these sectors cause or face’. These sectors were also chosen because of the particularly significant impacts that they have or could have on the environment as a whole and because, by their nature, they have crucial roles to play in the attempt to achieve sustainable development.¹¹¹ The sectors were industry, energy, transport, agriculture, and tourism. With respect to industry, this involved setting Community standards for production processes and products. It was stated that Community action is and will be continued to be an important element in the avoidance of distortions in conditions of competition and preservation of the integrity of the Internal Market.¹¹² However, no specific arguments were given for centralisation of such a hefty part of the economies of the Member States. Basically, we meet the view based on the mercantilistic-fair trade interpretation of distortion of competition also reflected in the earlier action programmes, which requires a certain degree of harmonisation to avoid or mitigate differences in cost conditions for similar industry due to differences in environmental regulations between Member States.

C138/1 of May 17, 1993.

111. *Ibid.*, point 18 at p.14 and the introduction of chapter 4 at p.28.

112. *Ibid.*, article 19, p.14.

In conclusion, despite the rhetoric of a new approach, the choice of environmental issues and sectors showed consistence with earlier programmes. Rather than a turning point¹¹³, it appeared to be a continuation of earlier principles. It is clear that the Community is still struggling to find a balance between harmonisation and differentiation, between centralisation and decentralisation. The result is a selection of five sectors encompassing a major part of the economy for action at Community level. To our judgement, this is mainly due to its economically flawed interpretation of distortion of competition, even though this mercantilistic-fair trade view is not applied consistently.

4.5 The Action Programme of the Amsterdam Treaty (1999-2002)

In January 2001, the Commission submitted a proposal to the Parliament and the Council for the sixth environment action programme of the European Community: 'Environment 2001: Our future, our choice'.¹¹⁴ The proposal was 65 pages long, establishing environmental objectives for the next 10 years and beyond plus the actions needed the next 5 to 10 years to achieve the objectives.¹¹⁵

The proposal reflected on the successes so far. According to the Commission, the European Union had the most comprehensive and advanced environmental legislation in the world.¹¹⁶ The Community had been central in reducing water and air pollution.¹¹⁷ Industrial emissions into the atmosphere of toxic substances such as lead and mercury had been reduced significantly, the acidification of forests and rivers had been greatly reduced and sewage and water

113. Ibid., point 39, p.18.

114. Proposal COM(2001)31 final of 24.1.2001.

115. Ibid., p.12.

116. Ibid., p.57.

117. Ibid., p.61.

treatment had improved the health of lakes and rivers.¹¹⁸ The key priority of the APE2001 proposal was the ratification and implementation of the Kyoto Protocol to cut Greenhouse gas emissions by 8% over 1990 levels by 2008-12.¹¹⁹ This was a Community wide goal, and the underlying national emission reduction goals were not distributed uniformly. The programme listed five ‘priority avenues of strategic action’ to meet the environmental objectives. These were to improve implementation of existing legislation, integrating environmental concerns into other policies, finding new ways to work closer with the market via businesses and consumers, empowering people as private citizens and helping them to change behaviour, and to encourage better land use planning and management decisions.¹²⁰ These goals were rather limited and unambitious but the stress on implementation was necessary because some Member States had been slow to implement the secondary legislation adopted up to then. It should not be forgotten that the Amsterdam treaty was written largely to prepare for the accession of many new Member States, and all of these Member States had to implement the *acquis communautaire* - i.e. the environmental legislation up to that point. In the proposal, there is talk of an enlargement from 15 to 28 or more Member States, adding 170 million inhabitants, a 58% increase in land area, and a unique set of environmental problems and assets.

According to the proposal, the approach towards business had largely revolved around setting standards and targets.¹²¹ Addressing environment-health problems involved looking at individual pollutants and setting standards on a medium-by-medium base.¹²² The lists mentioned in previous sections demonstrate this approach. As was said, this had resulted in significantly fallen levels of many common air pollutants. The proposal indicated that this approach

118. *Ibid.*, p.10.

119. *Ibid.*, p.4.

120. *Ibid.*, p.13.

121. *Ibid.*, p.15.

122. *Ibid.*, p.40.

was running out of steam. It is estimated that 30,000 man-made chemicals are presently produced and used in volumes above one tonne - often with limited or unknown knowledge of the environmental risks.¹²³ Thus, the Commission called for a more holistic and comprehensive policy approach, basically identifying risks, set (health) standards and from these derive 'specific policies and standards on air water waste and soil as well as an integrated Product Policy in order to identify opportunities for eliminating the emissions or use of the hazardous waste in products and production processes'.¹²⁴ Evidently, the new approach still depended for a large extent on setting standards.

The increased variation amongst Member States resulting from the enlargement foreseen would from an economic point of view reduce the scope for harmonised environmental policies, and thus reduced the need for centralisation. The programme did not say much on the desired level of centralisation and harmonisation. Regarding centralisation, the proposal identified actions at the national, regional and local levels. More in general, it is stated that if problems are concentrated in certain areas due to the concentration of sources or climatic or geographical conditions, responsibility falls strongly on the relevant local and regional authorities to reduce emissions.¹²⁵ This can be viewed as a call for less centralisation because of the lack of the need for harmonisation. Yet it is in line with the policy that Member States can set more stringent standards if they wish. A Member State with a specific environmental problem in a specific region can take stringent measures that are not to the detriment of industries in other Member States.

On harmonisation the proposal also stated that 'in selecting these actions, full account is taken of the need for the highest level of harmonisation and

123. Ibid., p.41.

124. Ibid., p.40.

125. Ibid., p.47.

approximation of laws to ensure the functioning of the common market.¹²⁶ It is also stated that a harmonised approach at Community level is necessary to overcome competitiveness concerns surrounding for example the introduction of environmental taxes.¹²⁷ These statements seem to imply that a high level of harmonisation is desirable diversity and they clearly reflect the mercantilistic-fair trade view, which has already been expressed in the first action programme and in the Communication of the Commission to the Council of March 1972. On the other hand, it is stated that regulation should be flexible to take account of widespread economic and geographical variation, which reflects the efficiency view. Thus, the proposal for the sixth APE seemed unable to choose between differentiation and harmonisation or between efficiency and equity.

In conclusion, the programme proposed did not set new ambitious goals. Rather it focused on the implementation of current environmental legislation in existing and new Member States. Consequently, the proposal offers little new information on the centralisation and harmonisation issue, and no clear criteria for the choice between harmonisation and differentiation.

4.6 Conclusions

If we look at the sequence of action programmes on the environment, the picture is one of continuity rather than system breaks. Despite statements encountered in every APE that a new approach would be adopted, the contents showed remarkable similarity. Items encountered in most or all programmes are:

- the need to combat distortion of competition through harmonisation but attention for local and regional differences;

126. Ibid., p.12.

127. Ibid., p.15.

- a type of subsidiarity principle but little application of this principle when listing the Community programmes to be undertaken.

The view with respect to harmonisation does not seem to have changed dramatically over time. The arguments for harmonisation and the definition of competitive distortion reflect the fair trade, level playing field views, but they are mitigated by the view that local and regional (environmental) differences should be reflected in the norm. The compromise between these two conflicting points of departure is minimum harmonisation.

This observed continuity is not remarkable given the fact that the action programmes are additive rather than sequential. To implement the policies from a specific programme often requires a timeframe bigger than that available within a period, and the slow legislative process results in little visible change within a span of a few years.

Despite continuity there have also been changes. The point of departure from the initial action programmes was harmonisation based on the fair trade, level playing field view. In other words: common environmental laws to improve the functioning of the common market, implying approximation of emission standards. The exception was to allow deviations from the Community standard on the basis of environmental differences. Over time, the point of departure has shifted: more emphasis is placed on the common goal of protecting the environment. The consequence of such a view might be the guarantee of a minimum environmental quality to each European citizen. On the other hand, the subsidiarity principle became ever more important, focussing on national and regional environmental policies before deciding on centralisation whenever national or regional policies could not bring about the desired result. One reason for centralisation was transborder pollution. Transborder pollution is one of the reasons for co-ordination of environmental standards on the basis of economic theory.

Chapter 5 Secondary Legislation during the period of the emergence of a Community environmental policy (1972-1986)

5.1 Introduction

5.1.1 Research questions and scope

In previous chapters - chapter 3 on primary legislation and chapter 4 on action programmes - we have looked for answers to the questions

- Which definition (definitions) of distortion of competition has (have) been used in the Treaty at various times – the economical or the political definition?
- Which articles from the Treaty could provide the legal base for environmental legislation and which level (levels) of harmonisation of environmental standards is (are) required by or compatible with these articles?

Another, related question concerns the possible and desired levels of centralisation. We see a high level of harmonisation as a strong argument for centralisation on economic grounds whereas if the directive sets a low level of harmonisation, we require additional reasons to justify centralisation.¹²⁸

We can summarise the results from the two previous chapters as follows. In chapter 3 we have seen that the primary legislation did not offer unambiguous answers to the questions we posed: The Treaty offered indications both for the economic perspective on harmonisation (i.e. a very limited role for international harmonisation of environmental standards) and the political perspective on harmonisation. The reserve article does not directly mention harmonisation but the reference to the common market provides a link to (various interpretations of)

128. See chapter 1.

the concept of distortion of competition. The harmonisation articles literally talk about approximation, not full harmonisation. With the replacement of article 100TR by article 100a SEA, it is explicitly confirmed that the legislation adopted on the basis of this article is minimum harmonisation. Grounds are provided to set national standards that are lower than the Community standard but since one of the reasons to invoke this exception is protection of the natural environment, the possibility to set lower national standards appears highly unlikely in the case of Community environmental standards. The environmental articles appear not to imply a certain bottom level of harmonisation, not even minimum harmonisation.

However, it is hard to talk about a level of harmonisation set by primary legislation because the precise requirements and characteristics vary per article (and, for every article, in turn on the version of the Treaty) and the choice of the legal base will in turn determine the level of overall harmonisation. As the articles themselves change over time, it is implied that we can only make a useful analysis of the level of harmonisation per period during which the contents of the Treaty remained constant. In addition, it should not be forgotten that there are great difficulties in interpreting primary legislation. The greatest obstacle in this respect is that a definition of competitive distortion does not exist in Community legislation even though it is a focal concept. The resulting uncertain situation deteriorated after the Paris Summit declaration that resulted in a reinterpretation of some Treaty articles rather than a change in the wording of the Treaty.

This ambiguity was continued in the action programmes discussed in chapter 4. At all times there have been parts stressing harmonisation based on the political interpretation of the competitive distortion and parts stressing differentiated standards to allow for local (environmental) characteristics to be taken into account, which is more in line with the economic definition of competitive distortion. We have concluded that the overall level of harmonisation that was advocated over time did not change drastically. It appears that the point of departure and the exception have traded places, resulting in a fairly identical

level of harmonisation.

Because we did not get definitive answers from the primary legislation and the action programmes on the questions we posed, we will have to look at the level of secondary legislation. This will be done in chapters 5 to 7. Secondary legislation is legislation that is based on primary legislation, in other words the application of Treaty and APE articles. From a legal perspective, secondary legislation should be as unequivocal as possible so that the Member States and citizens alike should have no doubts regarding the interpretation of the rules adopted. There can be incentives to keep the rules vague however. A legitimate reason for rules that are open to various interpretations is to allow for flexibility in the application of the rule. Another political reason for rules that are open to various interpretations is to (temporary) disguise disagreement between the Member States: Vague rules allow each Member State to adhere to the interpretation that suits its interests best.

Secondary legislation is open to scrutiny by the European Court of Justice, which can give binding interpretations of Treaty articles. One can argue that as long as the European Court of Justice (hereafter also referred to as ECJ or the Court) has not had its say about a piece of secondary legislation, the meaning stays ambiguous. However, the opportunities for the European Court of Justice to give its binding interpretation are limited in that this is restricted to the situations where there is a conflict that reaches the Court. There is limited scope for private parties to bring cases before the ECJ and the Commission and Member States may lack an incentive to push their case and expose the internal disagreements within the Community. Therefore a binding interpretation will often not be available. As an authentic ECJ interpretation is relatively rare, we are forced to make our own interpretations of the wording of secondary legislation.

The central questions in chapter 5 to 7 concern the actual use of harmonisation in the environmental policy with respect to stationary point sources as indicated by the secondary legislation. The questions are:

- What precisely is harmonised, for example environmental quality standards or emission standards?
- What type of harmonisation is pursued, for example minimum harmonisation or full harmonisation?
- What are the arguments for harmonisation?
- What kinds of exceptions are allowed and what is the overall resulting level of harmonisation in terms of approximation of emission standards?
- What is the legal base?

In section 5.2 environmental directives with an impact on stationary sources adopted in the pre-SEA period will be discussed and classified using the above criteria. In the conclusion (section 5.3) two other major questions are discussed:

- Is the environmental legislation internally consistent?
- Does the level of harmonisation set in the Community environmental legislation with respect to stationary sources support the choice for centralisation?

The question of internal consistency can be posed on several levels. The question of consistency can be posed on the level of individual directives. In this case, the focal question is whether all parts of the directive offer a consistent body of legislation or whether there are internal contradictions within the law. On the other hand, internal consistency at the level of legislation can be restated as: Is the level of harmonisation as determined on the basis of secondary legislation in correspondence with the limits (i.e. permitted levels of harmonisation) and objectives (i.e. the desired levels of harmonisation) as set in primary legislation and the action programmes? As we concluded above, the primary legislation and the action programmes on the environment did not offer unambiguous answers to the level of harmonisation that was allowed or pursued. In addition to the vagueness of e.g. individual Treaty articles, this was also due to the fact that the primary legislation generally offered several possible legal bases for

environmental legislation with respect to stationary sources and the preferences can be read only from the choice between these different legal bases. From the survey of secondary legislation, we will be able to determine which legal base was preferred by the legislator and whether this choice was supported by the contents of the directive. For example, in case the contents of the directive would result in a uniform Community wide-emission standard, the harmonisation article would have the logical choice for the legal base whereas in case the contents of a directive does not set any Community standards, the reserve article or the environmental article appear to be the logical choice.

With respect to the last question on centralisation, we consider a high level of harmonisation (e.g. full harmonisation) as a strong argument for centralisation. Vice versa, if a low level of harmonisation is set by secondary legislation, the level of harmonisation alone does not justify centralisation. In such a situation, it might have been optimal to let the Member States themselves set national policies rather than centralise these at the European level. Consequently, additional arguments for centralisation will have to be identified in order to conclude that centralisation was optimal and that the subsidiarity principle (as the criterion on which to decide the need for centralisation was later called officially) has been applied properly.

In chapters 5 to 7, we have limited ourselves to directives. Directives are but one of the legal tools available for the Community to make rules. For the environmental area under consideration, directives have by far been the instrument most frequently used. Its pervasiveness in environmental policy can be explained partly because article 100TR made the use of this instrument obligatory.¹²⁹ Another reason often quoted is that a directive in itself embodies the subsidiarity principle. The definition of a directive is given in article 189 EEC: ‘a directive shall be binding, as to the result to be achieved, upon each

Member State to which it is directed, while leaving to national authorities the choice of form and methods'. Thus, countries do have some choice in the form and methods of implementation.

In practice, however, directives have been used in different forms that can be more or less compatible with the subsidiarity principle. Many directives closely resemble regulations. Regulations are binding in their entirety and have direct effect in each Member State. Often directives are just as detailed as regulations. There has been some criticism towards this development, both on strictly legal grounds and in the light of the subsidiarity principle.¹³⁰ Rehinder (1985, p.35) distinguishes typical-article 189-directives, regulation-type directives and framework directives. A framework directive is an instrument that is somewhere in between a proper directive and an action programme. It offers substantial freedom of action to Member States and appears to be a programme rather than something directly applicable. We will encounter some examples of all types of directives in the following chapters.

5.1.2 The level of harmonisation

As we have seen in chapter 2, the mercantilistic and fair trade views use a different definition of competitive distortions than neo-classical economic theory. From these different definitions, international harmonisation of national environmental standards could cause competitive distortions from a neo-classical perspective whereas such harmonisation could prevent competitive distortions from a mercantilistic or fair trade point of view. Summarised in a few words,

129. See sections 3.1 and 3.2; in section 5.2 we will discuss this instrument in detail.

130. Whatever these critiques, we should keep in mind that directives often closely resemble national laws in the freedom they leave to lower levels of government. Thus, it is rather naive to invoke the extensive use of directives in the environmental policy in the EU as an example of shared responsibility (Andersen, 1998, p.2)

neo-classical theory calls for local environmental circumstances, local preferences and differences in pollution control costs to be taken into account, which can be done most properly by the authorities from or in a Member State. In contrast, the fair trade view calls for a level playing field where all producers face similar requirements and the mercantilistic doctrine focuses on preventing stricter requirements on national producers than for competing foreign producers. The mercantilistic and fair-trade views both provide arguments for centralisation geared to harmonisation of regulation affecting the cost of industry. We will present schematic overviews of the actual degree of harmonisation for each directive from the light of this contrast. This implies that we will focus on the level of harmonisation from the producers' perspective.

Instrument	
Full or minimum harmonisation?	
Exceptions (permanent? Conditional?)	
Overall approximation of emission standards	
Legal Base	

The first line 'instrument' in the schematic overview (of which an example is above) indicates the environmental instrument that is used in the directive. In general, this will be environmental quality standards and/or emission standards, but there are also national permits, efficiency standards, emission concentration standards or prescribed use of specific technologies. An environmental quality standard sets a standard for concentrations of ambient pollution, for example a maximum of 10 $\mu\text{g}/\text{m}^3$ of atmospheric air. An emission standard concerns the emissions per unit of time, for example a day, a 24-hour period or a month. Often such emission standards are somehow linked to the production capacity. An efficiency standard links the emissions of pollutants with the production, for example 10 μg per 100kg of product produced. An emission concentration standard sets the pollution contents of the emissions, for example 10 $\mu\text{g}/\text{m}^3$ of

flue gas or effluent. Prescribed use of technologies refers to directives that stipulate use of the ‘best available technology’ in this category. National permits are only mentioned in the table if the directive uses none of the other aforementioned instruments. Such a permit means that the polluter needs to have a licence issued by the authorities, allowing some degree of control over pollution by these authorities. If several issues are dealt with in the same directive, the data in the table will represent the most significant issue or part of the directive. The analysis for the secondary issue will be presented between brackets.

The next line ‘full or minimum harmonisation’ in the table refers to the distinction between full harmonisation, where Member States are in principle not allowed to set either stricter or less strict national standards, and minimum harmonisation, where Member States are in principle only allowed to set stricter national standards. In case the directive only calls for national permits without setting standards or imposing boundaries on standards to be set in the directive, we consider this ‘no harmonisation’. The third line refers to the exceptions that exist on the point of departure, irrespective of whether this is full or minimum harmonisation.

Having established the instrument, the point of departure (full, minimum or no harmonisation), we can qualify the overall level of approximation of emission standards that would be achieved. These emission standards in turn easily translate into abatement burdens by producers, the focal point from the mercantilistic-fair trade views. We shall consider that producers have identical abatement requirements if either uniform emission standards or uniform efficiency standards are prescribed. Environmental quality standards, even if these are fully harmonised, cannot bring about a situation that the emission reduction requirements for identical producers in different Member States are identical. This is because the individual emission reduction obligations that result from a harmonised environmental quality standard depend on the spatial concentrations and types of pollution source, on how the national government

chooses to distribute the abatement burdens and on local receptive capabilities of the natural environment in the respective area. Thus, even in the case of perfectly uniform and fully harmonised environmental quality standards, we will generally consider the level of harmonisation low as this does not imply that competing producers in different Member States face similar requirements. If the only instrument is a national emission ceiling, the national government will have to choose how to distribute the abatement burdens over the emitters, and there will be no harmonisation between producers. If the instrument is an emission standard or an efficiency standard set at producers' level, then the abatement requirements on individual producers can be uniform if these standards are harmonised.

In the final row 'legal base' we will present the legal base that was used for the directive. The legal bases available in the pre-SEA period covered in this chapter were the reserve article 235TR and the harmonisation article 100TR. Both articles referred to the common market, but only the harmonisation article was (explicitly) restricted to legislation that resulted in approximation of standards throughout the Community.

5.1.3 Contents

In the remainder of this chapter we will present our analysis of the secondary environmental legislation with respect to stationary sources we have selected from the Paris Declaration¹³¹ up to July 1, 1987, when the Single European Act entered into effect.¹³² That is, we will cover the second period identified in

131. We have seen in chapter 3 that this declaration probably extended the scope for articles 100TR and 235TR to be used for environmental legislation. Article 100TR was the harmonisation article that allowed adoption of harmonised directives for Common Market purposes. Article 235TR was the reserve article; if it was discovered that the Common Market called for a specific measure to be implemented but there was no specific legal base to enact this measure, article 235 TR could be called upon.

132. In chapter 6 that follows, we will cover the period of the Single European Act. Some 5
Continued on next page

chapter 1. The first period - up to the Paris Summit of 1972 - will not be covered in this chapter. We have seen from chapter 3 that this period only allowed for common market legislation with a (secondary) environmental aspect. Indeed, some directives with a strong environmental aspect were adopted in this period, but environmental protection came second to economic (free market) concerns. Examples are Directive 67/548 on dangerous substances¹³³, Directive 70/157 on noise from motor vehicles¹³⁴ and Directives 70/220 and 72/306 on air pollution from motor vehicles.¹³⁵ None of these directives concerned stationary sources, however, and therefore they remain outside the scope of this analysis.

In the second period from the Paris Summit up to the Single European Act, over a dozen directives relating to stationary sources were adopted. This makes this period the most productive era of environmental policy with respect to stationary sources if we look at the total number of directives adopted. The directives covered are listed in table 5.1 below.

The directives are listed in a chronological order determined by the date the Directive was adopted and they are covered in the main text in the same order. This implies that other phases in the legislative process of each directive, such as for example the initial Commission proposal, are not necessarily treated in chronological order. The selection of Directives thus presents a concise overview of the historical development of the Community environmental policy related to stationary sources. Changes in the institutional structure, changes in priorities and new approaches can all be distilled through comparing the directives.

relevant Directives were drafted during this period. This is only about half of the number of directives of the previous period, but amounts to a similar yearly average production given the longer span of the 1972-1985 period. In chapter 7, we will discuss the secondary legislation based on the Maastricht Treaty and subsequent treaties. The period of the Maastricht Treaty saw few environmental directives affecting stationary sources.

133. OJ L196 of 1967.

134. Directive of February 6, 1970, in: OJ L42/16 of February 23, 1970.

135. Directive 70/220 of March 20, 1970, in: OJ L76/1 of April 6, 1970 and Directive 72/306 of August 2, 1972, in: OJ L190/1 of August 20, 1972.

Table 5.1 List of directives covered in chapter 5		
<u>Name (subject) of the directive</u>	<u>Number</u>	<u>Section</u>
Drinking water	75/440	5.2.1
Aquatic Environment	76/464	5.2.2
Titanium Dioxide	78/176	5.2.3
Groundwater	80/68	5.2.4
Sulphur	80/779	5.2.5
Mercury	82/176	5.2.6
Lead	82/884	5.2.7
Cadmium	83/513	5.2.8
Mercury II	84/152	5.2.9
Industrial Installations	84/360	5.2.10
Hexachlorocyclohexane (HCH)	84/491	5.2.11
Nitrogen dioxide (NO _x)	85/203	5.2.12
Dangerous Substances	86/280	5.2.13
Asbestos	87/217	5.2.14

The list partially reflects a personal choice as the distinction between environmental legislation with respect to stationary sources and other legislation is sometimes hard to make. For example, we have not included legislation relevant only to agriculture.¹³⁶ This has been done for two reasons. Firstly because emissions from farms are different from industrial stationary sources in that they are more diffuse (i.e. non-point emitters whereas industrial installations are point emitters). Secondly because of the fact that the agricultural sector is relatively shielded from market forces compared to many other sectors of the economy, making it impossible to extend conclusions derived from analysis of

136. See e.g. Directive 91/676/EEC of December 12, 1991 (OJ L375 of December 31, 1991) on the protection of waters against pollution caused by nitrates from agricultural sources. Another directive not included is Directive 75/404/EEC (in: OJ L178/24 of 1975) on the use of natural gas in power plants. The preamble states that considerations with respect to environmental protection can point to the use of natural gas as a fuel, and power plants clearly are stationary sources. Environmental protection is not the principal aim of the directive and
Continued on next page

agricultural legislation. The relevance of a directive for our research is immediately clear where emission standards for industry are included. However, this applies to a small number of directives only. A great many more directives involve some type of environmental quality standard (also: EQS), where the link with harmonisation appears more distant. However, these environmental quality standards imply translation into emission standards at some level, and therefore some of these directives have been included for reference. They indicate a low level of harmonisation on plant-level as they do not directly mention (harmonised) legislation on stationary sources. An example of such a directive is the Drinking Water Directive; this directive sets minimum quality standards on water that may be used for the production of drinking water. It does not mention emission norms for polluters directly, but the standards will not be attained without emission norms at polluter level.

For each directive we will look at the level of harmonisation prescribed and its relation with primary legislation and the relevant action programmes on which the measure is based. Secondly, looking at the contents of the measure, we will draw conclusions on the level of harmonisation and as to whether a consistent view on the desired level of harmonisation during a period can be identified.

In order to determine the extent of centralisation achieved by a directive, we need to identify its scope. Subjects outside the scope of the directive are not regulated and hence remain within the legislative realm of the national authorities.¹³⁷ According to the action programmes, environmental problems come in different types, which in turn affect the choice of the designated legislator.¹³⁸ The central question with respect to centralisation is whether the

therefore this directive is not included in the list.

137. There is one exception on the general rule that a particular matter falls outside the scope of a directive if this matter is not regulated, and that is implied harmonisation (see e.g. case 172/82 *Inter-Huiles* 1983, ECR 555). This issue will not be discussed here however.

138. See subsection 2.2.1.

Community should have enacted a directive in the first place or whether the Member States ought to have drafted laws themselves.

It will be clear that we will only highlight the most relevant aspects of these directives and that we will not present a full discussion of these laws. Thus, the reader will look in vain for a discussion on the relative merits of economic and legal instruments et cetera. Rather, we will look whether the levels of harmonisation and centralisation are in conformity with economic theory.

In section 5.3 we will look at the conclusions that can be derived from this chapter. In subsection 5.3.1 we will focus on the legal bases used in the directives. In subsection 5.3.2 we will focus on the preambles of the directives covered. In subsection 5.3.3 we will discuss the contents of the directives and whether these are in line with the preambles and the legal bases. In section 5.3.4 we present the main conclusions from this chapter.

5.2 The secondary legislation

5.2.1 Drinking Water Directive 75/440/EEC

The first directive from our selection in table 5.1 is the Drinking Water Directive of June 1975.¹³⁹ The Drinking Water Directive concerned the required quality of surface water destined for the production of drinking water.

The proposal was submitted to the Council by the Commission in January 1974.¹⁴⁰ According to the proposal, the need for Community legislation was

139. Directive 75/440/EEC of June 16, 1975, in: OJ L194/34, of July 25, 1975. The Drinking Water Directive was closely followed by the similar Bathing Water Directive (76/160/EEC of December 8, 1975, published in: OJ L31 of February 5, 1976 and amended by Directives 90/656/EEC of December 4, 1990 (OJ L353 of December 17, 1990) and 91/692/EEC of December 23, 1991 (OJ L377 of December 31, 1991), that set minimum standards on the quality of bathing water. Because of the similarities we will limit our discussion to the Drinking Water Directive.

140. Proposal of January 21, 1974, in: OJ C44/5 of April 4, 1974.

based on several goals mentioned in the Treaty, i.e. improved living conditions, a harmonious development of economic activities and a continuous and balanced expansion. The proposal by the Commission was based on article 235TR. The stated reasons for introducing the proposal did not refer to competitive distortions. Therefore, the proposal could not be based on article 100TR. In chapter 3 we have concluded that the use of article 235TR does not imply that the legislation cannot set a high level of harmonisation, so in order to determine the level of harmonisation envisioned by the proposal we have to analyse its contents.

Member States were called upon to bring the 'raw' water they used for the production of drinking water up to A1 or A2 quality.¹⁴¹ Thus, minimum standards were set on the quality of water before purification and water that did not meet these minimum standards could not be earmarked for the production of drinking water. So, the proposal used environmental quality standards (EQS). Water of A1 quality could be used as drinking water after simple treatment, water of A2 level could be used as drinking water after normal treatment.¹⁴² It is stated that even maintaining these minimum standards would be very difficult - if not impossible - for some Member States. Therefore, surface water with a lower (A3) quality could - for up to 10 years - be used for the production of drinking water after extensive treatment.¹⁴³ The proposal did not this concession conditional.

For each of these three overall water quality standards, two identifying sets of quality standards on 47 parameters were included, indicated with I and/or G.¹⁴⁴ Together, these parameters would determine in which category (A1, A2, A3 or none) the water would fall. For I-parameters, with respect to e.g. many metals, Member States were obliged to set standards at the values indicated. Often these norms were independent of the water quality level, effectively setting harmonised

141. Ibid., article 4(1).

142. Ibid., annex 2.

143. Ibid., article 4(2) jo. annex 2.

minimum standards on intake water quality with respect to these pollutants. For G-parameters, including e.g. the pH, phosphates and nitrates, Member States individually needed to set norms based on the values indicated. Thus, whereas I-parameters were internationally harmonised there appears to be scope for national deviation from these G-parameters. In addition, the G-parameters themselves were generally dependent on the water quality level - and thus the treatment method - chosen. Certain parameters were not applicable when faced with e.g. exceptional geographic or meteorological conditions.¹⁴⁵ Application of this exception needed to be notified to the Commission.

In conclusion, the proposal included norms that implied full harmonisation (the ban on the use of water not meeting A3 quality). Some norms entailed minimum harmonisation (the I-norms that did not depend on water quality), some norms were differentiated (the I-norms that depended on the quality level chosen), some norms were really goals without legal consequences (the G-norms). In theory, all Member States where water was below A3 quality could choose the lowest A3 quality level. If the environmental standards in the proposal would be strict relative to the then-present situation, the (high) costs of improving the quality of water used for the production of drinking water could result in a uniform minimum norm at the A3 quality level for one decade. It is more likely, however, that both relatively clean and relatively green Member States maintained higher quality levels, what would result in a very low overall level of harmonisation. This is also invoked by article 7 of the proposal that prevented a deterioration of surface water towards the A3 minimum standard, preventing deterioration towards the lowest quality standard. Another rule resulting in a low level of harmonisation, was that certain quality norms were not applicable when

144. Ibid., annex 1.

145. Ibid., article 8b.

faced with exceptional geographic or meteorological conditions.¹⁴⁶ We can thus see that the proposal by the Commission set a rather low level of harmonisation.

The ECOSOC advice¹⁴⁷ put more stress on structural differences that existed between Member States. Features such as the location of industry would affect the implementation costs of the Directive. It is indicated that a balance needed to be found between the desirable economic and social development and environmental protection. By way of example, it is stated that Southeast England would face particularly high costs enforcing the Directive. The impression is that, according to the ECOSOC, even the lowest A3 level would be too ambitious for some Member States given the implementation costs. In conclusion, the ECOSOC stressed economic and social aspects.

The European Parliament on the other hand, is more environmentally conscious in its resolution on the proposal.¹⁴⁸ The European Parliament proposed stricter norms with respect to some pollutants and added more substances and criteria to the list of parameters. It proposed strict adherence to the harmonised minimum water standards, reducing the scope for differentiation. There is neither discussion of the existence of structural differences amongst Member States nor of the need to take such differences into account by differentiating the (minimum) norms.

The European Commission, the ECOSOC and the European Parliament seem to have shared the view that the reserve article 235TR offered the appropriate legal base as there was not critique on the legal base used in the proposal, but the Council judged differently. In the Drinking Water Directive 75/440/EEC as it was adopted, the Council states that ‘Whereas any disparities between the provisions on the quality required of surface water intended for the abstraction of drinking water already applicable or in preparation

146. *Ibid.*, article 8b.

147. OJ C109/44 of September 9, 1974

148. OJ C62/7 of May 30, 1974

in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market. Whereas it is therefore necessary to approximate laws in this field, as provided for in article 100 of the Treaty'.¹⁴⁹ The argumentation for the use of article 100TR used by the Council apparently emanates from the premise that if 'identical' firms in different countries face different obligations - and thus different costs - competition between these producers is 'distorted', which affects the common market negatively. The Council subsequently concludes that national legislation needs to be 'approximated' and introduces the harmonisation article as a legal base for the Drinking Water Directive. The reasoning used by the Council is a level-playing field argument and this is not in line with the economic model presented in chapter 2. The economic theory from chapter would conclude that differences between national legislations could and should reflect differences in preferences and conditions. Harmonisation in itself would constitute a competitive distortion.

In addition to the reference to the harmonisation article, the reserve article was retained as the secondary legal base.¹⁵⁰ This development was important because if both articles are invoked the Directive should respect the conditions from both articles. Even though article 235TR does not mention harmonisation or approximation, the requirements of article 100TR have to be met.

In contrast to the expectation that the addition of article 100TR as a legal base might result in a higher level of harmonisation compared to the proposal, the final directive was less harmonised. This can be seen from several articles. Firstly, the timeframe on the ban for use of level A3 water was removed, postponing approximation to the A2 minimum norms beyond the decade foreseen in the proposal. There were to be national programmes for upgrading A3 level water sources, but these plans should take account of economical and technical

149. Preamble, 75/440/EEG

150. Secondary in the way that this article was mentioned secondly and that this article filled in the gaps that the harmonisation article would leave as a sole legal base.

limitations present in regions within the Community.¹⁵¹ Thus, regional differences were explicitly taken into account to determine the appropriate standards. Secondly, the use of intake water not (even) meeting A3 minimum levels was no longer beyond discussion, but if a Member State chose to use it this needed to be communicated to the Commission. Thirdly, it was explicitly remarked that Member States could impose stricter environmental standards. This effectively did not change the content of the directive relative to the proposal, but it is remarkable given the fact that the harmonisation article was used as a legal base and the article 102TR does allow more stringent measures if they are not to the detriment of industries in other Member States. Finally, some of the (harmonised) minimum norms were deleted from the annex.¹⁵² For these parameters, norms were still to be set in the future, but no timeframe was included.

The main characteristics of the Drinking Water Directive are summarised in the table below:

Drinking Water Directive 75/440/EC	
Instrument	Environmental Quality standards (EQS)
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Permanent unconditional exception
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

151. Directive 75/440/EC, article 4(3).

152. Compare annex 1 of the Directive with annex 2 of the proposal.

5.2.2 Aquatic Environment Directive 76/464/EEC

On October 22, 1974, the Commission submitted a proposal for a Decision¹⁵³ on limitation of pollution by certain dangerous substances in water.¹⁵⁴ The proposal for the Decision was based on article 235TR.¹⁵⁵ The ultimate aim of the proposal was to establish limit values on Community level with respect to the pollutants identified in the proposal.¹⁵⁶ The lists of pollutants included substances such as phosphor, mercury, cadmium and cancerous substances.¹⁵⁷ Substance-specific directives had to be drafted in order to set substance-specific limit values. As indicated, the substance specific minimum norms themselves were not incorporated in the proposal, but were to be determined in future legislation. In short, the proposed Aquatic Environment Directive established a legal framework for specific standards that would be decided upon later. In a sense, it was an intermediate level between an abstract action programme and practical, directly applicable rules that can be found in secondary legislation.

The European Parliament supported the proposal for the Aquatic environment directive.¹⁵⁸ The ECOSOC on the one hand remarked that local factors such as the time and conditions of emission and the presence of aquatic life needed to be taken into account, as well as the population density of surrounding areas.¹⁵⁹ More in general, environmental goals needed to be balanced

153. The contents of this measure could hardly be described as a decision. From the ECOSOC advice on, the proposal was treated as a proposal for a directive rather than as a proposal for a decision.

154. In: OJ C12/4 of January 17, 1975

155. Notice that the proposal by the Commission was submitted before the Drinking Water Directive 75/440/EEC (discussed in the previous section) was adopted, and hence the view of the Council on the legal base of the Drinking Water Directive - as reflected in the preamble of that Directive - was not yet published.

156. See proposal, articles 3(A)1 and 3(B)2.

157. See lists I and II in the annex to the proposal.

158. OJ C5/63 of January 8, 1975.

159. Articles 1.1.2 and 1.3.5 of the Opinion of February 27, 1975, in: OJ C108/76 of May 15, 1975.

with socio-economic aspects.¹⁶⁰ These arguments appear to support differentiated legislation with a rather lenient minimum standard. However, the ECSOC also argued ‘that the use of standards which vary according to the particular tract of water or river mouth must not under any circumstances lead to significant discrimination between undertakings in the same sector in that some undertakings would have to invest heavily while others would be allowed to pollute further and consequently incur less costs. This would, in fact, amount to a reversal of the ‘polluter pays’ principle’.¹⁶¹ Thus, the ECOSOC appears to invoke the level playing field theory, where discrimination (and competitive distortions?¹⁶²) arises when and if the financial burdens placed on producers are not equalised. There was not explicit critique with respect to the legal base on which the proposal was based, i.e. article 235TR.

The final Aquatic Environment Directive was adopted on May 4, 1976.¹⁶³ In contrast with the proposal, the Aquatic environment Directive was adopted on the base of both article 100TR and article 235TR. The argumentation with respect to the choice for article 100TR as the legal base, was literally the same as that used in the Drinking Water Directive: ‘Whereas any disparities between the provisions on the discharge of certain dangerous substances into the aquatic environment already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market. Whereas it is therefore necessary to approximate laws in this field, as provided for in article 100 of the Treaty’. It was made clear in the preamble that any norm would be a minimum norm, and harmonisation thus minimum harmonisation. According to the Council, the

160. Ibid., 1.4.1.

161. Ibid., 1.3.6.

162. There is only one explicit reference to competitive distortions in the advice (article 2.3 in relation to financial support).

163. Directive 76/464/EEC, in: OJ L129/29 of May 5, 1976.

environmental goal of the directive required the additional legal base of article 235TR.

Similar to the proposal, the emissions of the pollutants identified in the Directive were made subject to a national licence issued by the individual Member States.¹⁶⁴ These permits needed to incorporate the Community norms, be they emission standards or EQS. The pollutants were separated into two categories, based on their potential environmental harm. Category I consisted of the most toxic and persistent pollutants, in turn including 8 categories of pollutants.¹⁶⁵ Category II included pollutants that had an effect only in a limited area or where the negative effects depended greatly on the characteristics of the receiving water. The separation of pollutants into two categories had greater consequences than envisioned in the original proposal. For example, there was an unambiguous ban on emissions of list I pollutants into groundwater. For each type I pollutant, the national permits needed to be based on (future) Community standards.¹⁶⁶ In each of the substance-specific directives based on the Aquatic Environment Directive, both emission standards and environmental quality standards were to be set. Member States were to be offered a choice either to adopt the Community emission standards or to adopt the Community environmental quality standards. Both the emission standards and the EQS were primarily determined on the bases of toxicity, persistence and accumulation of the pollutant, but the directive did not establish the necessary hierarchical link between these standards.¹⁶⁷ From the wording of article 6, it is clear that emission standards are the rule and environmental quality standards the exception.

The level of harmonisation that would arise with respect to category I

164. *Ibid.*, articles 4 and 5. See also case ECJ C-168/95 of September 1996.

165. See also the Council Resolution of February 7, 1983 (C46/17 of February 2, 1983), in which a total of 129 substances were identified that should be (made) part of list I. The member States were given 3 years only to supply information on these substances.

166. *Ibid.*, article 6. The Commission was asked to make proposals within 2 years following publication regarding such norms for some of the pollutants on the list, whereupon which the Council would decide within 9 months.

pollutants depends on the choices of the Member States. If all Member States based their permits on the minimum emission standards, all producers within the Community would be faced with identical standards but the environmental quality amongst Member States would vary as there was no upper ceiling on total domestic emissions. This applies even without taken into account the effects of transborder pollution. On the other hand, if all Member States based their permits on the harmonised minimum environmental quality standards, producers would be faced with different emission norms, depending on the ex ante total emissions in relation to the maximum emissions determined by the environmental quality standard. These differences between emission standards of producers located in different Member States would even be bigger when taking into account transborder pollution. The differences in environmental quality and emission standards would be even wider when Member States chose different norms. This is the situation where some Member States hand out permits based on the environmental quality standards and other Member States hand out permits based on emission standards. Secondly, the situation would also be more differentiated when some Member States would set standards higher than the community set minimum.

With respect to the category II pollutants, it is stated explicitly that the environmental harm depends on local conditions and can be limited to a certain (small) area.¹⁶⁸ National permits relating to category II pollutants needed to incorporate emission standards. These emission standards needed to incorporate Community environmental quality standards if and where these existed.¹⁶⁹ It can be deduced that the level of harmonisation aimed for when dealing with category II pollutants was even less than the level of harmonisation that could be expected in relation to category I pollutants, at least as long as no Community norms

167. Ibid., article 6.

168. Ibid., preamble.

169. Ibid., article 7(3).

existed. After setting Community wide EQS, the emission norms for individual polluters would still vary amongst polluters in different Member States, as was analysed with respect to category I pollutants. The treatment of category II pollutants - where Member States themselves could set norms - can thus be viewed using a subsidiarity principle *avant-la-lettre*. This conclusion is countered, however, by the fact that the Commission was to organise regular comparisons between national environmental policies with respect to category II pollutants in order to assure 'sufficient harmonisation'.¹⁷⁰

The major characteristics of the Aquatic Environment Directive are summarised in the table below. Insofar as the directive allows Member States a choice between emission standards and environmental quality standards, the level of approximation is less to a directive such as the Drinking Water Directive discussed before that only sets environmental quality standards. This is because a Member State that could satisfy the minimum environmental quality standards only at high costs would opt for emission standards and a Member State that could satisfy the emission standards only at high cost would opt for environmental quality standards. The level of approximation would be higher if all Member States would either apply the emission standard or the environmental quality standard. Thus, whereas the level of approximation of is minimum harmonisation per instrument, the choice between instruments results in a level of harmonisation that is less than minimum harmonisation.

170. *Ibid.*, article 7(7).

Aquatic Environment Directive 76/464/EEC	
Instrument	National permits. Base for future emission standards and environmental quality standards. A ban on direct emissions of category I pollutants into groundwater.
Full or minimum harmonisation?	Full harmonisation (ban) for direct emissions of category I pollutants but principally a framework directive that does not include standards.
Exceptions (permanent? Conditional?)	-
Overall approximation of emission standards	Full harmonisation (ban) for direct emissions of category I pollutants
Legal Base	100TR & 235TR

5.2.3 Titanium Dioxide Directive 78/176/EEC

In 1975, the Commission proposed a directive concerning pollutants emitted by the titanium dioxide industry.¹⁷¹ The preamble of the proposal stated that national laws with respect to this industry vary between the Member States and that these disparities ‘are likely to constitute barriers to trade within the Community and will therefore have a direct effect on the functioning of the common market’. Because of the primarily economic focus of the proposal the Commission based it on article 100TR. Notice that this was in contrast to the two proposals previously discussed, which according to the Commission had a weaker link with the internal market and where therefore based on article 235TR.

The principal goal of the proposal was to gradually reduce emissions of specific pollutants from this industry.¹⁷² A distinction was made between existing and new installations, the criterion being having or reaching full production

171. Proposal of July 18, 1975, in: OJ C222/110 of September 29, 1975.

172. Basically metals, SO₄, Cl and Fe (ibid., annex II).

capacity before the date of the directive.¹⁷³ New installations needed to achieve a 70% abatement (i.e. emission after abatement were at maximum 30% of emissions before abatement) by 1978, and 95% abatement by 1985. Thus, the proposal set internationally harmonised rules on emissions reductions at factory level. Existing installations needed to achieve a 30% emission reduction compared to emissions before abatement by 1978, a 70% reduction by 1981 and a 95% reduction by 1985.¹⁷⁴ It was explicitly stated that these emission reduction goals were minimum goals and that more ambitious emission reduction targets were allowed.¹⁷⁵

These goals were to be reached by incorporating them in a national permit system of the Member State. Both new and existing plants were to be subjected to national permits. According to the proposal, firms in the titanium dioxide industry are in the class of firms that need an environmental licence for their operations; requirements regarding the pollutants mentioned in the directives should be specified in the licence. Permits were also required for e.g. deposition and storage of waste. In conclusion, the Titanium Dioxide proposal imposed harmonised emission reduction goals on installation level. There was only very little differentiation on e.g. the basis of local conditions or age of the installations. Thus, the Titanium Dioxide proposal introduces minimum harmonisation without downward exceptions for new installations but no apparent harmonisation for existing installations.

The European Parliament welcomed the proposal as a further step to combat environmental pollution and repeated its previously expressed wish to establish regional environmental quality standards.¹⁷⁶ The European Parliament stressed the polluter pays principle, but also acknowledged that economic and

173. *Ibid.*, article 1.

174. *Ibid.*, article 8.

175. *Ibid.*, article 10.

176. In: OJ C28/16 of February 9, 1975. One can wonder how such differentiated regional targets could be combined with the harmonisation goal.

social difficulties could emerge as a result of its application. Financial support – if necessary - should preferably be given in the form of loans. In addition, the European Parliament argued for faster action: reduction of the transition period and an additional limit on the implementation period of the directive.

The ECOSOC propagated financial aid in order to reduce the burden on industry.¹⁷⁷ In addition, the ECOSOC stressed the need for international co-ordination of environmental policies at the highest level to prevent that industries will flee from the Community. Centralisation and harmonisation are central in the ECOSOC advice. For example, the ECOSOC argued that the permits should be handed out at Community level. It also argued for full rather than minimum harmonisation, that is, it asked for the removal of article 10 of the proposal that stated that Member State could always introduce stricter environmental goals. In the opinion of ECOSOC, additional or stricter environmental standards by one or more Member States would result in competitive distortions.¹⁷⁸ This implies that competitive distortions are defined by ECOSOC as changes in the relative competitive position of industries, i.e. the competitive distortions are linked to a level playing field where all producers face identical costs. But, in contrast to its advice on the Drinking Water Directive, environmental concerns were also incorporated by ECOSOC - Community involvement is advocated not only because of effects on intra-Community competition but also because of environmental concerns.¹⁷⁹

The preamble of the final Titanium Dioxide Directive¹⁸⁰ states the prevention of unequal competitive conditions between Members States as one of the reasons for harmonisation. The exact words are: ‘Whereas any disparities between the provisions on waste from the titanium dioxide industry already applicable or in preparation in the various Member States may create unequal

177. OJ C131/18 from June 12, 1976.

178. *Ibid.*, article 2.5.

179. *Ibid.*, article 1.1.5.

conditions of competition and thus directly affect the functioning of the common market. Whereas it is therefore necessary to approximate laws in this field, as provided for in article 100 of the Treaty. This reasoning is identical to the line used to justify the use of the harmonisation article in the Drinking Water Directive. In addition, article 235TR is maintained in the Titanium Dioxide Directive as a second legal base, again similar to the Drinking Water Directive.

The proposal rested on two pillars - the uniform minimum reduction percentages for new plants and the national permit system. In the final directive, only the national permit system was adopted. The uniform reduction percentages for emissions were removed. There were many guidelines concerning the content of the permits, especially for new installations. New installations needed to use the least damaging production techniques.¹⁸¹ For existing installations, the Member States individually needed to draw up national emission reduction programmes. These programmes were to be sent to the Commission before July 1980 so that it could make proposals concerning the harmonisation of these programmes.¹⁸² The article that Member States could implement stricter standards in the permits they issued was maintained, but, given the fact that the national programmes were not harmonised and that the Member States could thus set any standard they desired, this was already implied in the directive and the value of this article was reduced.¹⁸³

In conclusion, in contrast to the proposal the Titanium Dioxide Directive incorporates little harmonisation. The most uniform requirement was that new installations needed to use the least damaging techniques available on the market. The emission reduction goals at installation level envisioned in the proposal were deleted. There appears to be a gap between the legal base and the contents of the directive. The Titanium Dioxide Directive was based on article 100TR, but the

180. Directive 78/176/EEC of February 1978 in: OJ L54/19 of February 25, 1978.

181. *Ibid.*, article 11.

182. *Ibid.*, article 9.

contents showed a rather low degree of harmonisation. The proposal did include harmonised reduction goals, and had therefore been in line with the legal base, but these had been deleted by the Council. This gap between the legal base and the contents implied that the contents of the directive were more in line with the economic theory from chapter 2 than could be expected on the base of the legal base alone.

Titanium Dioxide Directive 78/176/EEC	
Instrument	Least damaging technology for new installations
Full or minimum harmonisation?	Minimum harmonisation for new installations
Exceptions (permanent? conditional?)	-
Overall approximation of emission standards	Minimum harmonisation for new installations
Legal Base	100TR & 235TR

5.2.4 Groundwater Directive 80/68/EEC

We have seen in section 5.2.2 that an Aquatic Environment Directive had been adopted in 1976. The only fully harmonised (zero-) emission norm in this directive related to groundwater. In 1978 the Commission came with a proposal specific for groundwater to partially replace the Aquatic Environment Directive.¹⁸⁴ This proposal was the first to adopt the double legal base (100TR&235TR) and the argument for the use of the harmonisation article that was used by the Council in the previously discussed directives. The Commission evidently accepted the Council’s reasoning that harmonisation was necessary to prevent competitive distortions.

183. Ibid., article 12.

184. Proposal of January 27, 1978, in: OJ C37/3 of February 14, 1978.

The design of the groundwater proposal strongly resembled the Aquatic Environment Directive. It did not cover effluents from households, the agricultural sector and the already regulated titanium dioxide sector. A major difference between the groundwater proposal and the Aquatic Environment Directive was that there was no mentioning of environmental quality standards, apart from the clause that implementation of the directive may not result in a deterioration of the groundwater.¹⁸⁵ This implies that the groundwater quality before introduction of the legislation should be monitored. For the next period it sets the minimum quality for the concentrations of specified pollutants in groundwater. It might imply that groundwater quality between regions and Member States may vary considerably depending on differences in initial variation in quality and pollution levels.

Two lists of dangerous substances (I and II) were drawn up.¹⁸⁶ The first list mentioned for example mercury, cadmium and organic phosphor, the second list mentioned amongst other lead and an-organic phosphor. In general, direct discharges of type I pollutants into groundwater were forbidden, however local circumstances mattered.¹⁸⁷ Indirect discharges of type I pollutants and all emissions of II pollutants required a national permit limiting discharges.¹⁸⁸ These permits should take account of (local) geological circumstances. No Community standards were set. Even so, it is stated that Member States were always allowed to impose stricter emission norms.¹⁸⁹ We can conclude that the resulting degree of harmonisation in the proposal is very low and limited to a ban on direct discharges of some pollutants. This very low level of harmonisation would be reached after an implementation period of several years (existing polluters could

185. *Ibid.*, article 11. This article can be found in the previous directives as well.

186. *Ibid.*, annex.

187. *Ibid.*, article 3.

188. *Ibid.*, article 4.

189. *Ibid.*, article 12.

be given a 3-year transition period by the national authorities on top of the 2-year implementation period).¹⁹⁰

The ECOSOC in its advice questioned the design of the proposal; it was copied from another directive and subsequently not tailored to the problem, the classification between type I and type II pollutants was fuzzy, and the terminology did not correspond with scientific definitions. Furthermore, local factors were not taken into account sufficiently. Finally, the exclusion of household and agricultural emissions was not well received.

The European Parliament in its advice¹⁹¹ did not criticise article 100TR as a legal base even though it advocated more differentiation to take into account the differences in natural conditions. It explicitly approved of the call on Member States to take more stringent measures, it advocated special measures in ‘extremely vulnerable’ karst zones, and in general asked to ascertain the purifying capacity of the soil and subsoil and the quality of the water receiving the pollution. In addition to more differentiation, it also called for stricter environmental norms, such as e.g. transferring the pollutants chromium, lead, arsenic and cyanides to list I and prohibiting all direct and indirect discharges of all listed substances in areas where groundwater can or will be used as drinking water.

The final Groundwater Directive¹⁹² of December 1979 met the ECOSOC critique in that the sectoral exemptions were removed. The proposal had generally been followed, however, and with it many items that resulted in its low level of harmonisation. The emissions of list I pollutants needed to be terminated. Member States needed to limit type II emission, but it was not clear to what level as there was no Community standards or norm.¹⁹³ Even in case of a high risk of transborder groundwater pollution, no harmonisation of standards was envisaged.

190. This was expanded to 4 years in the final directive (article 14).

191. OJ C296/35 of December 12, 1978.

192. OJ L20/43 of January 26, 1980.

There was but a duty to inform the other Member States involved so they can influence the decision whether or not to give a permit. There was one temporary exception in that Greece, a recent Member State, was given an additional 2 years to comply with the implementation of the directive relative to the other Member States.

In conclusion, despite its legal base – including 100TR - the level of harmonisation of the Groundwater Directive is very low. Indeed, there is not one uniform norm to be found in the directive at all.

Groundwater Directive 80/68/EEC	
Instrument	Ban on emissions of list I pollutants, permits for list II pollutants
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Temporary delay for Greece.
Overall approximation of emission standards	Minimum harmonisation for list I pollutants with exception for Greece.
Legal Base	100TR & 235TR

5.2.5 Sulphur Directive 80/779/EEC

On June 24, 1975, the Council took a decision regarding the gathering and exchange of information with respect to sulphur and small particles.¹⁹⁴ This information was necessary to get better knowledge on the health effects of these pollutants. Harmonisation of research and measurement methods was necessary to allow for comparison of national data. The reason for the Community to get

193. Ibid., article 5.

194. Decision 75/441/EEC, in: OJ L194/40 of July 25, 1975.

involved in this area was that the spread of pollutants over great distances necessitated involvement at regional, national, Community and world level.¹⁹⁵

In February 1976, the Commission came with a proposal for a directive on sulphur and suspended particles.¹⁹⁶ The aim of the proposal was protection of public health by setting limits on concentrations of these substances in urban areas.¹⁹⁷ That is, the object of the proposal was local health problems. The reasons for centralisation at Community level were not given other than that the re-interpretation of the Treaty involved the quality of life and environmental protection. There was no common market interest, and thus article 235TR was chosen as the sole legal base for the proposal.

The proposal set Community wide norms on concentrations of pollutants within urban areas to be reached by 1982.¹⁹⁸ There were environmental quality standards using yearly median of daily concentrations, daily average concentrations and median daily concentrations during winter. The daily average EQS are presented in table 5.2.5a below, the maximum median winter and yearly EQS are in table 5.2.5b. The yearly median concentration is the lowest norm, the daily norm places a restriction on extreme variations in daily concentrations that (summed over a year) would still comply with the yearly norm.

The applicable norms for sulphur dioxide (SO₂) depended on the associated concentrations of suspended particles - if the suspended particle concentrations were below a certain value, the associated permitted maximum SO₂ concentrations were higher. For example, if the concentration of particles for a specific 24-hour period was less than 100µg/m³ the sulphur norm was 350 µg/m³ but if the particle concentration exceeded 100µg/m³ the sulphur norm was (only) 250 µg/m³. There was an exception in that the daily averages were less strict in the event of exceptional weather conditions (table 5.2.5a, lower part); the norms

195. Ibid., preamble.

196. In: OJ C63/5 of March 19, 1975.

197. Ibid., article 1.

associated with the bad weather exception could be invoked only up to 1987 however.¹⁹⁹

Table 5.2.5a Daily average environmental quality standards from the proposal		
24 hour average	Suspended particles in µg/m ³	Sulphur dioxide µg/m ³
Normal	250	250
	100	350
Exceptional weather	350	350
	100	500

Table 5.2.5b Median winter and yearly concentrations from the proposal		
Maximum median	Suspended particles in µg/m ³	Sulphur dioxide µg/m ³
Year	>40	80
	<40	120
Winter	>60	130
	<60	180

The proposal also contained a standstill EQS applicable outside urban areas, in that measures undertaken to comply with the directive should not result in a worsening of the environmental quality in other areas.²⁰⁰ The norms imply that there was minimum harmonisation if all the Member States had to conform to identical minimum standards. It is possible, however, that it had already been foreseen that some Member States structurally could invoke the bad weather exception much more than other Member States and therefore would be allowed to have higher ambient concentrations. If these were the case, one can argue that there existed differentiated norms up to 1987, temporarily reducing the level of harmonisation set by the proposal.

198. Ibid., article 2/1 and annex I.

199. Ibid., article 2/2 and annex II.

200. Ibid., article 4.

The European Parliament in its advice judged that article 100TR would be a better legal base for the proposal and requested this to be changed, but no arguments were given to support this preference for article 100TR.²⁰¹ The European Parliament endorsed the Commission's opinion that Member States could impose stricter norms at all times if this would not endanger the functioning of the common market.²⁰² It is not clear what situations the European Parliament (or the Commission) had in mind. Finally, the European Parliament questioned the long implementation period (up to 1982/1987). The ECOSOC shared this final point of criticism, concluding that these years were chosen on the bases of economic rather than health considerations. It expressed its hope that Member States would reach the targets before these dates.²⁰³

The final Sulphur Directive of 1980 was based on both articles 100 and 235TR.²⁰⁴ The argumentation used to justify the use of the harmonisation article is almost identical to the one used in the previous directives.²⁰⁵ The geographical scope of the directive was expanded considerably in that it was no longer limited to urban areas. The level of harmonisation can be inferred from the preamble; measures need to be economically viable and deviations below the minimum standards are allowed when it is concluded that the limits imposed cannot be maintained or implemented. From this preamble, we can expect a low level of harmonisation. However, the phrase that measures need to be possible economically and compatible with a balanced development cannot as such be found in the main body of the Sulphur Directive. Rather, some specific exceptions were included.

201. OJ C83/44 of April 4, 1977, point 3.

202. *Ibid.*, point 8.

203. Point 1.3 in the ECOSOC advice of June 30, 1976, in: OJ C204/34 of August 30, 1976.

204. Directive 80/779/EEC of July 15, 1980, in: OJ L229/30 of August 30, 1980.

205. 'Whereas, since any discrepancy between the provisions already applicable or being prepared in the various Member States with regard to sulphur dioxide and suspended particles could give rise to unequal conditions of competition and could consequently directly affect the functioning of the common market, the legislative provisions in this area should be harmonised as prescribed in article 100 of the Treaty' (80/779/EEC).

The directive listed limit values and target values. As a result of their legal enforceability, the limit values are more important. These limit values were to be implemented by April 1983 but article 3 states that if the limit values were to be exceeded in some areas the Member State had to draft a policy to reach the limit values at the latest by April 1993. Thus, Member States were given over 12 years to achieve the goals. The yearly and winter medians were identical to those in the proposal (see table 5.2.5b). The daily norms (listed in table 5.2.5.c) applied to 98 percent of the year and were a bit more lenient, however the bad weather exception was deleted.

98% of 24 hour averages	Suspended particles in µg/m ³	Sulphur dioxide µg/m ³
	250	250
	150	350

In effect, this increased the level of harmonisation because all countries could use the 2 percent (i.e. 7 day) exception, be it because of bad weather or other causes. Thus, there would be no different norms on the basis of weather conditions within Member States. Article 10/2 allowed countries to use another method of measurement. The intention was of course to set identical norms independent of the measuring method, but some differences would probably occur due to this option. The resulting level of harmonisation would decrease in case the two methods of measurement would lead to different results.²⁰⁶

The standstill EQS from the proposal was maintained, i.e. if measures adopted to reach the limit values in polluted areas should not result in a noticeable deterioration of air quality in relatively clean areas.²⁰⁷ In a related

206. It is explicitly stated in article 4 that the Directive set minimum norms and that the Member States could set stricter norms.

207. Ibid., article 9.

Resolution of the same date as the Directive, the Member States declared to try and limit and if possible reduce and prevent transborder emissions of sulphur and particles.²⁰⁸

Sulphur Directive 80/779/EEC	
Instrument	Environmental quality standard, ambient standard, standstill
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Temporary (10 year) delay on environmental quality standards.
Overall approximation of emission standards	Minimum harmonisation of environmental quality standards (with exceptions until 1993).
Legal Base	100TR & 235TR

5.2.6 Mercury Directive 82/176/EEC

In 1979, the Commission submitted a proposal regarding aquatic mercury pollution emanating from the chlor-alkali electrolysis industry.²⁰⁹ This was the first directive based on the Aquatic Environment Directive: mercury was one of the pollutants on list I of this directive. The proposal made no direct reference to a legal base from the Treaty itself, thus demonstrating its dependence on the Aquatic Environment Directive. As this directive was based on articles 100 TR and 235TR, the mercury proposal was indirectly based on these Treaty articles too.

Following the approach set in this directive, the mercury proposal required that all discharges required prior permission by the Member State involved. The proposal was limited to the chlor-alkali electrolysis industry, which was the

208. Resolution of July 15, 1980, in: OJ C222/1 of August 30, 1980.

209. Proposal of July 20, 1979, in: OJ C169/2 of July 6, 1979.

principal polluter.²¹⁰ Being based on the Aquatic Environment Directive, the proposal used both emission standards and environmental quality standards and Member States could choose which to apply. As a matter of fact, formally there were two, related sub-proposals: one for emissions standards and one for EQS. The sub-proposal on emission standards set a limit on the monthly average mercury concentration in discharges and efficiency norms. These efficiency norms set limits on emissions of mercury in relation to the production capacity of the facility, the type of facility, the year and whether it concerned an existing or a new facility (see table 5.2.6a below).

When	Existing plants		New plants
	Recycled brine	Lost brine	
1.7.1983	1.5	8	
1.7.1986	1.0	5	
1.7.1989	0.5	2.5	
2 years after notification of the Directive or as soon as the establishment is brought into service, if this occurs after that date			0.5

The sub-proposal on EQS sets limits on mercury concentrations in water (0.5 µg/l within the freshwater limit and 0.05 µg/l beyond), in fish and in sediments. These environmental quality standards were to be attained by July 1983. The judicial department of the Council advised to merge the two proposals. As we have explained in section 5.2.2 on the Aquatic Environment Directive, the choice between (minimum) EQS or (minimum) emission standards will reduce the level of harmonisation compared to a proposal that sets either only emission standards or only environmental quality standards. It appears that in this proposal no attempt is made to reconcile these two norms as the emission standards change

210. Ibid., preamble.

over time whereas the EQS remains constant, assuring different obligations on installations.

The ECSOC in its advice stressed that mercury emission from other sectors were comparable (dentists and laboratories) or even higher (electrical products and instruments industry) than the chlor-alkali electrolysis industry selected.²¹¹ Given that these other industries were much less concentrated and their emissions very diffuse, the ECOSOC accepted the selection of the chlor-alkali electrolysis industry for the time being.²¹² With respect to the level of harmonisation, the ECOSOC stated that the natural background level of mercury in seawater varied substantially. Therefore, the Community standard should be tailored to incorporate regional conditions.

In the final Mercury Directive 82/176/EEC²¹³, articles 100TR and 235TR were explicitly mentioned besides the Aquatic Environment Directive. The reason for invoking article 235TR was that the contents of the Mercury Directive could not be based completely on the Aquatic Environment Directive, but the reference to article 100TR is not explained and seems superfluous. The two sub-proposals on emission standards and EQS respectively were merged into one directive. It was made explicit that the emission norms and the EQS, between which Member States could chose, were minimum norms.²¹⁴ The emission standards still set a limit on the monthly average mercury concentration in discharges and efficiency norms, but the values were changed relative to the proposal: The ambient concentration norm was 75mg/l per July 1983, lowered to

211. OJ C83/16 of April 2, 1980. The European Parliament appeared to share this critique in that it proposed to change the phrase that pollution arises principally from the electrolysis of alkali chlorides by to a large extent (OJ C341/24 of December 31, 1980).

212. The Commission subsequently changed its proposal in 1980 (Amendments of December 8, 1980 in: OJ C341/24 of December 31, 1980). The Commission removed the phrase that Mercury pollution was principally caused by the chlor-alkali electrolysis industry and replace it by 'to a large extent.'

213 Directive 82/176/EEC of March 22, 1982, in: OJ L81/29 of March 27, n1982. The Mercury Directive was amended by directives 90/656/EEC of December 4, 1990 (OJ L353 of December 17, 1990) and 91/692/EEC of December 23, 1991 (OJ L377 of December 31, 1991)

50mg/l per July 1986. The principal efficiency norms are presented in table 5.2.6b below; these are identical to the proposal except that the stricter norms after 1989 were deleted and that new facilities were not covered specifically. In compensation, the Mercury Directive stated in article 3 that the best available technology (BAT) needed to be implemented as a condition for getting a permit. BAT does not imply technology with the highest effectiveness in catching or preventing potential emissions as cost considerations are taken into account. The views of the Member States on what is appropriate technology are put together in a kind of shopping list from which Member States can make a choice. Since BAT is defined as a range of technologies the implication is that the emission standards achieved by installing the technologies will not be uniform but are differentiated within a certain range. In addition, the Mercury Directive allowed Member States to refrain from prescribing BAT technologies for ‘technical reasons’. This offered an opening for a lower level of harmonisation.

Table 5.2.6b: Maximum quantities of mercury per chlorine capacity in g/t		
When	Existing plants	
	Recycled brine	Lost brine
1.7.1983	1.5	8
1.7.1986	1.0	5

The BAT clause was also applicable when a Member State opted for EQS instead of the emission norms. The EQS themselves were changed in that the number of indicators of the environmental quality was increased considerably.²¹⁵ A Member State could largely choose which of the indicators for environmental quality to use in a specific area. Thus, of the alternative 5 indicators listed in annex II of the directive, the Member State could choose the one that would be less strict on the industry. As we have said in chapter 2, environmental quality standards offer a

214. Ibid., article 2(3).

way to attain a uniform environmental quality throughout the Community. The costs on industry would depend on the situation with respect to for example absorptive capacity of the local environment. Consequently, the pollution abatement costs on industry would differ. This was the situation aimed for in the proposal. However, in the Mercury Directive the scope for differentiation was increased even more as countries could choose the definition of environmental quality themselves. Not only could costs on industry differ greatly, also the environmental quality could differ depending on the criterion applied.

Mercury Directive 82/176	
Instrument	Environmental quality standards or emission standards; best available technology for new installations
Full or minimum harmonisation?	Minimum, choice of yardstick
Exceptions (permanent? conditional?)	Exception on best available technology for technical reasons
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

5.2.7 Lead Directive 82/884/EEC

In April 1975, the Commission proposed a directive concerning air quality standards with respect to lead.²¹⁶ The main goal was to protect public health, i.e. an apparently national or local concern. Nevertheless, APE1973 had stipulated that policies needed to be co-ordinated and harmonised on the basis of a common concept. The action programme thus offered the bases for centralisation and harmonisation. It follows that this harmonisation was not required for a common

215. Ibid., annex II.

216. Proposal of April 16, 1975 in: OJ C151/29 of July 7, 1975.

market objective and thus the directive could not be based on article 100TR. Consequently, the Commission proposal was based on article 235TR only.

The objective of the proposal was to set air quality standards on lead, i.e. limit values on the maximum concentrations, to be reached by 1980.²¹⁷ The general yearly average limit was 2 mg Pb/m³. In areas with lots of car-traffic the norm was 8 mg Pb/m³. Thus, local differences were taken into account to some extent. The proposal involved minimum harmonisation as Member States could set stricter quality norms. In addition, the proposal included a standstill-clause: areas with low levels of lead pollution should not deteriorate (i.e. have higher concentrations of lead or other pollutants) as a result of measures taken on the bases of the directive. In a way the directive covered more than just environmental quality standards for lead - it was stated that implementation of measures to reach the lead norms could not result in an increase of other pollutants.²¹⁸

The European Parliament in its advice wanted to change the standstill-clause. Areas with low levels of lead pollution should not deteriorate considerably as a result of measures taken on the bases of the directive.²¹⁹ A similar proposal from within ECOSOC did not make it into the ECOSOC advice.²²⁰ The supporters of the amendment argued that some deterioration was inevitable given e.g. relocation of industries. The ECOSOC did have critique on the limit values adopted as it was not clear whether these would be tenable given the current technology in industrial areas with high lead use.²²¹ This implied either lower harmonised norms or more differentiated norms to take the effects of stationary sources on local pollution into account.

217. *Ibid.*, article 2.

218. *Ibid.*, article 2(3).

219. OJ C28/32 of February 2, 1976.

220. Advice of January 28, 1976 in: OJ C50/9 of March 4, 1975. The proposal faced 48 rejections against 15 supporting votes, besides 8 abstentions.

221. *Ibid.*, article 2.1.2.

The final Lead Directive was adopted in December 1982.²²² Remarkably - given the other directives from our sample - the Lead Directive was based on article 235TR only. A uniform maximum of aerial lead concentrations of 2 mg Pb/m³ was established. The directive was even more harmonised than the proposal in that there was no lower norm in areas with lots of car-traffic.

During the legislative process, i.e. before the Lead Directive, a directive on the lead-content of gasoline had been adopted.²²³ This was a product directive aimed at common market as well as environmental considerations. The directive set a maximum (0,40 g/l) as well as a minimum (0,15 g/l) on the lead content.²²⁴ In light of the preamble, it can be deduced that the maximum norm aimed at health concerns and that the minimum norm aimed at economic, common market concerns. Despite the directive being based on article 100TR, Ireland got a higher maximum lead limit (0,64 g/l) than the other Member States. One can assume that the limits set on the lead-content of gasoline would limit lead emissions from car-traffic *ceteris paribus*. Thus, there could be a link between the deletion of differentiated norm in the Lead Directive and the directive on the lead content of fuels, as this reduced the need to make allowance for car-traffic.

It was clear that the Lead Directive incorporates minimum harmonisation as it was explicitly stated that Member States could impose stricter norms.²²⁵ The Member States were given 5 years to comply with these standards, but a 2-year extension was foreseen for Member States facing implementation problems.²²⁶ With respect to the standstill-clause, it was stated that where the lead

222. Directive 82/884/EEC of December 3, 1982, in: OJ L378/15 of December 31, 1982. In the meantime directive 78/611/EEC on the lead-content of gasoline (of June 29, 1978, in: OJ L197/19 of July 22, 1978) had been adopted. This was a product directive that set a maximum as well as a minimum on the lead content. Probably, the maximum aimed at health concerns and the minimum at economic, Common Market concerns. Despite this directive being based on article 100TR, Ireland obtained a lower maximum lead limit than the other Member States.

223. Directive 78/611/EEC Of June 29, 1978, in: OJ L197/19 of July 22, 1978.

224. *Ibid.*, article 2.

225. Article 2 of Directive 82/884/EEC.

226. *Ibid.*, article 3.

concentrations were small relative to the 2mg Pb/m³ norm, the air quality could not deteriorate noticeably.²²⁷

In conclusion, the limits on lead concentrations would be harmonised at the latest in December 1989, almost 15 years after the already delayed proposal. Thus, the Lead Directive involved minimum harmonisation. The Lead Directive nevertheless had a higher level of harmonisation than many of the previous directives that included many exceptions on the minimum standards. Ironically, this was the first real environmental directive affecting stationary sources that was not based on article 100TR. It is not clear why the Council did not base the Lead Directive on articles 100 and 235TR, as the contents were compatible to those of the previous directives. Of course, the choice for only article 235TR did not imply that harmonisation was not possible. After all, it was stated that Community legislation needed to be based on uniform ‘concepts’. Still, the fact remains that the level of harmonisation of this article 235TR directive was higher than the level of harmonisation in many article 100TR directives.

Lead Directive 82/884/EEC	
Instrument	Environmental quality standard; standstill clause on ambient quality
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Temporary delay, conditional
Overall approximation of emission standards	Minimum harmonisation of environmental quality standards with temporary exceptions and standstill
Legal Base	235TR

227. Ibid., article 7. Whether air quality includes other pollutants than lead is not stated explicitly.

5.2.8 Cadmium Directive 83/513/EEC

In 1981, the Commission submitted a proposal on cadmium.²²⁸ The proposal was based on both the Aquatic Environment Directive and on article 235TR. In the preamble it was stated that cadmium emanated from many industries, and that norms – where feasible - needed to be set for each industry or group of industries.²²⁹ As with all Aquatic Environment Directive-based legislation, the proposal offered Member States a choice between emission norms and environmental quality norms. With respect to the emission norms, the proposal identified 6 specific sectors.²³⁰ In table 5.2.8a below we present the monthly norms. There were also daily norms, which are calculated by doubling the values for the appropriate monthly norm in the table. In addition, there were norms on emission concentrations and efficiency norms that set a maximum on cadmium emission per quantity cadmium processed.

Table 5.2.8a Cadmium emission norms				
Sector	Monthly concentration norm in mg/l		Efficiency norm in mg/kg	
	1.1.1983	1.1.1986	1.1.1983	1.1.1986
Metals	0,5	0,3		
Pigments	1,0	0,5	0,7	0,3
Stabilisers	1,0	0,5	0,8	0,5
Batteries	1,0	0,5	2,5	1,5
Electroplating	1,0	0,5	0,5	0,3
Cadmium	1,0	0,5	1,0	0,5
Others	1,0	0,5		

228. Proposal of February 17, 1981, in: OJ C118/3 of May 21, 1981.

229. From an economic point of view, the optimum policy would include identical marginal pollution abatement costs for all polluters. It is not clear whether this is the underlying reason to set standards per industry rather than across the board.

Sectors '1:metals' and '7:others' only had a norm expressed in mg cadmium per litre of emissions. This norm for sector 1 was stricter than the norm for the other sectors.²³¹ Sectors 2-6 also had efficiency norms, which showed a lot of variation between sectors. In conclusion, with respect to the emission norms there was minimum harmonisation within sectors but differentiation between sectors. With respect to EQS, there were several indicators - both with respect to freshwater and seawater which all had to be abided by. Some of these norms would be applicable starting on January 1983, other only would become applicable on January 1986. The norms with respect to freshwater depended on the water characteristics. The BAT-clause was also applicable irrespective of which standard was chosen by the Member State, increasing the level of harmonisation amongst new installations.

The European Parliament broadly agreed with the proposal²³², and the final Cadmium Directive was adopted on September 26, 1983.²³³ The Cadmium Directive was based on the Aquatic Environment Directive as well as articles 100TR and 235TR. The directive incorporated minimum harmonisation. If minimum harmonisation was adopted for level-playing-field considerations, article 3(2) is interesting. It states that the emission norms could also be complied with by following treatment of the emissions in an abatement installation. It is not stated that this installation could not be operated and/or paid for by the Member State. There is another, more direct reference to competitive considerations. It is stated that new installations need to comply with BAT norms. There can be exceptions but not when BAT emission norms cannot be met with other (older/inferior) technology²³⁴ or where BAT is necessary 'for the prevention of

230. Proposal, annex I.

231. In the ECOSOC advice (OJ C230/22 of September 10, 1981) it is stated that the reason for the different value for sector 1:metals was because this was a compromise between existing national norms; some Member States (already) used stricter norms.

232. OJ C334/139 of December 20, 1982.

233. OJ L29/1 of October 24, 1983.

234. This condition is superfluous as the company will by definition 'chose' the BAT
Continued on next page

distortion of competition’.²³⁵ A welfare maximising Member State would allow its industry to use the cheapest technology to comply with the norms, be it a BAT technology or not. It appears that the condition quoted prevents this situation. This condition thus uses the political-economic condition of competitive distortions, attaching much value to a level-playing ground.

The final Cadmium Directive was limited to 6 sectors as sector 7 (‘other’) was dropped (see table 5.2.8b).

Table 5.2.8b Cadmium emission norms			
Sector	Monthly concentration norm in mg/l		Efficiency norm in mg/kg
	1.1.1986	1.1.1989	
			1.1.1986
Metals	0,3	0,2	-
Pigments	0,5	0,2	0,3
Stabilisers	0,5	0,2	0,5
Batteries	0,5	0,2	1,5
Electroplating	0,5	0,2	0,3
Cadmium	0,5	0,2	0,5

The 1986 concentration norms were the same as in the proposal, but stricter 1989 norms were added. The 1986 efficiency norms were also copied from the proposal, so there was no ‘environmental loss’ due to the delay in the legislative procedures. The level of harmonisation with respect to the emission norms is minimum harmonisation within sectors and differentiation between sectors. This is in line with the level playing ground argument. The EQS were simplified in comparison with those from the proposal, and did no longer depend on the characteristics of the receiving water.²³⁶

technology if this is the only technology available to reach the emission standards.

235. Ibid., article 3(4).

236. Ibid., annex II.

The directive was not applicable to Greenland given Greenland’s specific circumstances (low population density, large landmass and geographic position).²³⁷

The exclusion of Greenland implied that minimum harmonisation was not reached in the whole of the Community. It is difficult to interpret the exception for Greenland. One of the goals of the Cadmium Directive is protection of public health. Either one is of the opinion that all Community citizens have a right to a clean environment²³⁸ – in which case the norms should be harmonised without exceptions – or one is of the opinion that Member States should decide themselves the value of life and thus of cadmium levels.

Cadmium Directive 83/513/EEC	
Instrument	Choice between environmental quality standards or emission standards; best available technology for new installations
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Greenland; conditional exception on best available technology
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

5.2.9 Mercury II Directive 84/156/EEC

In March 1982, Directive 82/176/EEC, on Mercury emitted by the chlor-alkali electrolysis industry, had been adopted (see section 5.2.6). In December 1982, the Commission submitted a proposal on Mercury pollution for all remaining

237. Ibid., preamble and article 7.

238. There is no right to a clean environment to be found in the Treaty (see Van Calster, 1998, p.24)

sectors.²³⁹ The proposal was based on the framework Aquatic Environment Directive 74/464. In addition, both articles 100TR and 235TR were invoked explicitly. The need for the use of 235TR as a legal base in supplementing the Framework Directive was explained in the preamble, the use of article 100TR was not. It was stated that mercury pollution was caused by many industries and that sector specific norms needed to be established.²⁴⁰ The proposal set norms on mercury emissions to be used in the permits issued by the Member States for the sectors not covered by Mercury Directive 82/176, with the exception of emissions by dentists.²⁴¹

As in all proposals based on the Framework Directive, countries could chose between emission standards or (alternatively) environmental quality standards (EQS). The EQS in the Mercury II proposal were not set there, rather, the proposal referred to the EQS as set in the Mercury Directive. The overall minimum environmental quality standard was not altered. Therefore, it cannot be excluded that the Mercury II proposal had implications for the emission standards Member State needed to set in the emission permits issued to the chlor-alkali industry. This is because it had to be taken into account that (the emissions of) other industries would now be regulated as well, and this could have an effect on overall emission, and thus on the overall environmental quality. In this respect we should notice that it is not clear whether the fact that a Member State opted for emission standards for the Mercury Directive would prevent this Member State to opt for EQS for the Mercury II proposal, and vice versa.

The emission norms for the eight sectors identified were set in annex I of the proposal. There were both emission norms (in mg Mercury/litre of water) and efficiency norms (in g waste Hg/kg Hg used), together these would avoid the

239. Proposal of December 22, 1982 in: OJ C205/5 of January 25, 1983.

240. *Ibid.*, preamble.

241. *Ibid.*, article 4. Dentists would be allowed to emit mercury into the public sewer system. To reduce the effects of mercury pollution by dentists, Member States needed to make national action programmes involving abatement of mercury at water purification plants.

problem of dilution in order to reach the emission norms. The emission norms were uniform for all sectors at 0,1 mg/l by 1985 and 0,05 mg/l by 1988. The efficiency norms were differentiated and set only for 4 sectors:

Sector	1.1.1985	1.1.1988
1. Chemical industry using mercury catalysts	10	5
2. Production of mercury catalysts	8	5
3. Production of mercury compounds	0,2	0.1
4. Production of batteries	0,1	0,05

We cannot indicate whether these differentiated efficiency norms do properly reflect equation of marginal abatement costs from respective industries, which would be the desirable outcome from a welfare economic point of view.

Irrespective of whether emission standards or EQS were chosen, new installations were required to use BAT technology, even though exceptions were possible on technical grounds.²⁴³

In conclusion, if all Member States would chose EQS than the emission norms set in the individual pollution permits would differ between identical producers (i.e. competitors) in different Member States. No harmonisation in the meaning of article 100TR would be obtained. If all Member States would opt for emission norms, all producers would face identical emission norms and hence comparable abatement costs and there would be harmonisation in the sense of article 100TR. On the other hand, the environmental quality would differ between Member States if emission standards and not EQS were chosen. If some Member States would opt for emission standards and other Member States for environmental quality standards, the result would still be a low level of

242. The efficiency norms in this table are monthly norms. The daily norms can be obtained doubling the numbers from the table.

243. Ibid., article 3(4).

harmonisation, that is, a level of harmonisation below minimum harmonisation. However, in the longer run, the BAT requirement for all new installations could be decisive in imposing a level of minimum harmonisation at a high level of environmental protection

The European Parliament in its advice²⁴⁴ stressed that emission standards were preferred over EQS. It asked that the Commission to report whenever they ‘accepted’ the use of EQS by a Member State. The European Parliament mentioned that ‘national policies for authorising mercury discharges should be harmonised both for environmental reasons and to ensure equal conditions of competition’.²⁴⁵ The ECOSOC generally supported the proposal.²⁴⁶

The final Mercury II Directive was adopted in 1984 on the basis of articles 100TR and 235TR and Directive 76/464/EEC just as in the proposal.²⁴⁷ Likewise, the additional reference to article 235TR was explained, but the additional use of the harmonisation article was not. The EQS were identical to those in the proposal. The emission standards were also the same as in the proposal, but the efficiency standards were altered:

Sector	1.7.1986	1.7.1989
1b. Chemical industry using mercury catalysts	10	5
1a. However if for the production of vinylchloride	0,2	0,1
2. Production of mercury catalysts for the production of vinylchloride	1,4	0,7
3. Production of mercury compounds	0,1	0,05
4. Production of batteries	0,05	0,03

244. Advice of December 16, 1983, in: OJ C10/300 of January 16, 1984.

245. Ibid., resolution, point B.

246. Advice of July 7, 1983, in: OJ C286/1 of October 24, 1983.

247. Directive 84/156/EEC of March 8, 1984 in: OJ L74/49 of March 3, 1984.

248. The efficiency norms in this table are monthly norms. The daily norms can be obtained
Continued on next page

Generally, the norms were stricter even if delayed 1,5 years relative to the proposal. As in the proposal, permits for 'new' installations needed to stipulate BAT technology. The Mercury II Directive explicitly explained when BAT was called for: only if this was necessary to reach the environmental goals or 'for the prevention of distortion of competition'.²⁴⁹ The first reason appears to be superfluous. Whether the Member State opted for emission norms or EQS, the translation of these norms into the individual permits would set the emission norms at installation level. Whether BAT was necessary or not would be implied by these norms, i.e. no additional rule prescribing BAT for environmental reasons was necessary. This conclusion implies that the only real reason to prescribe BAT would be for the prevention of distortion of competition. When harmonised BAT norms are seen as a way to achieve prevention of distortion competition, this implies that the policy maker uses the politic-economic definition of competitive distortions where equation of financial burdens on identical competitive installations is the focal criterion. If this BAT clause was implemented rigidly, it would imply that there would be harmonisation of emission norms at BAT level irrespective of whether the Member State opted for emission norms or EQS. Thus, a high level of harmonisation would be reached for new installations.

Finally, it should be noted that the Mercury II Directive was not applicable to Greenland due to its specific conditions. This reduced the level of harmonisation within the (enlarged) Community.

In conclusion, under the Mercury II Directive the Member States were allowed to set either emission standards or EQS. The result could be differentiation with respect to old installations if some or all Member States used EQS. The result could be minimum harmonisation if all countries adopted emission standards and where it concerned new installations. New installations

doubling the numbers from the table.

249. *ibid.*, article 3/4

were required to use BAT, however. As harmonised BAT norms were seen as a way to achieve prevention of distortion of competition, this implies the political-economic interpretation of distortion of competition

Mercury II Directive 84/156/EEC	
Instrument	A choice between environmental quality standards or emission standards; best available technology for new installations
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Exceptions on BAT
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

5.2.10 Industrial Installations Directive 84/360/EEC

In 1983, the Commission submitted a proposal on the reduction of air pollution emanating from industrial installations.²⁵⁰ This proposal had a scope different from the previous directives that generally addressed one pollutant and/or one sector. The Industrial Installations proposal on the other hand tackled all industrial installations and many pollutants. In this sense, it was comparable to the framework Aquatic Environment Directive.²⁵¹ Thus, the Industrial Installation proposal was for air pollution what the Aquatic Environment Directive was for water pollution.

The proposal was based on both articles 100TR and 235TR. The justification for the use of article 100TR was the by now well-known reasoning: ‘whereas disparities between the provisions concerning the combating of air

250. Proposal submitted on April 15, 1983. In: C139/5 of May 27, 1983.

251. The proposal applied specifically to 8 listed categories of installations but national authorities could impose this requirement on other categories of installations as well (ibid., Continued on next page

pollution from industrial installations currently in force, or in the process of amendment, in the Member States are liable to create unequal conditions of competition and thus have a direct effect on the functioning of the common market; whereas, therefore, approximation of laws in this field is required, as provided for by article 100 of the Treaty’.

Like the permit system under the Aquatic Environment Directive, the Industrial Installations proposal subjected building, operating and substantial alteration of plants to prior authorisation. Authorisation must (amongst other) take into account

- all appropriate preventive measures to reduce pollutants, especially the 8 substances mentioned in annex II²⁵²;
- the installation must not cause danger for public health nor considerable damage to the environment;
- comply with national and Community (emission and EQS) standards.²⁵³

The proposal itself set no harmonised standards but referred to standards already set or to be set in other legislation. Harmonisation only pertains to the procedures of environmental licenses for air pollution.

The proposal indicated that the Member States should define more stringent air quality and emission standards in particularly polluted areas and in areas requiring specific protection.²⁵⁴ The Member States themselves needed to designate such areas. It probably should be read in that environmental quality standards could be more stringent in areas requiring specific protection and that

article 3(2)) despite the last category being titled ‘other industries’ (ibid. annex I).

252. Sulphur dioxide and other sulphur compounds, oxides of nitrogen and other nitrogen compounds, carbon monoxide, organic compounds and hydrocarbons except methane, heavy metals and metal compounds, particulate emissions and asbestos, chlorine and its compounds, and fluorine and its compounds.

253. Ibid., article 4.

254. Ibid., preamble and article 5. Notice that the proposal does not guarantee a choice between emission standards or EQS in future legislation on par with the Aquatic Environment Directive, it only states that whatever norms are set at Community level need to be complied with.

emission standards could be more stringent in particularly polluted areas.²⁵⁵ Given that the norms from the proposal were minimum norms - which is explicitly confirmed in article 15 of the proposal - this clause appears to be superfluous.

It is not directly clear what is the hierarchy between article 15 stating that ‘Member States may adopt stricter provisions than provided for in this Directive’ and article 12 that states that additional conditions by the competent authorities may not impose additional conditions on installations that are economically unfeasible ‘for the undertaking concerned nor for plants of the category in question’. This offers a legal defence to industry of a Member State if it views itself to be hit too hard by its government.

An article that increasing the scope for differentiation is article 16 concerning national defence. This exception is comparable to article 36TR, and in a way precedes article 100a SEA that refers to this article.

As we said before, the proposal is similar to the Aquatic Environment Directive in that the emission norms had to be decided on in future directives. The European Parliament in its advice²⁵⁶ proposed a time frame for setting the emissions norms. Very important from a harmonisation point of view is that the European Parliament proposed that the subsequent directives should include financial assistance for installations in economically weaker areas.²⁵⁷ Such an amendment would increase the political scope for harmonised, stringent environmental norms. But one should also note that it might undermine the level playing field at the industry level from an economic point of view. Also, the European Parliament regrets that there are so many possibilities for lenient national legislation relative to the Community norms. According to the European Parliament these derogations that ‘often given preference to national over

255. Compare article 4 of the Industrial Pollution Directive that more or less describes it like this.

256. Advice of November 18, 1983, in: OJ C342/156 of December 19, 1983

Community legislation’, do ‘not help to eliminate the obstacles to competition’.²⁵⁸ On the other hand, article 15 of the proposal is one of the articles the European Parliament endorses without amendments. Thus, the European Parliament favours the option of stricter national norms.

The ECOSOC in its advice deliberated about the relation between emission norms and EQS.²⁵⁹ It concluded that there is a certain threshold pollution concentration level above which danger could occur. This limit should be harmonised - regardless of the economic costs – throughout the Community. For pollution levels below this threshold, air quality must be balanced against economic and social consequences.²⁶⁰ As economic and social consequences differ between countries, this seems to imply that local/national economic differences could and should be taken into account. For example, the ECOSOC stresses that, for example, energy costs and the composition of industry and industrial techniques differ greatly amongst Member States. ECOSOC states that it agrees with the need to remove competitive distortions, but stresses the need to take such differences into account. In the quest to find a balance between harmonisation and differentiation, ECOSOC appears to be on the side of harmonisation where it concerns minimum environmental quality standards beyond which pollution causes harm and on the side of differentiation when the environmental quality is above this threshold. The interpretation of the word harm determines whether there would generally be harmonisation or differentiation.

The final Industrial Installations Directive was based on both articles 100TR and 235TR just like the proposal.²⁶¹ Article 13 indicates that the directive was really limited to new facilities constructed or being given a permit after July

257. *Ibid.*, article 8(3).

258. Point 10 in the Resolution in the advice.

259. Advice of 24 November 1983 in: OJ C23/25 of January 30, 1984.

260. *Ibid.*, point 3.2.

261. Directive 84/360/EEC of June 28, 1984 in: OJ L188/20 of July 16, 1984.

1, 1987. Member States were required to bring the existing facilities on par but it was explicitly stated that this should not result in excessive costs given the economic viability of the sector. The rest of the Industrial Installations Directive strongly resembled the proposal. In the mere articles of the directive, it is written four times that there should not be excessive costs. It seems as if the balance between economic costs and environmental benefits clearly tips toward the economic side. For example: ‘The Member States shall follow developments as regards the best available technology and the environmental situation. In the light of this examination they shall, if necessary, impose appropriate conditions on plants authorised in accordance with this directive, on the basis both of those developments and of the desirability of avoiding excessive costs for the plants in question, having regard in particular to the economic situation of the plants belonging to the category in question’.²⁶² In addition to the reference Member States, it was stated that the Council shall ‘if necessary’ fix emission limit values based on the best available technology not entailing excessive costs.²⁶³ Thus, neither the Council nor the Member States were explicitly obligated to impose BATNEC standards.

We conclude that the Industrial Installations Directive itself set no harmonised norms. However, there are many articles that discuss the level of harmonisation that would result from other directives that would be based on the Industrial Installations Directive. Member States could enforce stricter environmental norms on the bases of articles 5 (with respect to heavily polluted areas and areas that required special protection) and article 14 (general minimum harmonisation clause). However, these minimum norms applied only to new facilities and apparently could not result in excessive costs.

262. *Ibid.*, article 12.

263. *Ibid.*, article 8.

Industrial Installations Directive 84/360/EEC	
Instrument	National permits with BATNEC for new installations
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	-
Overall approximation of emission standards	Minimum harmonisation for new installations
Legal Base	100TR & 235TR

5.2.11 HCH Directive 84/491/EEC

In 1983, the commission submitted a proposal for a directive on HCH.²⁶⁴ HCH is a detergent used especially in the agricultural sector. Nevertheless, according to the proposal HCH emissions originated almost completely from producers of HCH and lindane, a polymer of HCH, and therefore the proposal was limited to this group. The production of lindane involves extraction from HCH. This implies that the production of HCH and the production of lindane are really two stages in the production process of lindane.

The HCH proposal was based on the articles 100TR, 235TR and on the Aquatic Environment Directive. No reason was given why article 100TR was referred to.

The HCH proposal was limited to pollution of surface water because groundwater was covered by the Groundwater Directive (see section 5.2.4). Air pollution was also covered in the sense that Member States needed to require a permit for HCH emissions into the air to prevent bypassing of the aquatic environmental standards, but the proposal did not include Community norms or guidelines upon which to base the permits for emissions into the air.²⁶⁵

264. Proposal of July 19, 1983, in: OJ C215/3 of August 11, 1983.

265. Ibid., article 3(5).

The proposal is very similar to other Aquatic Environment Directive-based legislation in that Member States could chose between emission standards and EQS. The environmental quality standards are in annex II of the proposal. There are two norms, one for lindane and one for other HCH isomers. The norms are identical at 10ng pollutant/litre surface water (including territorial seawater).²⁶⁶ The emission norms, listed in annex I of the proposal, could be distinguished in emission concentration standards and efficiency standards. The efficiency standards are in table 5.2.11a below.

Table 5.2.11a Efficiency norms from the HCH proposal				
In g HCH per ton production capacity Per 1.1.1985	Separated production		Integrated production: production of HCH and extraction of lindane	
	Daily	Monthly	Daily	Monthly
Production of HCH	8	7	25	20
Extraction of lindane	19	15		

The efficiency standards optimally take account of the relative emission and abatement costs for different types of installations. In a way, the efficiency norms could be considered as a bureaucratic alternative to achieve uniform marginal abatement costs for HCH across the Community. Given the preference for a legal instrument, different efficiency norms make sense.²⁶⁷ In addition to these efficiency norms, new installations needed to use the best technology available.²⁶⁸ Deviation from the best available technology was possible, but only on technical

266. There is also a norm that applies to water used for the production of drinking water, and therefore specifies a norm set in the Drinking Water Directive (see 5.2.1).

267. As we can see from the table, the efficiency standards are a bit more severe for integrated production than for separated production if we look at the totals (8+19 > 25 and 7+15 > 20). This probably results from advantages of scope with integrated production. The effect of such varied efficiency norms is thus to remove dynamic efficiency from the economy. If a uniform charge was implemented, separated production would (partially) have been replaced by integrated production to reap these economies of scope.

268. Proposal, article 3(3).

grounds and after informing the Commission.

The emission concentration norms are in table 5.2.11b below.

Table 5.2.11b Emission concentration norms from the HCH proposal				
Emission concentration norms (in mg HCH per litre) per 1.1.1985	Separated production		Integrated production	
	Daily	Monthly	Daily	Monthly
Production of HCH	8	8	25	20
Production of lindane etc.	19	15		

From the table we can see that the emission concentration norms are also varied between sectors. Thus, a HCH factory must emit water with much lower concentrations of HCH than a lindane factory. Indeed, the values as presented in the table are only half the story as they assume one m³ wastewater per ton production capacity. If there is 2 m³ wastewater per ton production capacity, the values from the table should be divided by 2, if there is only 0.5 m³ wastewater per ton production capacity, the values from the table should be doubled. In this way the emission norms are translated into uniform minimum efficiency standards.

The European Parliament in its advice²⁶⁹ argued for norms on indirect agricultural emissions, the ECOSOC²⁷⁰ called for rules on the import of products that were treated with HCH. In general however, there was praise for the proposal.²⁷¹

The final HCH Directive²⁷², like the proposal, was based on articles 100TR and 235TR alongside the Aquatic Environment Directive. The main differences were with respect to the norms, the BAT clause and the reference to other media.

269. In: OJ C127/138 of May 14, 1983.

270. Advice of January 26, 1984 in: OJ C57/1 of February 29, 1984.

271. On the other hand, both the European Parliament (OJ C127/138 of May 14, 1983) and the ECOCOC (OJ C57/1 of February 29, 1984) in their advises noticed the slow progress of legislation based on the framework Aquatic Environment Directive. Both Institutions called for directives that would cover more than one pollutant as to speed up the legislative process.

272. Directive 84/491 of October 9, 1984, in: OJ L274/11 of October 17, 1984.

The environmental quality standards from annex II were much more lenient. Instead of separate norms for lindane (10 ng/litre) and other polymers of HCH (10 ng/litre), the directive states that the total HCH concentration in inland surface waters must not exceed 100 ng/litre. The norms with respect to estuary waters and territorial seas were similar to those in the proposal.

The emission standards from annex I still used efficiency norms and emission concentration norms, but the figures in tables 5.2.11a&b and tables 5.2.11c&d are not compatible. Firstly, there were no longer daily norms, and reference is to monthly norms only. Secondly, the efficiency norms were no longer related to production capacity but to the actual production. Thirdly, norms were increasing over time. The efficiency norms are in table 5.2.11c.

Table 5.2.11c Efficiency norms from the HCH Directive				
Efficiency norms (in g HCH per ton produced)	Separated production		Integrated production	
	1.4.1986	1.10.1988	1.4.1986	1.10.1988
Production of HCH	3	2	16	5
Production of lindane etc.	15	4		

The emission concentration norms are in table 5.2.11d below. The main difference between these emission concentration norms and those from the proposal was that the final norms were much stricter and that the norms on integrated producers relatively to separated production were relatively much severe when compared to the proposal.²⁷³

273. This shows the problem associated with setting efficiency standards rather than pollution uniform charges; the legislator should optimally find the most efficient distribution of abatement costs that would achieve the same results as the efficient market solution obtained by a pollution charge.

Table 5.2.11d Emission concentration norms from the HCH Directive				
Emission concentration norms (in mg HCH per litre)	Separated production		Integrated production	
	1.4.1986	1.10.1988	1.4.1986	1.10.1988
Production of HCH	3	2	6	2
Production of lindane etc.	8	2		

The second main difference compared to the proposal is the BAT clause on new installations. In the proposal, deviation from BAT technology was permitted on the base of technical considerations.²⁷⁴ This implied that BAT was not really the best available technology in this situation. In the final HCH Directive, it was stated that new installation needed to adopt BAT technology when this was necessary to conform with the standards or when this was necessary to prevent competitive distortions.²⁷⁵ This clause therefore indicates that the Council used the level playing field argument associated with the politico-economic point of view.

The third difference was that the clause that addressed shift in emissions patterns to other media was changed relative to the proposal. Whereas the proposal only stated that Member States needed to subject such HCH emissions to a permit system, the final HCH Directive expressed that HCH pollution in soil and air could not increase as a result of this directive.

A summary of the HCH Directive is given in the table below.

274. Proposal, article 3(3).

275. Ibid., article 3(4).

HCH Directive 84/491/EEC	
Instrument	Choice between environmental quality standards or emission standards; best available technology for new installations
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Conditional exceptions on best available technology
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR and 235TR

5.2.12 Nitrogen dioxide Directive 85/203/EEC

In 1983, the Commission submitted a proposal on air quality standard for nitrogen dioxide (NO_x).²⁷⁶ This proposal was based on both articles 100 and 235TR. It stated that as ‘any discrepancy between the provisions already applicable or being drawn up in the various Member States with regard to nitrogen dioxide in the atmosphere could give rise to unequal conditions of competition and could in consequence directly affect the functioning of the common market, the legislative provisions in this area should be harmonised as prescribed in article 100 of the Treaty’. Thus, environmental quality standards needed to be set at Community level. Notice that there is an overlap between the proposal and the Industrial Installation Directive even though the proposal does not refer to this directive as nitrogen is one of the pollutants explicitly mentioned in the Industrial Installations Directive.

According to the preamble, implementation of the measures should be economically feasible and compatible with balanced development. This could apply to the phrase from the preamble that the limit values may not be feasible in

276. Submitted on 13 September 1983 in: OJ C258/3 of September 27, 1983.

some regions and that deviations can be allowed (i.e., beyond the year 1993 mentioned in article 3(2)).

The proposal distinguished between limit values (200 µg NO_x/m³ air²⁷⁷) and target values. Both of these values were environmental quality standards. The limit values needed to be reached by April 1986, or, given ‘special circumstances’, by April 1993.²⁷⁸ It is already said in the preamble that the limit values may not be feasible in some regions and that deviations can be allowed. This presumably refers to these special conditions and can therefore be invoked only up to April 1993. The limit values were the real norms, the target values had little significance.²⁷⁹ A Member State could impose stricter norms than the limit values based on article 4(1) (in urban or industrial areas with expected future increases of emissions) or article 4(2) (areas requiring special protection). Designation of such areas was optional, depending on the preferences of the Member State. Of course, it was always possible to set stricter national norms than the limit values constituted minimum norms. If the limit values in border areas were (likely) to be surpassed, which could be the result of emissions emanating from another Member State, these countries needed to fix the situation together.²⁸⁰ This applies to the Community limit value or the regional stricter limit values based on articles 4(1) or 4(2) if negotiated with the bordering Member States, but appears not to apply when a Member State unilaterally sets stricter national EQS. There was also a standstill clause: Implementation of the proposal may not result in deterioration in areas with NO_x pollution levels below the limit value.²⁸¹

277. That is, the norm applies to the 98 percentile of hourly measured concentrations calculated over a year (Ibid., annex I).

278. Ibid., article 3. The fact that the limit values are not really binding before 1993 can also be found in article 6.

279. The ECOSOC in their advice (below, article 3.3.4) called for deletion of the target value, the European Parliament called for more attention for the target values (below, resolution point 19).

280. Ibid., article 10(2).

281. Ibid., article 8.

In conclusion, the NO_x proposal set minimum harmonisation based on EQS. As we have seen in chapter 2, even harmonisation of environmental quality does not imply that the emission norms between identical competitors in different Member States will be the same. Especially with NO_x, which is caused to a large extent by traffic, the emission standards on individual installations will vary greatly. This is even more so because the NO_x proposal involved minimum rather than full harmonisation and because of the standstill clause. Thus, the reasoning for using article 100TR appears to be flawed.

The ECOSOC supported the limit value chosen, as it would be the strictest limit value economically feasible.²⁸² This is a bold statement given that there was a lot of uncertainty about the norm chosen in relation to the environmental and health benefits (article 3.2.3) and the implementation costs (3.8.4). The ECOSOC also remarked that there existed a wide variety of national laws within and outside the Community to curb atmospheric pollution.²⁸³ It asked that the legislation be compared to limit competitive distortions to a minimum.

The European Parliament asked that the ultimate date for compliance with the limit value be forwarded 3 years up to April 1990.²⁸⁴ Generally, it advocated additional, stricter environmental norms and using public pressure to enforce compliance. It is interesting to see that the European Parliament also invokes economic arguments in favour of more stringent harmonised limit values; acid rain had resulted in a reduced competitive position of the wood (processing) industry in Germany, the Netherlands and Belgium.²⁸⁵

The final, 1985 NO_x Directive was based on articles 100TR and 235TR just like the proposal.²⁸⁶ The result was generally in line with the proposal. Despite the use of the harmonisation article, the preamble still stated that

282. Advice of May 23, 1984, in: OJ C206/1 of August 6, 1984. The statement is in article 3.2.4.

283. *Ibid.*, article 3.11.

284. Advice from November 16, 1984, in: OJ C337/427 of December 17, 1984.

285. *Ibid.* Resolution point 11.

‘temporary derogations’ were allowed and that measures implemented on the bases of the directive needed to be ‘economically feasible and compatible with balanced development’. The temporary derogations imply that there would be a low level of harmonisation until the transition period expired on January 1, 1994.²⁸⁷ The instrumental articles did not specify when measures were not considered to be ‘economically feasible’. The limit value of 200 µg NO_x/m³ air was maintained, and needed to be reached by July 1987, or, in case of specific circumstances, by 1994.²⁸⁸ In contrast to the proposal, it was explicitly stated that the limit values were minimum norms.²⁸⁹

In conclusion, the Nitrogen Dioxide Directive differs from many previous directives in that it only sets environmental quality standards.²⁹⁰ There is no indication that this would result in some degree of harmonisation of emission norms for individual installations. This implies that the directive aims at environmental goals rather than level playing ground considerations. The correct use of article 100TR is therefore doubtful.

Nitrogen dioxide (NO_x) Directive 85/203/EEC	
Instrument	Environmental quality standard
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Temporary delay in case of specific circumstances
Overall approximation of emission standards	Less than minimum harmonisation of environmental quality standards; by 1994 minimum harmonisation of environmental quality standards
Legal Base	100TR & 235TR

286. Directive 85/203/EEC of March 7, 1985 in: OJ L87/1 of March 27, 1985.

287. *Ibid.*, article 3.

288. *Ibid.*, article 3.

289. *Ibid.*, articles 4 and 5.

290. *Ibid.*, article 1.

5.2.13 Dangerous Substances Directive 86/280/EEC

In 1985, the Commission issued a proposal concerning limit values and quality objectives for discharges of certain dangerous pollutants included in list I of the Aquatic Environment Directive.²⁹¹ The proposal was based on the double legal base of the reserve article and the harmonisation article, in addition to the reference to the Aquatic Environment framework directive.

Despite being based on the Aquatic Environment Directive, the proposal also referred to other media. Article 5 (6) of the proposal stated that the measures taken pursuant to the directive should not result in an increase in the pollution of other media, notably air and soil. Thus, the scope of the directive was wider than aquatic pollution.

According to the proposal, it was necessary to lay down specific limit values for discharges according to the type of industry concerned.²⁹² Thus, the values from table 5.2.13a refer to specific categories of installations. In case a type of plants did not fall under the description, the Member States were to draw up national programmes within 5 years after notification of the directive.²⁹³ Thus, the norms for carbon tetrachloride apply to carbon tetrachloride production plants but e.g. not to plants using carbon tetrachloride as a solvent and the norms on pentachlorophenol applied to plants producing sodium pentachlorophenol by hydrolysis of hexachlorobenzene but e.g. not to (competing) plants producing pentachlorophenol by saponification.²⁹⁴ This could result in the situation e.g. that not all of the 10 formulation plants in the Community were included in the proposal as this depended on whether the formulation plants were or were not on

291. In: OJ C70/15 of March 18, 1985.

292. Ibid., preamble of the proposal.

293. Ibid., article 5.

294. Ibid., see the footnotes by the tables listing the emission norms in annex II.

the same site as production plants. This was despite the fact that these 10 formulation units were responsible for 90% of all DDT emissions.²⁹⁵

Substance	January 1, 1987		January 1, 1990	
	Efficiency norm ¹	Emission concentration norm ²	Efficiency norm ¹	Emission concentration norm ²
Carbon tetra chloride	1	0,8	0,2	0,1
Chloroform	1	0,8	0,2	0,1
DDT	0,005	1,3	0,00015	0,004
Pentachloridephenol	1	1	N/a	N/a

¹ In g/kilogram of substances produced, treated or used. The value for DDT is derived from the norm in g/tonne.

² In mg/litre of water discharged

There was an additional obligation for ‘new plants’. Article 3 (4) of the proposal states that Member States could grant authorisation only when these plants applied standards corresponding to the best technical means available when this was necessary for the elimination of pollution or ‘for the prevention of distortions of competition’.²⁹⁶ In case of derogation, the Commission needed to be provided with evidence in support of the reasons prior to any authorisation by the Member State.

Alternatively to the ‘emission standards’, Member States could opt for environmental quality standards. These environmental quality standards were applicable to inland surface waters, estuary waters and territorial seawaters.²⁹⁷

295. Point 3.10 in the ECOSOC advice, in: OJ C188/19 of July 29, 1985.

296. Ibid., article 3 (4) and following. The definition of ‘new plants’ is in article 2 (g).

297. The Groundwater Directive covered in subsection 5.2.4 covered groundwater. For DDT

Continued on next page

The proposed norms were 10µg/l carbon tetrachloride, 10µg/l chloroform, 10mg/l DDT and 1mg/l pentachlorophenol.²⁹⁸ These norms were all applicable per 1987.

In conclusion, we can see that the level of harmonisation set in the proposal for existing plants is low despite the explicit reference to the harmonisation article. Firstly, Member States could chose between emission concentration standards plus efficiency standards or environmental quality standards. In theory, such standards could in very exceptional cases result in identical emission abatement requirements on producers in different Member States. This 'level playing field' was even harder to reach in this directive because whereas the environmental quality standards generally were fixed, the 'emission standards' were generally progressive in that there were more stringent norms starting 1990. On the other hand, the best technical means requirement for new plants implied a high level of harmonisation. The actual level of harmonisation would depend on the frequency of invocations of the exception and the willingness of the Commission to accept the argument that allowing a less strict technology would not cause a distortion of competition. This does not seem likely, given the preamble of the Aquatic Environment Directive.

The European Parliament was very critical on the proposal, attacking its vagueness, inconsistencies and the standards.²⁹⁹ A principal difference was that the Parliament believed that emission standards and environmental quality objectives were complements rather than alternatives. According to the Parliament, 'while emission standards are an acceptable way of controlling emissions from fixed installations, such standards are not the best method of controlling the significant amount of pollution originating from diffuse sources'.³⁰⁰ It proposed a lot of amendments, especially with respect to the

there were additional norms for concentrations of DDT in fish flesh and mollusks sediments.

298. *Ibid.*, annex II.

299. Advice of April 18, 1986, in: OJ C120/164 of May 20, 1986.

300. *Ibid.*, points 3 to 5 from the resolution.

standards set in annex II but also in other texts, often resulting in a reduced pollution compared to the proposal.³⁰¹

The ECOSOC in its advice³⁰² expressed doubts as to whether the methods of combining or alternating the two systems based respectively on emission limit values and quality objectives was an appropriate way to monitor discharges of dangerous substances. In its opinion, it would be more fitting to speak not of a choice between two different monitoring systems but rather of using two systems with priority given to limit values. ECOSOC felt that this needed to be stated more clearly so as to avoid ‘creating misunderstandings and unfair competition conditions, particularly since public bodies also play a major role in monitoring the quality of water’.³⁰³ The text suggestion given by the ECOSOC was the phrase: ‘The Member State concerned shall be responsible for monitoring the effects of discharges from plants on the aquatic environment by the same procedure under the two systems (emission limit values and quality objectives)’.³⁰⁴

The final Dangerous Substances Directive was adopted on June 12, 1986.³⁰⁵ Just as the proposal, it was based on both the harmonisation article and the reserve article. Specific reasons were given for using the reserve article, but

301. For example, the Parliament proposed relating the efficiency standards not to output but rather to the production capacity of the industrial plants, even though these changes were in fact only proposed for the standards relating to carbon tetrachloride and chloroform (the efficiency standard for pentachlorophenol of 1g/kg to 25g/tonne produced, treated or used whereas the emission standards for DDT were unchanged). The standard relative to production capacity for the manufacture of chloromethane was 10g/tonne, the standards for carbon tetrachloride depended on the production process and the type of average value. The proposed changed environmental quality norms were 1µg/l carbon tetrachloride (from 10µg/l in the proposal), 1µg/l chloroform (from 10µg/l in the proposal), 1µg/l DDT (from 10mg/l in the proposal) and 0,1mg/l pentachlorophenol (from 1mg/l in the proposal), all by 1987 just as in the proposal.

302. OJ C188/19 of July 29, 1985.

303. *Ibid.*, point 2.1.

304. *Ibid.*, point 3.5.

305. Directive 86/280/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the annex to Directive 76/464/EEC, in: OJ L181/16 of July 4, 1986.

there was no explicit reason given for invoking the harmonisation article. Indeed, the text of the directive was very similar to the text of the proposal, including the reference to prevention of distortion of competition. For example, article 3(4) of the directive stated that Member States may grant authorisation for new plants only if those plants apply the standards corresponding to the best technical means available when that is necessary for the elimination of pollution or for the prevention of distortions of competition. The Commission needed to be informed beforehand on licenses including derogation from the best technical means available. The main differences between the proposal and the directive are in the annexes. The final directive only covered three pollutants instead of the four substances in the proposal. As in all directives related to the Aquatic Environment Directive, Member States had a choice between emission standards and environmental quality standards.³⁰⁶ Both the emission standards and the quality standards were changed radically relative to the proposal, sometimes accepting the system proposed by the European Parliament however often setting other values.

The straightforward emission concentration and efficiency standards from the proposal were progressive in time. These standards were replaced by other standards that made further distinctions between production processes to be reached by the first of January 1998. The norms with respect to carbon tetrachloride are in tables 5.2.13b and 5.2.13c below.

306. 'Whereas Member States are required to apply the limit values except in the cases where they may employ quality objectives', from Preamble, *ibid.*

5.2.13b Carbon tetrachloride production by perchlorination		
	g/tonne of total production capacity of carbon tetrachloride and perchloroethylene	mg/litre of water discharged
Process involving washing:		
Monthly norm	40	1,5
Daily norm	80	3
Process not involving washing:		
Monthly norm	2,5	1,5
Daily norm	5	3

5.2.13c Production of chloromethanes by methanechlorination and from methanol		
	g/tonne of total production capacity of chloromethanes	mg/litre of water discharged
Monthly norm	10	1,5
Daily norm	20	3

Due to differences in yardsticks, the standards are not easily compared.

For DDT, a comparison of the efficiency and emission concentration standards of the proposal and the directive is given in table 5.2.13d below.

Table 5.2.13d Limit values for DDT standards from the proposal and the directive				
DDT proposal	January 1, 1987		January 1, 1990	
	g/tonne ¹	mg/litre of water discharged	g/tonne ¹	mg/litre of water discharged
Monthly norm	5	1,3	0,15	0,004
DDT Directive	January 1, 1988		January 1, 1991	
	g/tonne ²	mg/litre of water discharged	g/tonne ²	mg/litre of water discharged
Monthly norm	8	0,7	4	0,2
Daily norm	16	1,3	8	0,4
¹ g/tonne of substances produced, treated or used				
² g/tonne of substances produced, handled or used				

The emission standards generally became much more lenient, but the addition of daily norms limited extreme peak emissions and the directive stated that the Commission would submit proposals aimed at fixing more stringent limit values to enter into force by 1994.³⁰⁷

The pentachlorophenol standards of the directive are given in table 5.2.13e. Due to the differences in units of measurement, direct comparisons with the proposal are not possible.

Table 5.2.13e Limit values for pentachlorophenol standards from the directive		
Pentachlorophenol directive	January 1, 1988	
	g/tonne production/utilisation capacity	Mg/litre of water discharged
Monthly norm	25	1
Daily norm	50	2

³⁰⁷. Notice that there is no obligation on the Council to act on these proposals.

As an alternative to these efficiency standards and emission concentration standards, Member States could opt for environmental quality standards. The environmental quality standard for carbon tetrachloride was increased to 12 µg/l, the standard for DDT was maintained at 10µg/l but increased to 25µg/l for territorial seawaters and the norm on pentachlorophenol was increased to 2mg/l. These more lenient norms were all applicable per 1988, one year later than proposed.

In conclusion, the Dangerous Substances Directives covered a limited number of pollutants and a limited number of types of installations. The efficiency standards were different for the three pollutants covered, i.e. either in ‘g/tonne of total production capacity’, ‘g/tonne of substances produced, handled or used’ or ‘g/tonne production/utilisation capacity’. These differences made it hard to draw comparisons between the strictness of legislation concerning these pollutants.

The Dangerous Substances Directive had a very low level of harmonisation, despite the fact that the environmental quality standards were harmonised and independent of the production process. The reason for the low level of harmonisation is that Member States could chose either to adopt the efficiency standards and emission concentration or the standards environmental quality standards. On the other hand, the best technical means requirement for new plants implied a high level of harmonisation.

Dangerous substances Directive 86/280/EEC	
Instrument	Choice between environmental quality standards or emission standards; best technical means
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Conditional exception on best technical means
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

5.2.14 Asbestos Directive 87/217 EEC

In 1985, the Commission submitted a proposal for a directive on asbestos.³⁰⁸ The objective was to prevent ambient environmental pollution by asbestos. Asbestos is very toxic and affects human health. Before this proposal, there had already been product legislation regarding asbestos as well as a directive on protection of people working with asbestos (products).³⁰⁹ The new proposal filled the gap left.

The Asbestos proposal was based on both article 100TR and article 235TR.³¹⁰ The reason for using article 100 TR is that ‘disparities between the provisions in force or being amended in the Member States as regards the control of pollution from industrial plants can create unequal conditions of competition and thereby directly affect the functioning of the common market, and it is therefore necessary to approximate legislation in this field pursuant to article 100 of the Treaty’.³¹¹ Thus, distortion of competition is not mentioned as such but rather unequal conditions of competition.

The proposal set an emission-concentration standard on airborne pollution of 0,1mg asbestos/m³ air.³¹² It was an emission norm applicable ‘at the stack’. The proposal also set an emission concentration standard and an efficiency standard on aquatic emissions. The emission concentration standard was 30g of suspended matter/m³ aqueous effluent and the efficiency norm was 0,7m³ aqueous effluent per ton asbestoscement produced. The norms had to be reached by 1987. A Member State could introduce stricter environmental norms on the basis of article 11. Thus, these norms constituted minimum harmonisation.

308. Proposal of December 6, 1985 in: C349/27 of December 12, 1985.

309. Directive 76/769/EEC, OJ L262/20 of September 27, 1976, respectively Directive 83/477/EEC, OJ L188/20 of July 16, 1984.

310. The proposal also referred to the framework Industrial Installations Directive 84/360/EEC (see section 5.2.10).

311. *Ibid.*, preamble.

312. *Ibid.*, articles 5 and 6.

The proposal contained some pieces of fully harmonised legislation. There was an obligation for full recycling of aqueous effluent in installations for the production of asbestopaper. The proposal also incorporated a harmonised BATNEEC clause: ‘Member States shall take measures necessary to ensure that aqueous effluent, emissions into the air and solid waste arising from the use of asbestos are reduced at the source as far as possible, recycled or treated, using the best available technology not involving excessive costs’.³¹³ On the other hand, an article that prevented approximation was article 12. This was a standstill-clause stating that the national standards already in place needed to be maintained even if these contained stricter limits.³¹⁴ The proposal also did not apply to ‘small’ polluters, i.e. using less than 100 kg of raw asbestos per year, introducing differentiation between small and big polluters. In conclusion, overall the proposal prescribed minimum harmonisation.³¹⁵

The ECOSOC had considerable critique on the proposal.³¹⁶ The objective of the proposal should be protection of public health. Given this objective, emission standards are less relevant than the exposure of the population to the pollutants.³¹⁷ The ECOSOC considered EQS more appropriate than emission standards as the proposal did not address problems of high local concentrations of emitters of asbestos. The ECOSOC in addition called for deletion of the restriction that the cost of technologies should not be excessive – the goal should be the best available technology.³¹⁸ Not often had the ECOSOC been so critical

313. *Ibid.*, article 4.

314. *Ibid.*, article 12. From an economic welfare optimising point of view, this is a curious clause; if the directive results in less pollution coming from other Member States, it can be optimal for the Member State to reduce its own abatement efforts. The change will be Pareto efficient if the foreign emission reduction is cheaper than the savings resulting from national more lenient emission standards. Whereas environmentally beneficial, the greener Member States were in effect punished for having adopted national environmental standards early.

315. It is explicitly confirmed that the norms are minimum norms in article 11.

316. OJ C207/21 of August 18, 1986.

317. *Ibid.*, point 2.8.

318. *Ibid.*, points 3.5.1 and 2.7.

on a proposal. The advice was not supported by the Employers Group within the ECOSOC, which supported the Commission's proposal.³¹⁹

The final Asbestos Directive 87/217/EEC was adopted in 1987.³²⁰ Like the proposal, it was based on de double legal base. The preamble also explicitly referred to the Industrial Installations Directive 84/360/EEC. The reason for using article 100TR was similar to that used in the proposal.³²¹ The rest of the Asbestos Directive also followed the proposal closely. The most interesting changes were that all water had to be recycled if this was feasible economically³²² and that an exception on the harmonised emission standard was introduced: Small producers (those that emit less than 5000m³ waste gas and less than 0,5g asbestos per hour) could be exempted from the emission limit of 0,1mg asbestos/m³ air by the member State. The main difference with the proposal was that the clause that the Member States could not reduce their national norms when these were above the Community norms was dropped. This *ceteris paribus* increased the level of harmonisation but the other changes did the opposite.

In conclusion, the Asbestos Directive resulted in a low level of harmonisation. In general, the norms incorporated minimum harmonisation but the overall level of harmonisation was reduced through the exemptions for small polluters.

319. *Ibid.*, annex III.

320. Directive of March 19, 1987 in: OJ L85/40 on March 28, 1987.

321. 'Whereas disparities between the provisions in force or being amended in the Member States as regards the control of pollution from industrial plants can create unequal conditions of competition and thereby directly affect the functioning of the common market; whereas it is therefore necessary to approximate legislation in this field pursuant to Article 100 of the Treaty' (*Ibid.*, preamble).

322. *Ibid.*, article 5.

Asbestos Directive 87/217 EEC	
Instrument	Emission concentration standard, best available technologies not entailing excessive costs
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Conditional exemption
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100TR & 235TR

5.3 Conclusions from the secondary legislation during 1972-1985

5.3.1 The level of harmonisation

We set out in this chapter with a number of inter-linked questions about the actual level of harmonisation in the environmental policy in the pre-SEA period from 1972 to 1986. In table 5.3.1 below, we have copied the results from the analysis of the directives.

Table 5.3.1 Level of harmonisation of the directives from chapter 5.			
Name (subject) of the directive (section)	Instrum ent	Exceptions	Overall approximation of emission standards
Drinking water (5.2.1)	EQS	Yes	Less than minimum harmonisation
Aquatic environment (5.2.2)	ES	-	Harmonised ban on direct emissions of category I pollutants into groundwater
Titanium Dioxide (5.2.3)	BAT	-	Minimum harmonisation for new installations

Name (subject) of the directive (section)	Instrum ent	Exceptions	Overall approximation of emission standards
Groundwater (5.2.4)	ES	Temporary	Ban on emissions of list I pollutants, less than minimum harmonisation for list II pollutants
Sulphur (5.2.5)	EQS	Temporary	Minimum harmonisation with temporary exceptions
Mercury (5.2.6)	ES/EQS , BAT	Yes	Less than minimum harmonisation
Lead (5.2.7)	EQS	Temporary	Minimum harmonisation with temporary exception and standstill
Cadmium (5.2.8)	ES/EQS , BAT	Conditional, Greenland	Less than minimum harmonisation
Mercury II (5.2.9)	ES/EQS , BAT	Yes	Less than minimum harmonisation
Industrial installations (5.2.10)	BAT	-	Minimum harmonisation for new installations
Hexachlorocyclohexane (HCH - 5.2.11)	ES/EQS , BAT	Conditional	Less than minimum harmonisation
Nitrogen dioxide (NO _x - 5.2.12)	EQS	Temporary conditional	Minimum harmonisation with temporary exception
Dangerous substances (5.2.13)	ES/EQS , BAT	Conditional	Less than minimum harmonisation
Asbestos (5.2.14)	ES, BAT	Conditional	Minimum harmonisation with exemption

In the first column we have listed the directives in the order that they have been addressed in this chapter. In the second column we have listed the instruments that were used in the directive. ES stands for the different varieties of emission standards, EQS for the different varieties of environmental quality standards

(including standstill clauses that do not allow environmental deterioration) and BAT stands for all varieties of clauses that make a reference to the use of a specific technology (including those not entailing excessive costs). The third column highlights if there are exceptions. With this we mean downward derogations that allow the Member State to have less strict environmental standards than the Community standard. A general feature (and not repeated in the table) is that all requirements are minimum standards. A Member State is allowed to impose stricter standards for its industry. The minimum harmonisation boils down to full harmonisation if zero emissions are set as a minimum. The examples encountered are the rules prohibiting direct emissions of pollutants into groundwater (see the Aquatic Environment Directive and the Groundwater Directive that succeeded it). The last column indicates the overall level of approximation of emission standards.

The standard approach of many directives was to offer a choice between conforming to maximum emission standards, which imply a minimum requirement regarding abatement technology, or adhering to uniform minimum environmental quality standards. This approach was introduced by the framework Aquatic Environment Directive, which stated that Member States should be offered a choice between Community set environmental quality standards and emission standards. The directives that were based on the Aquatic Environment Directive - i.e. mercury directives, the Cadmium Directive and the HCH Directive all featured this option.

This choice for Member States can result in different levels of harmonisation. If all Member States opted for the environmental quality standards, the environmental quality would be harmonised to some extent throughout the Community. However, this does not imply harmonisation of abatement requirements on similar producers in different Member States. The second possibility is that all Member States opt for the emission standards. In this case the resulting environmental quality would probably differ between Member

States but all producers would have to conform to identical emission norms. Thus, the abatement costs would be harmonised between producers to a certain extent. The third possibility is that some Member States opt for emission standards whereas other Member States opt for environmental quality standards.

The highest level of harmonisation would emerge if all Member States would chose to harmonise emission standards. The result would be minimum harmonisation rather than full harmonisation. The minimum character of the standards was either implicit, because the norms were minimum standards, or explicit, when the directive included an article that specifically permitted the Member States to set stricter environmental standards. Of course, article 102TR already allowed for stricter standards under certain conditions. However, the overall level of harmonisation that was achieved was even lower than minimum harmonisation. There were many different clauses allowing exceptions. It is rather hard to categorise these exceptions. The overall conclusion must be that the approximation of emission standards in these directives is low irrespective of which standards Member States would chose to adopt. A possible exception is the BAT, BATNEEC and BTM requirements for new installations and plants. These could result in a high level of approximation of emission standards, especially in the long run when all installations are 'new' installations. However, even with respect to these norms, derogation is often possible as long as this does not result in distortion of competition.

5.3.2 Internal consistency

The second question posed at the beginning of this chapter is whether the level of harmonisation set in the directives is on conformity with the requirements set by the legal bases. The environmental directives from our selection generally were

based on both article 100TR and article 235TR. This observation is based on the summary in table 5.3.2 below:

Table 5.3.2 The legal base of the directives and the proposals from the pre-SEA period.

Name (subject) of the directive	Legal base of the directive	Legal base of the proposal
Drinking water	100TR+235TR	235TR
Aquatic environment	100TR+235TR	235TR
Titanium Dioxide	100TR+235TR	100TR
Groundwater	100TR+235TR	100TR+235TR
Sulphur	100TR+235TR	235TR
Mercury	100TR+235TR	*
Lead	235TR	235TR
Cadmium	100TR+235TR	235TR
Mercury II	100TR+235TR	100TR+235TR
Air pollution by industrial installations	100TR+235TR	100TR+235TR
Hexachlorocyclohexane (HCH)	100TR+235TR	100TR+235TR
Nitrogen dioxide (NO _x)	100TR+235TR	100TR+235TR
Dangerous substances	100TR+235TR	100TR+235TR
Asbestos	100TR+235TR	100TR+235TR
* Indirectly on 100TR and 235TR		

The first column of the table gives the name of the directive in the chronological order used in this chapter. The second column ‘legal base’ gives the legal base on which the directive was adopted, i.e. the legal bases that were explicitly mentioned in the directives. As we can see, almost all directives explicitly make reference to both articles 100TR and 235TR. The only exception is the Lead Directive that only referred to article 235TR. This implies that the directives (excluding the Lead Directive) had the common market, and more specifically, the approximation of harmonisation in order to prevent distortion of competition, as one of their goals.

Notice that the proposals were much more varied with respect to the legal base they invoked. In the last column of table 5.3.2, we can see that seven proposals made explicit reference to both 100TR and 235TR, five proposals made reference to article 235TR only, one proposal made reference to 100TR only and one proposal did not explicitly refer to any Treaty article as a reference to the framework Aquatic Environment Directive was deemed sufficient. Rather than just making categories, however, it is more useful to notice the development that took place. The general observation that can be made is that the first proposals made a choice between either article 235TR or 100TR depending on the subject of the directive. Indeed, the Commission used to offer the reasons for chosen a specific legal base. The later, post 1978 directives were based on the double legal base. This was probably due to the fact that the proposals the Council had previously adopted (i.e. the directives on drinking water, the aquatic environment and the titanium dioxide industry) were all based on both article 100TR and article 235TR. The Commission apparently decided to adopt the Council's line of reasoning with respect to the legal base.

The second observation is that the secondary legislation from our selection lacks internal consistency between the legal base and the contents of the various directives. As the legal base and the preambles are closely related in this period, there is also an inconsistency between the preambles that refer to the need for harmonisation in order to prevent competitive distortions, and the contents. We can highlight this by the directives that offer a choice between emission standards and environmental standards that were already discussed in the previous subsection.

If the result is that all Member States adopted similar environmental quality standards, it would be hard to base such harmonisation on article 100TR despite the fact that this resulted in some form of harmonisation. But what is harmonised here are the environmental quality preferences of the Member States. Remind that in this period Council decision on harmonisation had to be made

unanimously. But what the advantages of environmental harmonisation for the creation of a common market are is less than obvious. Moreover, it is unclear why such harmonisation of environmental quality is necessary to prevent competitive distortions, as is often claimed in the preambles, irrespective of whether one adheres to the fair trade or the economic line of thought.

If all Member States would adopt the emission standards, the answer to the question whether such a result could be based on article 100TR would depend on whether differences in abatement costs between 'identical' producers would be considered as a competitive distortion. If different abatement costs amongst identical producers based in different Member States would be considered competitive distortions, legislation setting uniform emission standards could be based on article 100TR. Given the wording of the preambles of the directives, this is the case. If one adheres to the economic line of thought that considers national differences on the basis of environmental quality a source of competitive advantage and welfare increasing international trade, the resulting differences in national emission standards and abatement costs need no harmonisation to further the common market. Consequently, harmonisation of emission standards cannot be based on the harmonisation article.

In case some Member States would chose emission standards and other environmental quality standards, the resulting degree of approximation of emission standards would be very low. Given the results derived above, legislation allowing Member States a choice between emission standards and environmental quality standards could probably not be based on the harmonisation article independent of whether one adheres to the economic or the political definition of distortion of competition.

In conclusion, the pre-SEA period, that is the period following the Paris Summit Declaration, was marked by an apparent conflict between the legal base and the preamble on one hand and the contents of the directives on the other. We consider the level of approximation that is achieved insufficient to be based on

article 100TR. Instead, it would make much more sense to base the legislation on article 235TR instead. This article would offer the same opportunities for environmental legislation without the necessity of harmonised legislation. If the directives would be based on article 235TR, there would have been no problem with internal consistency of the environmental legislation.

5.3.3 The need for centralisation

Finally, the third question posed at the beginning of this chapter was whether the choice for centralisation as witnessed by the directives is supported by the need for centralisation given the level of harmonisation set by the directives.

From the economic analysis given in chapter 2 it follows that approximation would be inefficient as it prevents specialisation of Member States that would result in a welfare optimum. The reasoning implicit behind the preambles is a different one: approximation would guarantee identical starting conditions for producers and hence a level-playing field. We have seen in the previous sections that the EP, the Commission and the Council have all resorted to and supported level playing ground arguments at times. The term competitive distortion as in article 100TR is subsequently interpreted as meaning unequal cost conditions in competition. Thus, the mere fact that a producer in one Member State has higher burdens than a producer in any other Member State due to differences in costs of compliance with specific national environmental legislation implies that the Community needs to approximate the national policies. If this principle were to be applied consistently, this would result in legislation with a high level of harmonisation of emission standards.

If we look at the contents of the directives, however, the conclusion must be that although mandatory BAT, BATNEEC or BTM for new installations or plants could imply a rather high level of minimum harmonisation in the long run

(depending on the use of the exceptions in practice), the directives allow in the shorter and intermediate run a high level of differentiation, implying only weak approximation of emission standards. Thus, the contents of the directives appear to be much more in line with economic theory. In general, the preambles are in direct conflict with the economic theory as presented in chapter 2 but the contents are generally in line with economic theory.

If the Community would adhere to a level playing field definition of distortion of competition, there would be a need for centralisation. The preambles appear to refer to this definition. If the Community would adhere to the economic definition of distortion of competition (the efficiency view), there would generally be no need for centralisation. The contents of the directives often appear to be more in line with the efficiency view than the level playing field view.

Given the scope left for differentiation of emission standards, one wonders whether it would not have been more sensible to abstain from centralisation of standard setting.

5.4 Summary of chapters 3 to 5 for the pre-SEA period (1972-1986)

After the Paris declaration in 1972, the European environmental policy really took off. The basis for the environmental policy was interpreted into the Treaty, and there were no visible changes to the text of the Treaty of Rome. This implied that the environmental policy had to be based on the articles that were included in the Treaty as of then. As there were no articles that specifically referred to protection of the natural environment, the options were limited to a few suitable, general articles. In fact, the choice was between the reserve article 235TR and the harmonisation article 100TR. The reserve article could provide a legal base in case legislation was necessary in a policy area that was transferred to the

Community but without the provision of a specific legal base. The harmonisation article could provide a legal base for measures that would prevent or remedy national legislation that could interfere with the common market in case the national policies were not 'approximated'. Both of these articles share that there should be a clear link with the common market in order for these articles to be available and the fact that secondary legislation needed to be adopted by the Council by unanimity.

A major difference between the articles is that the reserve article does not require that the legislation adopted on the basis of this article is harmonised up to some extent. Article 100TR uses the word approximation, and even though this does not necessarily imply perfectly uniform standards and norms, the scope for differentiation between national standards should at least be reduced as a result of the directive. The reserve article is more flexible in that it does not pose this requirement and hence allows for a higher degree of differentiation between Member States concerning the environmental policies and standards deemed appropriate. Whereas we would therefore expect a higher level of harmonisation in the secondary legislation adopted on the basis of article 100TR, the exact level of harmonisation cannot be predicted due to the lack of definitions.

In order to get grip on the new environmental policy area, the Commission drafted its action programmes for the environment. Three action programmes set out the tasks during the period up to the Single European Act. These programmes contained a set of guiding principles. Some of these guiding principles stressed the need for harmonisation, other principles stressed the need for differentiation to take local factors into account. We concluded that these programmes do not provide good clues as to how strict harmonisation should be, leaving ample or little scope for differentiation of emission standards. We therefore looked at the secondary legislation that was adopted on the basis of these programmes.

A significant amount of secondary legislation was adopted in the period up to the Single European Act. In this chapter we have seen that the initial proposals

for the environmental legislation selected used either the reserve article or the harmonisation article. The choice between these two articles seemed to depend on whether the Commission judged the proposal to have more or less connection with common market issues. The legislator, in casu the Council, adopted nearly all the directives on a combination of the reserve and the harmonisation article however. The double legal base featured in all but one of the directives discussed. Even if we discount the fact that many of the directives were indirectly based on one of the directives (the Aquatic Environment framework directive) and that one can therefore doubt the additional evidence provided by some of the directives listed, the fact remains that the double legal base was the normal practice. The reasoning for adopting the legal base was given in the directives, namely that differences between national standards would have an effect on the common market. The legislator implies of course that this is a negative effect. The Commission, having witnessed the line of thought of the Council, subsequently adopted the double legal base in its proposals.

If we look at the contents of the directives, the low level of harmonisation stands out, especially in the short run. The directives were based on minimum harmonisation, but generally there were numerous exceptions allowing for deviations from the minimum standards on the basis of local circumstances. For example, we have seen that generally there was a way out of BAT obligations as long as this did not distort competition. As we have noticed before, in the longer run the level of harmonisation could increase as most facilities would be 'new' installations. The same goes for the other exceptions that many times were temporary.

In conclusion, the formative period of the European environmental policy that extended up to the Single European Act was characterised by a low level of internal consistency. The Council made a deliberate choice to adopt the environmental legislation on the basis of both article 100TR and article 235TR. Article 100TR is suitable for harmonised legislation in order to reach the

common market goals. Even though the wording of the preambles of these directives are in line with the conditions for using the harmonisation article, with a central role for prevention of distortion of competition, the low level of approximation in the contents are in contrast with the stated aim.

Chapter 6 Secondary Legislation from the period of the Single European Act (1987-1992)

6.1 Introduction

6.1.1 Research questions

The questions to be answered in this chapter are the same questions that were addressed in the previous chapter: The central question concerns the actual use of harmonisation in the environmental policy with respect to stationary point sources as indicated by the secondary legislation. This central question translated into the following questions:

- What precisely is harmonised, for example environmental quality standards or emission standards?
- What type of harmonisation is pursued, for example minimum harmonisation or full harmonisation?
- What are the arguments for harmonisation?
- What kinds of exceptions are allowed and what is the overall resulting level of harmonisation in terms of approximation of emission standards?
- What is the legal base?
- Is the environmental legislation internally consistent?
- Does the level of harmonisation set in the Community environmental legislation with respect to stationary sources support the choice for centralisation?

In this chapter, these questions will be answered for the period between July 1, 1987 when the Single European Act entered into force and January 1, 1993, when the Maastricht Treaty entered into force.

To these questions, we will add another question. This relates to the preferences for a specific legal base. The legislative process - from proposal to adoption of a specific directive - can take many years. According to the principle of attribution, all secondary legislation should be based on powers that are conferred to the Community, i.e. the directives should be based on primary legislation available. This implies that some of the directives adopted during the SEA-period under scrutiny in this chapter may have been initiated well before the Single European Act.³²³ As we have seen in chapter 3, the SEA introduced specific environmental articles such as article 130r SEA. A new version of the harmonisation article (article 100a SEA) was added, allowing for qualified majority voting instead of unanimity voting in the Council. This article now included some elements that specifically referred to protection of the natural environment. Thus, whereas the choice in period 2 (following the Paris Summit) was between articles 100TR and 235TR, the choice in period 3 (following the Single European Act) was between 100a SEA, 130r SEA and possibly 235SEA. As the Treaty articles available in these respective periods differed, we can draw conclusions about the perceived advantages and disadvantages of the Treaty articles from the period up to the SEA relative to the Treaty articles introduced by the SEA. The additional question thus is:

- Can we draw conclusions on the optimality of the legal bases from the pre-SEA period as perceived by the Institutions on the basis of relative use of different legal bases in the periods?

The analysis may yield several possible results. We assume throughout that the changes in article 100a SEA compared to 100TR are minor relative to the differences between articles 100TR and 130r SEA, i.e. that 100a SEA is the logical replacement for article 100TR

323. Similarly, some of the proposals initiated by the Commission during the SEA-period only resulted in directives adopted after the Maastricht Treaty.

Firstly, article 100TR may have been a second best legal base relative to article 130r SEA from the point of view of the legislator. This can be concluded if directives from the SEA-period that do not differ significantly in content from directives adopted on the basis of article 100TR in the pre-SEA-period, were adopted on the bases of article 130r SEA instead of on article 100a SEA. The legislator would have used article 130r TR instead of 100TR had both of these articles been available in the pre-SEA period. This implies that the legislation in the first period had been based on an article that was second best from the point of the legislator.

Secondly, the legislator could have taken the point of view that article 130r SEA was superior to the double legal base used in the pre-SEA. Given that 100a SEA is the natural replacement of article 100TR and that article 235SEA is unchanged relative to article 235TR, directives that were based on the double legal base (235TR&100TR) in the pre-SEA period would have been based on the double legal base (235SEA&100aSEA) in the SEA-period if this combination was considered to be superior from the point of view of the legislator compared to the used of solely article 130r SEA.

Thirdly, article 235TR may have been opted for as a second-best legal base relative to article 130r SEA. In this case, directives from the SEA period that do not differ significantly in content from proposals from the previous period that were based on article 235TR would be based on article 130r SEA instead of on article 235SEA. In case of the directives comparable to the ones based on the double legal base in the pre-SEA period, these would be based on a combination of articles 100a SEA and 130r SEA in the SEA-period.

This perceived superiority of one (combination of) article(s) from the SEA period to another (combination of) article(s) could be based on various considerations. One criterion to establish superiority of one legal base relative to the other are

differences in (voting) procedures, another criterion could be the flexibility of the article.

With respect to the voting procedures, in the pre-SEA period both article 100TR and article 235TR required that legislation on the basis of (one of) these articles was adopted on the basis of unanimity. In the SEA-period, the legislator had a choice between three articles – 100a, 130r/s/t and 235 – with different voting procedures. Article 100aSEA required qualified majority. This means that a group of Member States not composing all Member States is sufficient to adopt specific legislation. On the other hand, articles 235 and 130rSEA required unanimity. When deciding on a legal base, the difference in voting procedure can be taken into account when a group of Member States composing a qualified majority wants to adopt a directive notwithstanding opposition from other Member States. That is, if a piece of secondary legislation needs to be based on more than one Treaty article it has to meet the requirements of all the articles used as the legal base. In the period up to the Single European Act it was feasible to base a directive on both article 100TR and 235TR because these articles set the same requirements (unanimity and consultation of the European Parliament).³²⁴ On the other hand, the requirements of qualified majority and unanimity are not identical. Adding article 100a SEA as a legal base to a proposal based on article 130rSEA does not appear to pose great problems. Unanimity voting appears to be sufficient condition for the proposal to be carried, because if the proposal is carried unanimously, this would imply that it is also carried by any majority. However, adding article 130r SEA as a secondary legal base to a proposal based on article 100a SEA would diminish the scope for the proposal to be carried for this would not require unanimity. Thus, the advantages and intentions of qualified

324. Article 100TR stipulated in addition that *‘the Assembly and the Economic and Social Committee shall be consulted in the case of directives whose implementation would, in one or more Member States, involve the amendment of legislation’* but such consultation would not imply incompatibility with article 235TR.

majority – a way to increase the output of Community legislation – would be undermined if article 130rSEA would be added as a secondary legal base.

Articles 235SEA and 130r SEA are fully compatible in that both articles require unanimity. Article 130r SEA states that that ‘The Council shall define those matters on which decisions are to be taken by a qualified majority’. This implies that the Council can (unanimously) decide that certain pieces of environmental legislation would require qualified majority voting. Such a decision would remove additional support required by adding article 130r SEA as a secondary legal base to a proposal based on article 100a SEA. On the other hand, it would pose additional voting requirements if article 235SEA was to be added as a secondary legal base to a proposal based on either 100aSEA or 130r SEA.

With respect to the relative flexibility of Treaty articles, we have seen in chapter 3 that a difference between article 130r SEA compared to article 100TR was that article 130r SEA did not mention harmonisation. Thus, we expect a lower level of harmonisation in the secondary legislation from this period compared to the directives from the previous period. Another difference is that article 130r SEA did not specify the form of the instrument whereas article 100a SEA was limited to enacting directives only. Thus, in cases where e.g. a regulation was judged to be superior, article 130r SEA would be preferred over the harmonisation article.

6.1.2 Contents

Table 6.1 below lists the Directives that will be covered in section 2 of this chapter. There are only four directives under investigation. Thus, the body of secondary environmental legislation with respect stationary sources was not very extensive in this period running from July 1, 1987 to January 1, 1993 but it

should be noted that some of the proposals initiated by the Commission during this period only resulted in final directives in years following the Maastricht Treaty, and will thus be covered in the next chapter. Following the discussion on the directives from the table, the conclusion will be presented in section 6.3.

Table 6.1 List of directives covered in chapter 6 on the period of the Single European Act (1985-1992)		
Name (subject) of the directive	Number ³²⁵	Section
Large combustion plant	88/609	6.2.1
Incineration of domestic waste	89/369, 89/429	6.2.2
Titanium Dioxide II	89/428	6.2.3
Urban waste water treatment	91/127	6.2.4
Titanium Dioxide III	92/112	6.2.5

6.2 The Secondary legislation

6.2.1 Large Combustion Plant Directive 88/609/EEC

In 1983, the Commission submitted a proposal aimed at limiting the emission of pollutants by Large Combustion Plants (LCP).³²⁶ These emissions had already been subject of the Industrial Installations proposal that had been submitted earlier that year.³²⁷ The Industrial Installations proposal was aimed at air pollution in general, whereas the LCP proposal was aimed specifically at reducing acid rain. Therefore, the LCP proposal focused on some key pollutants related to acid rain only - i.e. sulphur, NO_x and particles/dust. The LCP-proposal was based on articles 100TR and 235TR. It used the by now standard reasoning

325. The number before the slash indicates the year in which it was adopted.

326. Proposal of December 19, 1983, in: OJ C49/1 of February 21, 1984.

327. See section 5.2.11.

to adopt article 100TR as a legal base, i.e. the need to harmonise legislation in order to prevent distortion of competition.³²⁸ In addition, it referred to the Convention on long-range transborder air pollution.

The proposal was limited to the largest combustion plants, i.e. combustion plants of a capacity of 50MW capacity and over. Therefore, differentiation between small and large installations was built into the design of the proposal. The proposal was different relative to the previous proposals in that it primarily targeted Member States rather than installations or producers in order to reach its environmental objectives. Thus, there were emission reduction targets at national, Member State level. The 1996 emission reduction objectives were 60% for SO₂, 40% for NO_x and 40% for particles compared to a 1980 baseline.³²⁹ National programmes needed to be set up to guarantee national emission reductions. There was an escape clause for Member States that emitted relatively little pollutants. Such Member States were allowed to use lower emission reduction goals.³³⁰ Neither a definition of what was meant by limited emissions nor a list of the Member States that could invoke this exception was provided however.

Equal national emission reduction goals do not imply 'harmonised' costs on producers. The national emission reduction goals required translation into emission reduction standards for sectors, enterprises or plants. This part of the proposal is clearly geared to formulating a common approach to mitigate the acid rain problem caused by transborder emissions of combustion fuels in the

328. Some foreign language versions include 'Considérant que les dispositions législatives, réglementaires et administratives concernant les obligations imposées aux grandes installations de combustion comportent des disparités qui peuvent créer des conditions de concurrence inégale et avoir de ce fait une incidence directe sur le marché commun; qu'il convient donc de procéder dans ce domaine au rapprochement des législations prévues à l'article 100 du traité CEE' and 'Overwegende dat de wettelijke en bestuursrechtelijke bepalingen inzake de verplichtingen waaraan grote stookinstallaties moeten voldoen, verschillen vertonen waardoor ongelijke concurrentievoorwaarden kunnen ontstaan en die bijgevolg rechtstreeks van invloed kunnen zijn op de werking van de gemeenschappelijke markt; dat derhalve op dit gebied dient te worden overgegaan tot het nader tot elkaar brengen van de wetgevingen als bedoeld in artikel 100 van het EEG-Verdrag.'

329. Ibid., article 3.

Community. It is not geared in any way to harmonisation of emission standards or financial burdens between comparable producers in different Member States. However, harmonisation does come in the second part of the proposal. In addition to the overall reduction goals for Member States, the proposal set Community emission standards at plant level for ‘new installations’ as well as a limit on stack height.³³¹ ‘New installations’ in the proposal not only applied to completely new (in the sense of not existing before) installations but included existing installations that had been out of use or that had been refurbished or expanded. The applicable emission norms depended on plant size and type of fuel used.³³² Table 6.2.1a lists the emission norms for January 1985:

Type of fuel	SO ₂	Particles	NO _x
Solid	400	50	800
Liquid	400	50	450
Gas	35	5	350

The 1985-norms make a distinction between different fuels, i.e. solid fuels, liquid fuels and gas. Had the norms been identical, e.g. though a Pigouvian pollution tax, there would have been an incentive to switch to the cleanest fuel, i.e. gas. However, the proposal had another objective next to the stated goals of preventing competitive distortions and protecting the environment. This goal was to protect national production of fuels, irrespective of whether these were clean or not. Thus, in addition to the comparatively low norms on solid fuels, Member States that used national solid fuels with a high sulphur content could ask for more lenient emission norms.³³³ Table 6.2.1a gives a distorted picture of the

330. Ibid., article 7.

331. However, geographical features needed to be taken into account (ibid., article 10).

332. Ibid., and article 4 and annex I.

333. Ibid., preamble and article 7.

degree of harmonisation as there were various other grounds for deviation from the harmonised standards. Firstly, the emission standards were postponed 5 years for installations with a capacity of less than 100MW.³³⁴ The preamble states that this exception was aimed at protecting the use of national solid fuels. Secondly, there were lower norms on specific processes and sectors such as ‘pulverised hard coal firing with extraction of fused ash’, ‘blast furnace gas’, ‘coke oven gas’, ‘liquefied gas’ and ‘steel industry’. One emission norm was even a factor 20 higher than the norm in table 6.2.1a.

Apart from the 1985 norms, there were also 1996 emission standards (table 6.2.1b):

Type of fuel	SO ₂	Particles	NO ₂
Solid	250	50	400
Liquid	250	50	220
Gas	35	5	180

Compared to table 6.2.1a, the norms on SO₂ and NO₂ were generally stricter. However, the exceptions for specific industries etc. were unaltered. Consequently, there was relatively little incentive for innovation for these specific installations and processes. Overall, the difference between general norms from table 6.2.1b and the exceptions increased.

The actual variation between norms that producers were faced with could even be wider. It was expressly stated that Member States could impose both stricter and additional emission norms.³³⁵

In conclusion, the emission rules on individual installations imply minimum harmonisation at Community level only with respect to new plants using the same type of fuel and of the same size. It should be noted, however, that

334. Ibid., preamble and article 4.

gas contains much lower percentage of sulphur for example than coal and oil. The difference in standards for the three fuels reflects an effort to equalise the costs of emission reduction between the fuels. The national emission caps relate to both new and existing installations. Thus, the proposal allowed the Member States to distribute the burdens over all installations according to e.g. efficiency criteria. This could therefore imply additional national norms for existing plants or more stringent standards for new installations on top of the Community norms. It would demonstrate that a trade-off existed between the objectives of reducing acid rain emissions sufficiently in all Member States and equalisations of costs of compliance to create an a level playing field in terms of conditions of competition.

The European Parliament was very critical in its resolution on the proposal.³³⁶ Indeed, it called the proposal ‘totally inadequate because it provides no solution to the problem and falls short of the expectations generally current in the population as regards such legislation’.³³⁷ It refrained from rejecting the proposal only so as not to delay treatment of the subject.³³⁸ In addition to its critique on the contents, the Parliament called on the Council to create a legal base for implementing a European environmental policy ‘so that future decisions do not solely have to be based on Article 235 of the Treaty’.³³⁹

The ECOSOC, in its opinion on the proposal, made various references to distortions of competition.³⁴⁰ It regarded as very positive the aim to reduce emissions ‘through effective, homogeneous measures at Community level’.³⁴¹ This not only implied that ECOSOC endorsed centralisation, but also that it endorsed a high level of harmonisation. According to ECOSOC, ‘The weakest

335. *Ibid.*, article 4(3).

336. Resolution of November 16, 1984, in: OJ C337/446 of December 17, 1984.

337. *Ibid.*, point 2.

338. *Ibid.*, point 3.

339. *Ibid.*, point 10.

340. Advice of November 21, 1984, in: OJ C25/33 of January 28, 1985.

341. *Ibid.*, point 1.1.

point in Community measures to date is certainly the gulf between the stated aims of the Directives and their implementation. This is largely due to the difficulties encountered in attempting to define uniform, rigorous emission limit values for all countries and plants concerned. It would thus be reasonable to say that too many differences in implementation and too many exemptions from the limits and deadlines laid down do not contribute to uniform environmental policies and effective Community measures or to achieving satisfactory results at the national level. Perhaps, because of the interests and stakes involved, environmental policy is one of the sectors of Community activity which require more effective and binding standards and instruments and more homogeneous measures and results in order to make up for lost time by exploiting the most advanced innovations and techniques quickly and on a larger scale. Indeed, the lack of co-ordination between Community standards and national legislation contributes to inadequate or partial implementation of the agreed standards or to the adoption of local measures which continue to create risks and inequalities, as well as distortions of competition'.³⁴² The ECOSOC continues that a special effort should be made 'to ensure that no country, sector or region is placed in a privileged or disadvantaged position. While it is right to lay down that each Member State should draw up a plan to reduce emissions to the limits set, taking into account local circumstances, it would seem that, if a proper balance of costs, benefits and conditions of competition is to be achieved, the Member States with low total emission and those burning indigenous fuels should not be allowed for any reason to disregard either the general aim of reducing total pollutant emissions or the emission limits for large combustion plants'.³⁴³

From these phrases it is clear that the ECOSOC considers that differentiation of standards could result in distortion of competition. More specifically, the ECOSOC called for emission standards on existing installations

342. Ibid., points 2.1.3-2.1.5.

343. Ibid., point 2.8.5.

to avoid distortion of competition and wait-and-see attitudes, which would militate against the installation of new plants. It also pleaded for limit values that did not discriminate between fuels.³⁴⁴ However, the phrases also imply that ECOSOC does recognise that there may be some valid grounds for local variation of standards. It is not clear where lays the boundary between valid variation and the commencement of distortion of competition. This difficulty is expressed clearly in its comment on exemptions: ‘The Committee does not think there should be excessive or general exemptions which might favour some Member States or discriminate against others. It stresses that the Commission should ask the Member states to take account of specific circumstances in their national programmes, in order to achieve the common aim without creating distortions of treatment or competition between plants, Member States or sectors’.³⁴⁵ It appears from these quotes that taking into account local circumstances can both cause and prevent distortion of competition in the view of the ECOSOC.

In 1985, the Commission submitted an amended proposal.³⁴⁶ The most significant change was that the emission limits on NO_x and SO₂ for new plants were more differentiated with respect to the capacity of the installation. If we compare the 1985-norms of the amended proposal with those of the proposal, we see that

- The SO₂-norms on installation bigger than 300Mw were relaxed significantly; the proposed norm for installations with a capacity of over 50Mw applied only to the installations with a capacity of over 300Mw.
- The exception on SO₂ emission from fluidised bed combustion plants was removed from the proposal and postponed to a future proposal.
- The particle-norms were unaltered and therefore independent of plant size. The exceptions were maintained.

344. Ibid., points 3.4.1 and 3.4.4.

345. Ibid., point 3.3.1.

346. Amended proposal of February 25, 1985 in: OJ C76/6 of March 22, 1985.

- The NO_x -norms were stricter for plants of over 300Mw using solid fuel. The other NO_x norms were maintained unaltered.

Table 6.2.1c 1985 emission norms in mg/m³ from the amended LCP proposal				
Type of fuel	Capacity	SO ₂	Particles	NO ₂
Solid	>300 Mw	400	50	650
	300-100Mw	1200		800
	<100 Mw	2000		800***
Liquid	>300 Mw	400	50	450
	300-100Mw	1700		
	<100 Mw	1700		
Gaseous	>300 Mw	35*	5**	350
	300-100Mw			
	<100 Mw			
* but 5 for liquefied gas and 100 for coke oven gas ** but 10 for blast gas furnaces and 50 for the steel industry *** but 1300 for pulverised hard coal firing with extraction of fused ash				

In conclusion, the 1985-norms were less uniform than in the previous proposal. We assume an attempt was made to vary environmental standards in relation to the balance between the costs of upgrading the installations and the size (and thus total emissions) of the installations. The environmental loss with respect to SO₂ was offset by an environmental gain with respect to NO_x, but we are not able to qualify the net environmental result. Also, we do not have the numbers of plants that would benefit or lose under this amended proposal and in which Member States these are situated.

Table 6.2.1d 1996 emission norms in mg/m³ from the amended LCP proposal				
Type of fuel	Capacity	SO ₂	Particles	NO ₂
Solid	>300 Mw	250	50	200
	300-100Mw	1200		200
	<100 Mw	2000		400***
Liquid	>300 Mw	250	50	150
	300-100Mw	1700		
	<100 Mw	1700		
Gaseous	>300 Mw	35*	5**	100
	300-100Mw			
	<100 Mw			
* but 5 for liquefied gas and 100 for coke oven gas				
** but 10 for blast gas furnaces and 50 for the steel industry				
*** but 800 for pulverised hard coal firing with extraction of fused ash				

The conclusions with respect to the 1996-norms are similar to those drawn with respect to the 1985-norms. The norms from the amended proposal were less uniform across all installations and the environmental loss with respect to SO₂ was offset by an environmental gain with respect to NO_x. However, the environmental gains on NO_x were more substantial in that almost all NO_x norms were stricter and not only those with respect to solid fuels.

The final Large Combustion Plant Directive of 1988 was based on article 130s SEA only.³⁴⁷ Thus, no use was made of the harmonisation article. Indeed, the Directive no longer mentioned the common market or a need to harmonise at all. Instead of harmonisation, differentiation was stressed: ‘Whereas in establishing the overall annual emission ceilings for existing large combustion plants due account has been taken of the need for comparable effort whilst making allowances for the specific situations of Member States; (...); whereas in

347. Directive 88/609/EEC of November 24, 1988, in: OJ L336/1 of December 7, 1988.

the case of Spain there has been granted a temporary and limited derogation from the full application of the emission limit value of sulphur dioxide fixed for new plants, since that Member State considers it needs a particular high amount of new generating capacity to allow for its energy and industrial growth'.³⁴⁸

The change in position - given larger weight to reduce emissions in regions where they cause the highest damage and reducing emissions primarily at the largest installations, thus accepting less uniform standards - can be seen from the differentiation in the national emission reduction goals. The proposals spoke of uniform 60% (SO₂) and 40% (NO_x and particles/dust) national reduction goals to be reached by 1996. Instead, the LCP Directive set differentiated national emission reduction goals for 1993, 1998 and 2003. In table 6.2.1e below we have listed the 1998 and 2003 targets:

Table 6.2.1e National emission reduction goals in % reduction over 1980 emissions			
Member State	SO ₂ (1998)	SO ₂ (2003)	NO _x (1998*)
Belgium, Germany, France, Netherlands	60	70	40
Luxembourg ³⁴⁹	50	60	40
Denmark	56	67	35
Italy	39	63	26
United Kingdom	40	60	30
Spain	24	37	24
Greece	-6		-94
Ireland	-25		-79
Portugal	-135		-178
* Member States could delay implementation for technical reasons for up to 2 years.			

As can be seen from the table, the original uniform reduction percentages applied

348. Ibid., preamble.

349. It is possible that the 2003 reduction target agreed was 50 percent. The directive is internally inconsistent.

only to Belgium, Germany, France and the Netherlands. Subsequently, following accession by Austria, Finland and Sweden, these reduction targets also applied to these countries.³⁵⁰ These were the environmentally most ambitious countries and most vulnerable to deposition of acid rain pollutants. Some Member States even obtained negative reduction goals, i.e. they were allowed to increase their emissions. These were the economically less developed Member States, often with soils less sensitive to acid rain deposition. The distribution of reduction targets among Member States appears to reflect a balancing of abatement costs and environmental benefits, in short the efficiency view.

The Parliament adopted a resolution on the amended proposal, complaining that its main amendments had not been incorporated, included the ones on emission reductions from existing plants and the elimination from the exemptions from article 7.³⁵¹

The final LCP Directive also contained legislation that applied to plant level. The harmonised rules relating to stacks were removed but there were still emission standards. The scope of the Directive was defined very precisely with respect to the type of plants and fuels it covered.³⁵² For example, norms on SO₂ emission from plants between 50-100MW were excluded and to be set in future legislation.³⁵³ For the plants that were included, the norms applied only to new plants. For these new plants, the emission norms for the individual plants were highly dependent on the fuel used and on the plant size. The exception for the use of 'indigenous solid fuel' was maintained, as were exceptions for lignite, Spain and a specific category of installations that were used less than 2,200 hours a year.³⁵⁴ Apart from all these exceptions and definitions, the general emission norm was highly dependent on the capacity of the installation. The rule of thumb

350. OJ C241 of August 29, 1994, pp. 172-173.

351. Resolution of June 14, 1985, in: OJ C175/297 of July 15, 1985.

352. *Ibid.*, article 2.

353. *Ibid.*, annex III, footnote.

354. *Ibid.*, articles 5 and 6.

is, the bigger the installation, the stricter the norm. The exact numbers are in table 6.2.1f below. The norms needed to be implemented by July 1990, and a review of the standards was to be undertaken before July 1995.

Type of fuel	Capacity	SO ₂	Particles/dust	NO ²
Solid	>500 Mw	400	50	650**
	100-500Mw	400 + 4x (x= capacity in MW-100)	100	
	100 Mw	2000		
Liquid	>500 Mw	400	50	450
	300-500Mw	400 + 6.5x (x= capacity in MW over 300)		
	50-300Mw	1700		
Gaseous	>300 Mw	35*	5***	350
	300-1000Mx			
	<100 Mw			

* but 5 for liquefied gas and 800 for low-caloric gasses from gasification of refinery residues, coke-oven and blast-furnace gases.

** but 1300 for solid with less than 10% volatile compounds

*** but 10 for blast furnace gas and 50 for gases from the steel industry which can be used elsewhere.

In conclusion, the proposal created minimum harmonisation between similarly sized new installations within one sector. However, it is perfectly possible that the national reduction plans would require more stringent national standards upon some plants creating an outcome with actually very differentiated standards instead of an approximation of standards. We can conclude that the LCP Directive featured almost no harmonisation of emission standards on plants. The

proposal differed only in detail from the Directive, even though the proposal was based on the harmonisation article and the Directive was based on 130s SEA that did not prescribe harmonisation.

Large Combustion Plant 88/609/EEC	
Instrument	Emission standards for new plants; national emission reduction targets
Full or minimum harmonisation?	Minimum harmonisation of emission standards; differentiated national emission reduction targets
Exceptions (permanent? Conditional?)	Conditional, Spain
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	130s SEA

Basically, the approach of setting minimum emission standards while allowing exceptions (less strict standards) and leaving plenty of room for more stringent measures does not differ from the stance of the directives in the pre-SEA period. But in the case of acid rain the discrepancy between an efficient solution for environmental problems on the one hand and a level playing field in terms of conditions of competition was more glaring than ever. Given the very low level of harmonisation to be expected from the directive it is not without good reason that the harmonisation article disappeared as a legal base from the directive. However, this does not explain why the harmonisation article was chosen as the legal base for the proposal.

6.2.2 Incineration of Domestic Waste Directives 89/369 and 89/429/EEC

In 1988, the Commission submitted two proposals on the incineration of domestic waste ('IDW'). The IDW-proposals covered new installations³⁵⁵ and existing installations³⁵⁶ for incineration of domestic waste respectively. Whereas many of the directives we discussed previously made a distinction between new and existing installations, this was the first time that two separate proposals had been submitted.³⁵⁷ Both of the proposals were based on article 130s SEA. The preamble states that the Community 'by fixing emission limit values and other pollution prevention requirements helps increase the effectiveness of the action taken by the Member States to combat air pollution from municipal waste incineration plants'. Hence the stated reason for (centralised) Community norms is effectiveness. There is some overlap with the legislation on air pollution by industrial installations and directives 75/442/EEC on waste and the Industrial Installations Directive.³⁵⁸

The IDW proposal on new installations included emission concentration norms for many pollutants. Some of the norms were differentiated with respect to the size of the installation, which reflects efforts to equalise emission control costs. Thus, the directive was similar to the LCP-Directive in that there were different norms depending on the size of the installation. The rules for the smallest installations were applicable to installations used on a seasonal base in tourist areas.³⁵⁹ It was explicitly stated that the norms were minimum norms.³⁶⁰

355. Proposal of March 9, 1988 in: OJ C75/4 of March 23, 1988.

356. Proposal of March 9, 1988 in: OJ C75/8 of March 23, 1988

357. For Mercury Directive 82/176 there had been two proposals for EQS and emission standards respectively, but these had been merged (see section 5.2.6).

358. Preamble. Directive 75/442/EEC (OJ L194/39 of July 25, 1975) on waste is not included in our sample. The Industrial Installation Directive is discussed in section 5.2.10.

359. *Ibid.*, article 10.

360. *Ibid.*, article 13.

Table 6.2.2a Emission norms for new IDW-installations (in mg/Nm³)			
Pollutant	'big installations' (capacity >5 ton/hour)	'small installations' (capacity <5 ton/hour)	'seasonal installations' (capacity <1 ton/hour)
Dust/particles	50	100	350
Pb+Cr+Cu+Mn	5		-
Ni+As	1		-
Cadmium	0,1		-
Mercury	0.1		-
HCl	50	100	-
HF	2	4	-
SO ₂	300		-
CO	100		
C (organic compounds)	20		
PCDD/PCDF	*		
* emission levels equivalent as achieved by a process of burning at least 2 seconds at 850°C using at least 6% oxygen.			

The IDW-proposal on existing installations set norms that were applicable starting 5 years after adoption of the directive. This was in contrast to the immediate applicability of the norms on new installations. In addition, existing installations were to meet the norms imposed on new installations after at most 10 years. Thus, the norms on existing and new IDW-installation were to be harmonised over time. Until harmonisation, the norms on existing IDW-installations were few and relatively lenient when compared to new installations. The more lenient treatment for existing plants was instigated by the knowledge that the cost of pollution control are generally much lower when the control investment can be integrated when building a new plant compared to retrofitting an existing plant.

Table 6.2.2b Emission norms for existing IDW-installations (in mg/Nm³)			
Pollutant	'big installations' (capacity >6 ton/hour)	'small installations' (capacity <6 ton/hour)	'smallest installations' (capacity <1 ton/hour)
Dust/particles	100	150	600
CO	100		
PCDD/PCDF	*		
* emission levels equivalent as achieved by a process of burning at least 2 seconds at 850°C using at least 6% oxygen.			

Like the proposal on new installations, the emission concentration standards depended on plant size. The result of these proposals would be minimum harmonisation. In this sense, the result is comparable to the legislation from the previous, pre-SEA period; i.e. sectoral minimum harmonisation.

The European Parliament³⁶¹ proposed (much) stricter norms and faster compliance. For example, the norms on dust from table 6.2.2b (i.e. 100, 150 and 600 respectively) were to be reduced to 30, 60 and 300 (amendment 37). Furthermore, existing installations should comply with the norms specific for existing installations after 4 instead of 5 years (amendment 35) and should comply with the norms for new installations after 5 instead of 10 years (amendment 36). The European Parliament explicitly approved of article 130s SEA as the legal base chosen.

The ECOSOC³⁶² voiced the same kind of critique, even though it was aware of the fact that high norms could result in switching to environmentally less desirable alternatives to burning. The ECOSOC asked to look into the possibility to add standards for additional pollutants³⁶³, stricter norms³⁶⁴ and a

361. Advice of February 20, 1989, in: OJ C69/219 of March 20, 1989.

362. Advice of September 28, 1988, in: OJ C318/3 of December 12, 1988.

363. Ibid., 4.1, under ad article 3 and ad article 6.

shorter time before existing installations would have to conform to the norms of new installations.³⁶⁵ According to the ECSOC, some of the norms from the proposal did not imply improvement relative to current practice.³⁶⁶

In 1989, the two IDW Directives were adopted on the basis of article 130s SEA.³⁶⁷ With respect to new installations, there were harmonised norms for three categories of installations delineated on the basis of the capacity of the installation. The most important norms are in summarised in table 6.2.2c below:

Pollutant	'big installations' (capacity >3 ton/hr)	'small installations' (capacity <3 ton/hr)	'smallest installations' (capacity <1 ton/hr)
Dust/particles	30	100	250/500
Pb+Cr+Cu+Mn	5		-
Ni+As	1		-
Cadmium	0,2*		-
Mercury	0,2*		-
HCl	50	100	250
HF	2	4	-
SO ₂	300		-
CO	100		
C(organic compounds)	20		
PCDD/PCDF	It is not exactly clear how the norms on cadmium and mercury should be read from the directive. It is also possible that the norm of 0,2 mg/Nm ³ applies to cadmium+mercury.		
* emission levels equivalent as achieved by a process of burning at least 2 seconds at 850°C using at least 6% oxygen.			

364. Ibid., 4.1, under ad article 3, ad article 10, and 4.2 ad article 3.

365. Ibid., 4.2, ad article 2.

366. Ibid., article 4(2).

367. Directive 89/369/EEC of June 8, 1989 on new installations (in: OJ L163/32 of June 14, 1989) and Directive 89/429/EEC of June 21, 1989 on existing installations (in: OJ L203/50 of July 15, 1989).

The lower standard on dust (500 mg/Nm³) for the ‘smallest installations’ applied only in cases of exceptional local circumstances, but other installations could also bypass some of the norms in case of a specific type of installations.³⁶⁸ The norms on dust were stricter than in the proposal. Notice that the categories were defined differently than in the proposal, increasing the differences in norms on dust for installations with a capacity of 3 to 5 ton/hour compared to the proposal. In addition to these norms, Member States could set additional norms on other pollutants.

Existing installations of a capacity of 6 ton/hour or more needed to comply with the norms for new installations by December 1996. Thus, they had 6 more years to comply with these norms than new installations. Up to December 1996, they faced the less stringent norms from table 6.2.2d below, although a norm on dust seems to have been omitted. Smaller existing installations were given delay until December 2000 to conform with the norms on new installations. They faced intermediate norms from December 1995 as listed in table 6.2.2d below:

Table 6.2.2d Emission norms for existing IDW-installations (in mg/Nm³)		
Pollutant	‘small installations’ (capacity 1-6 ton/hour)	‘smallest installations’ (capacity <1 ton/hour)
Dust/particles	100	600
CO	100 (hourly average)	100 (daily average)
PCDD/PCDF	Emission levels equivalent as achieved by a process of burning at least 2 seconds at 850°C using at least 6% oxygen	

In conclusion, the IDW Directives by and large imposed minimum harmonisation. However, the norms were dependent on installation size and whether these were existing installations or new installations by the definition of the directives. The contents of the IDW Directives did therefore not differ

368. See the directive on new installations, articles 3(2) and 10.

markedly from previous directives enacted on the basis of article 100TR. The IDW Directives only set emission standards and did not incorporate EQS. Centralisation was not required from the point of view of reducing transborder emission since it was stated that only in some cases do transborder emissions occur.³⁶⁹ There appear to be no reasons for drafting these sector specific directives at Community level from an economic or environmental perspective and the only explication appears to be the aim to establish a level playing field between identical installations.

Incineration of Domestic Waste Directives 89/369 and 89/429/EEC	
Instrument	Emission concentration norms per size category
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	-
Overall approximation of emission standards	Minimum harmonisation of emission norms.
Legal Base	130s SEA

6.2.3 Titanium Dioxide II Directive 89/428/EEC

In 1983, the Commission submitted yet another proposal on the titanium dioxide industry.³⁷⁰ The proposal referred to the fact that the 1978 Titanium Dioxide Directive stipulated (article 9) that the Member States draft national programmes to limit and eventually end the pollution caused by this sector. These programmes were to be sent to the Commission by July 1987³⁷¹, so that the Commission could introduce proposals for the harmonisation of these national programmes with regard to the ‘improvement of the conditions of competition in the titanium

369. See the preambles of the proposals and the ECOSOC advice.

370. Proposal from April 1983, in: OJ C138/5 of May 26, 1983.

371. Directive 83/29/EEC of January 24, 1983 (in: OJ L32/28 of February 2, 1983) changed the dates from the Titanium Dioxide Directive: 1987 was 1980 in the original text.

dioxide industry.³⁷² The 1983 Titanium Dioxide proposal constituted this ‘long awaited’ proposal.³⁷³ The proposal was based on articles 100TR and 235TR.

According to article 1 of the proposal, it aimed at harmonisation of national programmes to reduce emission of pollutants and improve competitive conditions within the sector. A distinction was made between different production processes. For example, existing plants using the sulphate production process were obligated to terminate certain aquatic emissions of iron-sulphate by July 1987 and existing plants using the chloride production process needed to stop emission of liquid waste with a pH of less than 6,5 by July 1988. In addition to these emission standards, there were efficiency norms. Existing plants using the sulphate production process needed to limit liquid wastes to 1000kg/tonne and 400kg/tonne titanium dioxide produced by July 1988 and July 1993 respectively (article 3). In addition, the emissions of SO_x should not exceed 30kg/tonne titanium dioxide produced. Existing plants using the chloride production process needed to restrict emissions of liquid wastes to 200kg acid/tonne titanium dioxide produced and emission of chlor into the air to 6kg/tonne titanium dioxide produced by July 1988. If a Member State encountered technical difficulties, the deadlines could be postponed one year at maximum.

The European Parliament proposed elaborate modifications of the proposal.³⁷⁴ The alterations proposed concentrated largely on the (definitions of the) pollutants covered and the implementation periods. In the resolution contained in its advice, the European Parliament stated that: ‘it is essential to harmonise as soon as possible at Community level the national programmes for the reduction of pollution, not least in order to avoid distortions of competition between producers of titanium dioxide in the Community’ and that ‘an extension

372. Proposal, preamble.

373. The fault for the delay was that some Member States were late with transferring the required information, and the information given was considered to be insufficient to draft a proposal. See the ECOSOC advice of October 28, 1982 in OJ C326/1 of December 13, 1982 and Directive 83/29/EEC of January 24, 1983, in: OJ L32/28 of February 2, 1983.

of the deadline from 1987 to 1993 would lead to distortions of competition favouring undertakings that have hitherto taken little or no action to comply with the basic (Titanium Dioxide I - RL) Directive 78/176//EEC'.³⁷⁵

The Commission came with an amended proposal accepting many of the suggestions by the EP.³⁷⁶ The amended proposal was thus much greener than the original proposal. In the meanwhile, the Single European Act had entered into force. This had resulted in a change of legal base, i.e. article 100a SEA instead of articles 100TR and 235TR proposed by the Commission.³⁷⁷ The European Parliament agreed with the use of article 100a SEA as the legal base, and rejected article 130s SEA preferred by the Council.³⁷⁸

In 1989, the Titanium Dioxide II Directive was adopted. The Directive was based on article 130s SEA despite the preference for article 100a SEA by the Commission and the EP.³⁷⁹ The directive differed significantly from the proposal(s). The goal remained the same, however, i.e. reducing pollution and improving competitive conditions within the sector.

Dumping of several waste products in internal waters or the sea was forbidden starting 1990 (articles 3 and 4), however the dates could be postponed to 1993 should technical or economic problems be encountered, following which the Commission could give an additional six-month delay (article 5). In addition, there were efficiency norms, to be implemented by 1993 and depending on the process used:

374. Advice of April 10, 1984 in: OJ C127/29 of May 14, 1984.

375. *Ibid.*, resolution, under B and C.

376. Amended proposal of June 4, 1984, in: OJ C167/9 of June 27, 1984.

377. OJ C125/137 of May 11, 1987.

378. EP Resolution in: OJ C158/248 of June 26, 1989.

379. Directive 89/428/EEC of June 21, 1989 in: OJ L201/56 of July 14, 1989.

Table 6.2.3a Maximum emissions in kg per tonne titanium dioxide produced in SO_x or Cl respectively		
Production process	Harmonised norm	Delay when faced with technical or economic problems
Sulphate-process	800 (by 1993)	1200 (by 1993), 800 (by 1995)
Chloride-process using natural rutile	130 (by 1990)	130 (by 1992)
Chloride-process using synthetic rutile	228 (by 1990)	228 (by 1992)
Chloride-process using slag	450 (by 1990)	450 (by 1992)

From the table, we can see that there were large differences between the treatment of the two production processes. However, the most remarkable change relative to the previous proposal was that Member States were allowed to choose between emission standards and EQS. This would reduce the level of harmonisation between ‘identical’ producers even further.

The countries were not completely free to choose the norm they desired, as the directive set a specific requirement. Instead of efficiency norms listed in table 6.2.3a above, the Member States could use environmental quality standards ‘in such a way that the effects in terms of protecting the environment and avoiding distortions of competition are equivalent to that of the limit values’.³⁸⁰ This condition implies that prevention of distortion of competition - i.e. maintaining a level-playing field between Member States - was a principal goal in the Titanium Dioxide Directive. The ‘wet part’ of the Titanium Dioxide II Directive was thereby brought in line with the Aquatic Environment Directive that offered the same options. It is not explained what happens if these two conditions - environmental protection and the level playing field - cannot be met simultaneously because of differences between e.g. the receptive or absorptive

capacity of the environment in different Member States. Another complication is that it will be hard to translate the environmental quality standards into emission norms in areas that featured several installations with different production processes.

Articles 5 and 7 offered Member States a possibility to (-temporarily-) delay the implementation date on technical or economic grounds. An attached condition was that the Member State invoking this option submitted a programme to the Commission outlining the measures to reach the targets at the later date.

The Titanium Dioxide II Directive also covered air pollution, and here no choice was offered: The directive set emission standards on emission into the air depending on the production process.

In conclusion, we can see that the level of harmonisation was low (with the exception of the standards on emission into the air) due to the fact that Member States could chose between environmental quality standards and emission standards. The directive shows a mix of environmental concerns and the concerns to maintain a level playing field between identical installations in different Member States. Identical installations faced identical norms; technical and economic problems could only result in temporary differences. Given the high level of harmonisation within the processes and the similarity of previous directives, article 100a SEA could easily have been chosen as the legal base.

Titanium Dioxide II Directive 89/428/EEC	
Instrument	Environmental quality standards or emission standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent, conditional)	Temporary
Overall approximation of emission standards	Minimum harmonisation with temporary exception
Legal Base	130s SEA

380. Ibid., article 8.

6.2.4 Urban waste water treatment Directive 91/127/EEC

In 1989, the Commission entered a proposal for a directive concerning municipal wastewater treatment.³⁸¹ Despite the title, the proposed directive also covered the treatment and discharge of industrial wastewater. Indeed, the norms were directly applicable to industrial waste water that was of a nature similar to municipal waste water and did enter municipal waste water treatment plants before discharge to receiving waters while there existed separate, qualitative rules for industrial waste water entering collecting systems and municipal waste water treatment plants.³⁸² We will focus on the references to industrial plants.

The proposal was based on article 130s SEA. The stated reason for centralisation is transborder pollution from one Member State to other Member States.³⁸³ The primary obligation resulting from the proposal was that all discharges from municipalities of 2,000 population equivalents (hereafter: p.e.) (into fresh water and estuaries) or 10,000 p.e. (into coastal waters) needed to pass through collection and/or treatment plants.³⁸⁴ Implementation was due by December 31, 1998. The Member States could chose between emission concentration standards or emission reduction standards. There were specific norms for sensitive areas, which were defined in the proposal, but it was explicitly stated that all norms were minimum norms.³⁸⁵ A possible exception on the rule that the standards were minimum standards could be the emission reduction norm on biochemical oxygen demand, which was listed as 70 to 90 percent.³⁸⁶ Given the fact that the Member States could chose between the standards they applied, the level of harmonisation of the proposal was very low.

381. Proposal of November 9, 1989, in: OJ C1/20 of January 4, 1990.

382. *Ibid.*, article 12 and annex II (C).

383. *Ibid.*, preamble.

384. *Ibid.*, articles 4, 5 and 7.

385. *Ibid.*, annex III and preamble.

386. *Ibid.*, annex II, table 1.

The ECOSOC in its opinion called for more differentiation.³⁸⁷ It recognised that the execution of the proposal would place ‘an extremely heavy burden on large areas of the Community’.³⁸⁸ To ease the financial difficulties foreseen, the deadlines should be staggered on the bases of population equivalents. In general, ECOSOC supported the proposal though. It pointed out that limit values urgently needed to be added to the Aquatic Environment Directive as many types of industrial waste were not covered by any European legislation as of then.³⁸⁹

The amendments proposed by the European Parliament closely resembled the comments by the ECOSOC, however the amendments proposed would result in a greener directive with stricter norms both relative to the proposal and relative to ECOSOC’s comments.³⁹⁰ For example, the European Parliament called for the size delineation for collection and/or treatment plants to be halved to 1,000 p.e. and 5,000 p.e. respectively.³⁹¹ In addition, the resolution explained which industrial waste waters would be considered similar to municipal waste water, i.e. those that do not contain a significant level of contamination with the substances referred to in annexes I and II of the Aquatic Environment Directive and the additional burden it represents allows compliance with the quality objectives for the receiving bodies of water.³⁹²

In late 1990, the Commission submitted an amended proposal.³⁹³ The changes in the proposal were very limited in relation to the changes proposed by the European Parliament but the lowering of the thresholds of 1,000 p.e. and 5,000 p.e. was adopted.

387. Opinion of April 25, 1990, in: OJ C168/36 of July 10, 1990.

388. *Ibid.*, under II, point 4.

389. *Ibid.*, under III, comments on article 12.

390. Legislative resolution of September 13, 1990, in: OJ C260/185 of October 15, 1990.

391. *Ibid.*, amendments no 22 and 25.

392. *Ibid.*, amendment no 7.

393. Proposal on October 25, 1990, in: OJ C287/11 of November 15, 1990.

In May of the following year, the Council adopted Directive 91/271/EEC ‘concerning urban waste water treatment’.³⁹⁴ The similar treatment of municipal and industrial wastewater was terminated, and industrial wastewater was covered summarily in article 13 only. Just like the proposal, it was based on article 130s SEA. The directive only applied to discharges ‘from certain industrial sectors of biodegradable industrial wastewater not entering urban wastewater treatment plants before discharge to receiving waters (...) in respect of all discharges from plants representing 4,000 p.e. or more’.³⁹⁵ Unlike the proposal, the final Urban Wastewater Treatment Directive included a list of industrial sectors covered, thus probably excluding some sectors of industry.³⁹⁶ By 1994, the Member States should set requirements for the discharge of biodegradable industrial waters ‘appropriate to the nature of the industry concerned’.³⁹⁷ In addition, Member States should ensure that by 2001 the discharges mentioned above shall ‘respect conditions established in prior regulations and/or specific authorisation by the competent authorities or appropriate body’. Article 13 appears not to impose any additional requirements on emissions. The reference to industrial wastewater in annex I was maintained, but this also did not appear to impose any additional obligations on industry.

In conclusion, the level of harmonisation of the proposal is nil with respect to industrial water. Member States were required to set appropriate standards, but there were not centralised guidelines as to what constituted such appropriate standards. This low level of harmonisation exists despite the fact that the

394. Directive 91/271/EEC of May 21, 1991, in: OJ L135/40 of May 30, 1991.

395. *Ibid.*, preamble.

396. Milk processing, manufacture of fruit and vegetable products, manufacture and bottling of soft drinks, potato-processing, meat industry, breweries, production of alcohol and alcoholic beverages, manufacture of animal feed from plants products, manufacture of gelatine and of glue from hides, skin and bones, malt houses and fish-processing industry (*ibid.*, annex III).

397. *Ibid.*, article 13 (2).

Commission was to undertake a review of the requirements of the Member States on their industries.³⁹⁸

Urban Waste Water Treatment Directive 91/127/EEC	
Instrument	-
Full or minimum harmonisation?	-
Exceptions (permanent? Conditional?)	-
Overall approximation of emission standards	Nil
Legal Base	130s SEA

6.2.5 Titanium Dioxide III Directive 92/112/EEC

In 1989, the Council enacted the Titanium Dioxide II Directive (section 6.2.3). This directive was based on article 130s SEA. However, both the European Parliament and the Commission wanted the harmonisation article 100a SEA to be used as the legal base. In their opinion, the Titanium Dioxide II Directive was mainly concerned with (improving) competitive conditions in the titanium dioxide industry, i.e. an economic common market rather than an environmental objective.

The Commission subsequently initiated a legal procedure against the Council at the Court of Justice with respect to the proper legal base of the Titanium Dioxide II Directive.³⁹⁹ The European Parliament intervened and also called for annulment of the directive.⁴⁰⁰ The Commission stated that economic reasons (i.e. distortions of competition resulting from differing national policies)

398. *Ibid.*, article 13 (3).

399. Case 300/89 ‘Commission versus the Council’, ECR 1991, I-2867.

400. Indeed, the European Parliament was affected more than the Commission by the change in legal base. This is because the position of the European Parliament in the legislative procedures for adoption of a proposal based on Article 100a SEA was much stronger than in the procedures surrounding article 130s SEA. Whereas 100a called for ‘co-operation’, article 130s

Continued on next page

called for harmonisation. That it concerned environmental policies was of minor importance as the harmonisation article was to be treated as a *lex specialis* in relation to all articles that were not aimed at furthering the common market.⁴⁰¹ According to the Commission, the ECJ had agreed that differences in national legislation could result in distortions of competition. It referred to case 91/79, in which it was stated that ‘provisions which are made necessary by considerations relating to the environment and health may be a burden upon the undertakings to which they apply and if there is no harmonisation of national provisions on the matter, competition may be appreciably distorted’ (see also the quote from case 92/79 mentioned before in section 3.2 above). The European Parliament also stressed that harmonisation was the central feature of the directive, not the environment. The directive did not set environmental quality standards but rather emission and efficiency standards, proving that economic considerations came before environmental concerns. The Council in its defence argued that the main aspect of the directive was environmental protection, wherefore the directive was duly based on article 130s.

Advocate-general Tesauro in his opinion rightly noted the difference between product and process legislation. However, this difference did not imply that the opinion was in line with neo-classical economic theory as explained in chapter 2. Tesauro stated that he did not see ‘how it is possible to achieve a genuinely single, integrated market without eliminating divergences between national legislation which, by having a differing impact on production costs, prevents the development of competition on the basis of real equality within the Community’. We will not delve into the legal aspects here, but the ECJ decided against the Council and declared the Titanium Dioxide II Directive void.

It was necessary to fill the void that resulted as a consequence of this annulment. Hence, the Commission introduced another proposal, reintroducing

merely called for ‘consultation’.

401. Opinion of AG Tesauro in case 300/89.

the content of the Titanium Dioxide II Directive, but based on article 100a SEA.⁴⁰² The Council adopted this subsequent Titanium Dioxide III Directive in late 1992.⁴⁰³ One important consideration in the preamble was that ‘the legal void caused by the annulment may have adverse effects on the conditions of competition in the sector’. The new preamble also stated that ‘the objective of this Directive is to approximate national rules relating to titanium dioxide production in order to eliminate the existing distortions of competition between the various producers in the industry and to ensure a high level of environmental protection’.⁴⁰⁴ It was also explicitly stated that Member States could introduce stricter environmental measures.

In conclusion, despite the use of the harmonisation article 100a SEA, the level of harmonisation achieved was very low. The Titanium Dioxide III Directive largely followed its predecessor in its content. The most remarkable change was that the Member States could resort to EQS instead of some of the emission norms if the effects on the environment and the prevention of competitive distortions would be equal to the emission standards.⁴⁰⁵ The level-playing field goals stated in the directives would be difficult to achieve given the different norms for different production processes and the choice Member States were given between emission standards and EQS.

402. Proposal of 7 October 1991, in: OJ C317/5 of December 7, 1991.

403. Directive 92/211/EEC of December 15, 1992 in: OJ L409/11 of December 31, 1992. The February 26, 1992 advice of the ECOSOC can be found in OJ C98/9 of April 21, 1992 and the Decisions of the European Parliament are in OJ C94/158 of April 13, 1992 and OJ C305/68 of November 23, 1992.

404. *Ibid.*, preamble.

405. There were also some differences to do with dates The emission bans and aquatic emission norms from article 4 were imposed by June 15, 1993. Member States could delay implementation of these norms for 2 weeks on the basis of technical or economic difficulties (!). This two-week delay period seems to have been incorporated to maintain consistence with the structure of the original proposal, but the change of the next section of the same article 5 speaks against this argument. Implementation of the norms from article 6 and 9 were generally delayed, with the exact dates depending on the production process. One of the emission norms for one of the production processes could be delayed one additional year on the basis of

Continued on next page

Titanium Dioxide III Directive 92/112/EEC	
Instrument	Environmental quality standards or emission standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Temporary
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100a SEA

6.3 Conclusions from the period of the Single European Act (1987-1992)

6.3.1 The level of harmonisation

Given our analysis of the five directives in section 6.2, we can now answer the questions posed at the beginning of this chapter. Table 6.3.1 summarises in the last column the level of harmonisation from the five directives adopted during the SEA-period. From this table, we can see that the average level of harmonisation was very low. Only in one case the level of harmonisation was minimum harmonisation, and this only with respect to one medium (air).

technical or economic difficulties (Ibid., article 7).

Table 6.3.1 The level of harmonisation set in the directives of the SEA-period			
Name (subject) of the directive (section)	Instrument	exceptions	Overall approximation of emission standards
Large Combustion plant (6.2.1)	ES, ceilings	Conditional, Spain	Less than minimum harmonisation
Incineration of Domestic Waste (6.2.2)	ES	-	Minimum harmonisation per size-category
Titanium Dioxide II (6.2.3)	ES/EQS	Temporary	Minimum harmonisation with temporary exceptions
Urban Waste Water Treatment (6.2.4)	-	-	Nil
Titanium Dioxide III (6.2.5)	ES/EQS	Temporary	Less than minimum harmonisation

6.3.2 Internal consistency

A question posed in this chapter is whether the level of harmonisation as set by the directives is in line with the level of harmonisation required by the legal base on which the directive was based. An overview of the legal bases of the directives and the proposals is given in table 6.3.2 below.

Table 6.3.2 The legal base of the Directives and the associated proposals from the SEA period.		
Name (subject) of the directive	Legal base of the directive	Legal base of the proposal
Large Combustion Plant	130s SEA	100TR+235TR
Incineration of Domestic Waste	130s SEA	130s SEA
Titanium Dioxide II	130s SEA	100TR+235TR
Urban Waste Water Treatment	130s SEA	130s SEA
Titanium Dioxide III	100a SEA	100a SEA

Two of the proposals from this period emanated from the pre-SEA period (the Large Combustion Plant proposal and the Titanium Dioxide II proposal). These proposals used the standard double base from the pre-SEA period, i.e. they were based on both article 100TR and 235TR.

When the European Single Act entered into force on July 1, 1987, the set of legal bases that was available changed. Besides a new version of the harmonisation article, the legislator could use specific environmental articles. We can see from the table that two of the three proposals from the SEA-period used an environmental article as the legal base (the Incineration of Domestic Waste proposal and the Urban Wastewater Treatment proposal). One proposal used the harmonisation article for its legal base (the Titanium Dioxide III proposal).

The Council adopted four of the five directives on the bases of article 130s SEA. These were the two proposals based on the double legal base from the pre-SEA period and the two proposals based on the environmental article. The proposal based on harmonisation article 100a SEA was accepted on the basis of this legal base. We have seen in subsection 6.2.5 that the Titanium Dioxide II Directive was nullified by the European Court of Justice because of its use of article 130s SEA as the legal base, and that the Titanium Dioxide III Directive adopted on the basis of article 100a SEA was its successor. If we ignore the nullified directive for a second, we can conclude that three out of four directives were accepted on the bases of the environmental article and that one out of four directives was based on the harmonisation article.

Article 130s SEA does not prescribe harmonisation. This does not imply that the environmental article cannot be used for (fully) harmonised legislation. Given the fact that the environmental article does not set requirements on the level of harmonisation of environmental legislation, there is no possibility of inconsistencies between the legal base and the instrumental articles. We have seen that none of the preambles of the directives based on the environmental article referred to any need to harmonise national environmental legislation by

the Member States in order to prevent distortion of competition. This was in line with the contents of the respective directives, which also showed a low degree of harmonisation. Thus, there is no internal inconsistency within the directives based on the environmental article with respect to the level of harmonisation.

In conclusion, this period, covering the Single European Act, shows the demise of the harmonisation article as the legal base for environmental legislation relating to stationary sources. It is hard to draw strong conclusions as the signals given by the directives are mixed. If one adheres to the level playing field, centralisation for harmonisation of environmental rules related to the titanium dioxide industry is appropriate. Neo-classical economic theory rejects such an approach since reducing the scope for differentiation in standards impairs economic efficiency but it accepts centralised and co-ordinated standards when strategic standards setting between Member States is to be feared. The environmental article is appropriate for the LCP Directive from this perspective. Incineration of waste and wastewater treatment are treated in most Member States as kinds of public services. Their impact on the conditions of competition is only indirectly if different prices for these services are caused by different cost charges. Consequently there are no really goods arguments to invoke the reasoning that different legislation causes distortion of competition, and therefore article 100a SEA.

Many of the directives are not really comparable to the directives from the previous chapter. It is therefore not possible to infer a change in thinking by the Community. One solution may be not to focus on the contents of the individual directives, but combine this with the subjects of the directives. We have seen that the Urban Wastewater Treatment Directive shirks from including standards on industry, which could have resulted in recourse to the harmonisation article. In the Large Combustion Plant Directive a major role was played by the national emission caps. This reflects a change in thinking. Given all the legislation that was still due on the basis of the action programmes, one can conclude that the

preferences have changed. In other words, the Community chose to legislate on public utilities and set differentiated national emission ceilings rather than continue drafting directives on additional pollutants and sectors.

6.3.3 The choice for centralisation

A question asked at the beginning of this chapter was whether the level of harmonisation supports the choice for centralisation of the environmental issue. We have concluded in subsection 6.3.1 that the level of harmonisation is very low. We therefore do not consider the level of harmonisation as an argument that is sufficient to conclude that centralisation was necessary precondition in order to reach a high level of harmonisation. From this perspective, it was only correct to make centralised legislation for the titanium dioxide sector, but for the other areas this was less obvious.

This implies that that centralisation was probably pursued for reasons other than to obtain harmonised environmental standards. These reasons could include those based on neo-classical economic theory as summarised in chapter 2 (e.g. because of transborder pollution or to counter strategic standard setting) or on political grounds (e.g. because of spillover effects or because of a perceived right to a clean environment). It was not possible to distil one overall criterion or principle underlying the centralisation question such as the principle from the pre-SEA period that competitive distortions (however defined) needed to be prevented. For example, the choice for or against centralisation does at times conflicts with neo-classical economic arguments.

Such a guiding principle could and should have been the subsidiarity principle that was introduced into the treaty in article 100r(4) SEA. The subsidiarity principle states that environmental policies should be undertaken at Community level only to the extent to which the environmental objectives can be

attained better at Community level than at the level of individual Member States. This implies that environmental policies should be undertaken at the lowest policy level suitable. The initial question for every new piece of legislation should be whether it was indeed necessary to centralise the policy or whether the optimal policy was a matter for individual Member States to decide. The implication of a strict adherence to this principle is that fewer issues should be centralised. The effectiveness criterion underlying the subsidiarity principle can result in a situation where policies that imply a high level of international harmonisation should be centralised whereas policies that do not require harmonisation often will not be centralised. In practise, directives generally did not include a careful balancing on the basis of the subsidiarity principle.

6.3.4 Optimality of the pre-SEA legal bases

The last question posed in section 6.1 is whether we can draw conclusions on the optimality of the legal bases from the pre-SEA period. These conclusions will be drawn on the basis of the relative use of different legal bases in the periods.

We have seen that the majority (four) of the directives were adopted on the basis of article 130s SEA. The double legal base was abandoned as soon as articles 130r-t SEA became available. The plausible reason for this is that from the SEA on an overall guiding principle for the choice of subjects and the design of specific directives seems to be lacking. Harmonisation for level playing field reasons was the dominant motive for the Titanium Dioxide III Directive. The other environmental directives do not show a clear view on why there should be centralised legislation because the other reasons mentioned before do not require the harmonisation article as the legal base.

The reason for the sole use of the environmental article may have been the content of the directives. But next to that there may have been a technical reason:

the formal incompatibility of articles 100a SEA and 130s SEA. In the previous, pre-SEA period, articles 100 and 235 TR were combined into the double legal base. Both articles state that the Council acts unanimously on a Commission proposal. Article 235TR stipulates consultation of the EP, which article 100TR only requires when national legislation in one or more Member States would need to be amended. In such a situation, article 100TR requires additional consultation of ECOSOC. In short, by adopting the directive on the basis of unanimity and by consulting the European Parliament and ECOSOC in all cases, the requirements of both articles are met. Following the Single European Act, article 100a SEA states that the proposal must be adopted by the Council by a qualified majority on a proposal from the Commission and in co-operation with the EP. Article 130s on the other hand states that the proposal must be adopted by unanimity after consulting the EP. These decision-making procedures are markedly different, and therefore these two articles are not compatible. The upshot is that in these directives where article 130s SEA was preferred as the (primary) legal base and unanimity was required, adding the harmonisation article would not have caused problems unless a Member State objected to the additional use of this article. On the other hand, where the harmonisation article was preferred as the primary legal base, adding the harmonisation article would require that the proposal was approved by the Council by unanimity rather than qualified majority.

We cannot fully answer why article 130s was preferred over article 100a SEA. The Council had introduced the use of the harmonisation article in addition to the reserve article in the past. On the other hand, it would have been perfectly possible to adopt the legislation of the pre-SEA period on the basis of the reserve article without calling upon the additional use of the harmonisation article. It is not unlikely that the fact that 100aSEA only prescribed qualified majority voting encountered opposition with Member States fearing to be outvoted.

This use of article 130s SEA as the legal base implied that environmental regulation needed no longer be justified as being necessary to avoid distortion of competition. However, it is unlikely that the situation where the Community would have continued adopting the legislation on the basis of the harmonisation article in order to prevent distortion of competition would have encountered opposition from the European Court of Justice. Such a verdict would probably have resulted in much of the pre-SEA legislation being based on the wrong legal base as well, as the level of harmonisation of the directives did not change markedly. We conclude that the use of the harmonisation article in the previous period had not been for the lack of a suitable article to base environmental standards on. The choice between the harmonisation article and the environmental article cannot be attributed to the different possibilities these legal bases offered in terms of contents of directives.

We should notice here that this conclusion is not in line with the conclusions of AG Tesouro in the Titanium dioxide case. He concluded that a big difference between articles 100a and 130s was the minimum-character of 130s. This minimum character derived from the fact that Member States could implement national policies that set higher environmental standards than those set in the legislation based on article 130s SEA. In principle, such a possibility for national, greener legislation does not exist in case of harmonisation. Tesouro concludes that 130s is applicable only when article 100a cannot be used as a legal base. This implies that 130s cannot be used for harmonisation of production processes or products, as these would affect competitive conditions within the common market. Rather, 130s can be used only for policies that would previously (before the adoption of the SEA) have been based on article 235TR alone. In our opinion, this distinction is not very real. The majority of environmental legislation we have covered so far is harmonised (on the bases of 100TR) as well as offers opportunities for Member States to adopt greener national policies (i.e. minimum harmonisation).

6.4 Summary of chapters 3, 4 and 6 for the period of the Single European Act

With the Single European Act, the European environmental policy was explicitly addressed in the Treaty. The Treaty now included an environmental chapter that consisted of three articles (130r,s, and t SEA). It could safely be assumed that the environmental article made the reserve article superfluous for environmental policy. In addition, the appropriate harmonisation article 100a SEA was made more environment-friendly relative to article 100TR. Whereas the environmental articles required unanimity in the Council, the new harmonisation article required decision making in the Council by qualified majority voting, arguably facilitating the legislative process.

The legislator could chose between using either article 100a SEA or article 130r SEA for adopting environmental legislation. The environmental articles allowed for more flexibility compared to the harmonisation article in that (a) there was no reference to harmonisation or approximation and (b) that it was not limited as a legal base for directives only. However, we have seen in chapter 5 that the fact that a directive was based on the harmonisation article did not imply that this directive would show a high level of harmonisation. Therefore, the differences in flexibility between these articles appear to have been negligible.

The fourth action programme for the environment was adopted for six years (1987-1992) covering more or less the period of the Single European Act. The subsidiarity principle was interpreted in such a way that centralisation and harmonisation were still necessary to prevent competitive distortions. Thus, the subsidiarity principle did not have the effect of bringing policy principles closer to the economic principles from chapter 2.

Looking at the secondary legislation from the period of the Single European Act, we can see that the subjects (policy areas) addressed in the directives and the contents are more or less in line with the legislation adopted in the previous period. That is, we cannot see significant policy changes if we look at the instrumental articles of the directives. The degree of harmonisation of norms and standards remained on a low level, comparable to the low level of harmonisation from the previous period. However, despite the similarities in contents, there were significant changes in the legal bases and the wording of preambles that were used in the directives.

Several of the proposals from the previous period carried over to the period of the Single European Act because the Council had not yet decided on these proposals. The proposals had been based on the double legal base of the reserve article and the harmonisation article, in line with the later proposals from the period up to the Single European Act. The reasoning behind the use of the harmonisation article was that harmonisation was required in order to prevent distortion of competition. The final directives were adopted on the basis of the environmental article. Thus, the double legal base with the harmonisation article had been replaced by (only) the environmental article. The contents of these directives were not altered in such a way that the harmonisation article would be less appropriate. Indeed, the Titanium Dioxide II Directive even mentioned the competitive distortions as a break on differentiation. The contents of the directives thus did not show any apparent reason for not making use of the harmonisation article. The following directive on Incineration of Domestic Waste was proposed and adopted on the basis of the environmental article. Later during this period, the Titanium Dioxide II Directive was annulled, as the primary reason for this directive had been economic rather than environmental grounds. It was replaced by a fairly similar directive that was based on the harmonisation article. Nevertheless, the level of harmonisation as shown by the instrumental articles remained low.

In conclusion, we have seen that the Council abandoned the double legal base with the harmonisation article as soon as possible. In fact, it opted for the environmental article even in a situation where the Court later ruled that the harmonisation article would have been more appropriate. This change in legal base was followed by the abandoning of most references to distortion of competition but the contents of the directives did not mark differently from the instrumental articles from the directives that were adopted on the basis of the double legal base in the period up to the Single European Act. It should be kept in mind however that the body of secondary legislation from which we draw these conclusions is very small.

Chapter 7 Secondary Legislation during and after the Maastricht Treaty (1993-2002)

7.1 Introduction

7.1.1 Research questions

The questions to be answered in this chapter for the post-SEA period starting with the Maastricht Treaty are the same questions that were addressed with respect to other periods in the previous chapters. The questions are:

- What precisely is harmonised, for example environmental quality standards or emission standards?
- What type of harmonisation is pursued, for example minimum harmonisation or total harmonisation?
- What are the arguments for harmonisation?
- What kinds of exceptions are allowed and what is the overall resulting level of harmonisation in terms of approximation of emission standards?
- What is the legal base?
- Is the environmental legislation internally consistent?
- Does the level of harmonisation set in the Community environmental legislation with respect to stationary sources support the choice for centralisation?
- Can we draw conclusions on the optimality of the legal bases from SEA period as perceived by the Institutions on the basis of relative use of different legal bases in the post-SEA period?

7.1.2 Changes in Primary Legislation

The chapter starts with the Maastricht Treaty and runs up to 2002. In this chapter, we cover the last two of the five periods identified in chapter 1, i.e. the period of the Maastricht Treaty and the period of the Amsterdam Treaty up to 2002. The changes in primary legislation from the period of the Maastricht Treaty relative to the period of the Single European Act have been discussed in chapter 3. The relevant Treaty articles changed little if we compare the periods of the Maastricht Treaty and the Amsterdam Treaty, wherefore we take these two periods together in this chapter. The Maastricht period runs from January 1, 1993 (the day the Treaty on European Union entered into force) to May 1, 1999 (the day the Treaty of Amsterdam entered into force). We will discuss the secondary legislation from the Maastricht period in section 7.2 and the secondary legislation from the Amsterdam period in section 7.3. We will identify the Treaty articles following the Maastricht Treaty with the suffix TEU and the articles during the Amsterdam Treaty with the suffix TA.

The main changes in primary legislation that occurred relative to the SEA were the formal inclusion of the environmental objective in the Treaty and a central place for the subsidiarity principle. The environmental articles and the harmonisation article were changed. It had become clear that the environmental articles could be used for harmonised legislation on par with the harmonisation article.

As we have remarked in chapter 6, the legislative process from proposal to adoption of a specific directive can take many years and thus the proposal for a directive can be from another period than the final directive. This implies that directives adopted during the Maastricht period can be proposed during the period of the SEA, and that proposals from the Maastricht period could have resulted in directives that were adopted during the Amsterdam period. In subsection 7.4.4 we will draw conclusions on the relative preference of specific

articles by comparing the legal bases proposed and used during various periods. The superiority of one (combination of) article(s) from one period to another can be based on various considerations such as differences in (voting) procedures and the flexibility of the article.

In the previous chapter (subsection 6.3.4), we could not rule out that the Council would have preferred to base the directives on a combination of the environmental article and the harmonisation article had this been possible. This had not been possible due to incompatibility of the respective voting procedures. With respect to the voting procedures, there were substantial changes from the Maastricht Treaty relative to the Single European Act. During the period of the Maastricht Treaty, the legislator had a choice between articles 130s TEU and 100a TEU.⁴⁰⁶ Article 100a TEU referred to the procedure from the (new) article 189b TEU. A (short) description of this procedure is that the Council generally adopts a proposal by qualified majority. If the European Parliament thereafter (through majority voting) proposes amendments these also can be adopted by qualified majority. However, if the Council wants to decide contrary to the Parliament's proposed amendments – including a rejection of the proposal – or where it concerns amendments with which the Commission does not agree, the proposal can only be adopted by the Council on the basis of unanimity. In short, if there is agreement between the EP, the Commission and the Council, the Council decides by qualified majority but if these Institutions differ in their opinions the Council decides on the basis of unanimity. This procedure is often referred to as the co-decision procedure as it attributes substantial legislative powers to both the Council and the European Parliament.

On the other hand, article 130s TEU refers to the procedures of article 189c TEU. This so-called co-operation procedure has lots of similarities with the co-decision procedure from article 189b TEU. However, under the co-decision

406. We will ignore article 235 from here on as this article was not used for environmental legislation with respect to stationary sources since the adoption of the Single European Act.

procedure, if the Council does not reach agreement, the President of the Council calls upon a reconciliation committee whereas under the co-operation procedure the Commission makes a new proposal on the basis of the amendments of the European Parliament that the Commission supports. Such differences with respect to procedures make that the procedures of articles 189b and 189c TEU are incompatible even though the articles are based on a combination of qualified majority and unanimity.⁴⁰⁷

The incompatibility of the decision-making procedures for the harmonisation article and the environmental article implies that a choice needs to be made. Which decision procedure will be preferred by the Council depends on the specific proposal and the positions of the members of the Council. The big difference with the previous period, however, is that choosing the legal base is no longer the prerogative of the Council as the legal base is an integral part of the proposal, and hence will be decided upon by the voting procedures discussed above. For example, if a Council-majority wants to adopt a proposal, this majority can decide (by qualified majority) on the use of a legal base that stipulates qualified majority. This implies that the scope for (members of) the Council to choose a legal base on strategic grounds has been lessened as the minority can effectively not influence this outcome. On the other hand, articles 189b and 189c TEU allow Council minorities some additional level of protection in that the Council majority cannot steer the voting procedure to qualified

407. Article 130s TEU also states that by way of derogation of article 189c and ‘without prejudice to article 100a’, the Council shall adopt (a) provisions primarily of a fiscal nature, (b) measures concerning town and country planning, land use with the exception of waste management and measures of a general nature, and management of water resources and (c) measures significantly affecting a Member State’s choice between different energy sources and the general structure of its energy supply, by unanimity. The Council may by unanimity define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority. It is perfectly well possible that the environmental measures with respect to stationary sources qualify under this exception and should hence be decided on the basis of unanimity. This exception makes the decision procedures for articles 100a TEU and 130s TEU even more incompatible even though the Council may by unanimity define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority (130s
Continued on next page

majority voting if either the Commission or the European Parliament does not agree.

The Treaty had becoming more and more intractable over time as many additional articles had been inserted. We have already countered examples such as 100a and 130r, 130s, 130t, 189b and 189c. Within the numbers, there was less and less consistency. To remedy this situation, the Amsterdam Treaty introduced a renumbering of treaty articles. Harmonisation article 100a TEU was renumbered article 95 TA, and environmental articles 174 TA replaced 130r TEU, 130s TEU became 175 TA and article 176 TA replaced 130t TEU.

With the Amsterdam Treaty, the voting procedure for both article 175 TA and article 95 TA was the procedure outlined in article 251TA. Thus, following the Amsterdam Treaty the double base of the harmonisation article and the environmental article became feasible. In effect, this could result in legislation that was based on both harmonisation for economic reasons and protection of the environment.

7.1.3 Contents

Table 7.1 below lists the Directives that will be covered in this chapter. These directives will be covered in sections 2 and 3. In section 7.2, we will discuss the directives from the Maastricht period. In section 7.3, we will discuss the legislation from the Amsterdam period. The conclusions for the whole period under review will be drawn in section 7.4.

TEU).

Table 7.1 List of directives covered in chapter 7		
Name (subject) of the directive	Number ⁴⁰⁸	Section
Period 4 The Maastricht Treaty (1993-1999)		
Volatile Organic Compounds (VOC)	94/63	7.2.1
Incineration of Hazardous Waste	94/67	7.2.2
IPPC	96/61	7.2.3
Ambient Air Quality Assessment	96/62	7.2.4
Air Pollutants I (SO ₂ - NO _x -PM-Pb)	1999/30	7.2.5
Period 5 The Amsterdam Treaty (1999-2001)		
Aquatic Environment II Directive	2000/60	7.3.1
LCP II Directive	2001/80	7.3.2

7.2 The Secondary legislation from the period of the Maastricht Treaty

7.2.1 Volatile Organic Compounds (VOC) Directive 94/63/EC

In 1992, the Commission submitted a proposal on the control of volatile organic compound emissions resulting from the storage of petrol and its distribution from terminals to service stations⁴⁰⁹ VOC emissions can be toxic, carcinogenic and contribute to the formation of ozone. The sources are very diverse, and the proposal only covered about 5% of the total emissions of man-made VOC in the Community.⁴¹⁰ The other main source was solvents.

The proposal was based on article 100a SEA. The stated reason was that ‘in order to avoid distortion of competition and in order to ensure the establishment of the internal market, it is necessary to harmonise the measures

408. The number before the slash indicates the year in which it was adopted.

409. OJ C227/3 of September 3, 1992.

410. This was about 500 000 tonnes of VOC emissions per year (VOC Directive 94/63/EEC, preamble).

based on a high level of protection'.⁴¹¹ However, Member States may require more stringent measures in geographical areas where it is established that such measures are necessary for the protection of human health or the environment due to special local or regional conditions.⁴¹²

The ECOSOC in its opinion⁴¹³ supported the choice for article 100a TEU as the legal base. It called for a high level of harmonisation without accepting stricter emission norms by some Member States before analysing the impact on the internal market: 'The Committee considers the choice of article 100a of the Treaty to be a positive one, and to reflect the Commission's increasing caution following the approval of the principle of subsidiarity enshrined in the Maastricht Treaty. By opting for this legal base, the Commission is indicating that its intention is to provide a minimum level of harmonised environmental protection, with implications for the single market, applicable to all Member States. However, article 4 states that Member States may require more stringent measures (...) in specific geographic areas; this would compromise harmonisation and thus act against the free provision of services (...) and lead to market fragmentation. The Committee therefore feels that in addition to receiving notification from Member States, together with the grounds for introducing such measures, the Commission should judge whether they match the ends and assess the potentially contrary effects on the internal market, as set out in article 100a(4) of the Treaty. On the other hand, safeguarding of the environment and of worker's health requires a high level of protection in accordance with available technology. (...) The Committee is aware of the existence in the FRG of emission values from vapour recovery units in major storage terminals stricter than those proposed by the Draft Directive. It would therefore urge the Commission to make a detailed analysis of these values. It would also suggest that the Commission put

411. Ibid., preamble.

412. Ibid., articles 3 and 4.

413. Opinion of January 27, 1993, in: OJ C73/6 of March 15, 1993.

forward measures enabling the existing legislation in the FRG to be brought in line with the requirements of the internal market'.⁴¹⁴

Later that year, the Commission submitted an amended proposal.⁴¹⁵ In this amended proposal, it extended (the possibilities for) differentiation. The phrase 'Member States may maintain or require more stringent measures nationally or in certain areas of their territory for the protection of human health or the environment' replaced the more limited 'Member States may require more stringent measures in geographical areas where it is established that such measures are necessary for the protection of human health or the environment due to special local or regional conditions' from the initial proposal. In addition, Member States could grant derogations for small (100-500 m³) service stations.⁴¹⁶

The final VOC Directive 94/63/EC⁴¹⁷ applied to stationary sources as well as mobile sources (vehicles and vessels). It was based on article 100a TEU just as the proposal had been. The reasoning used in the preamble to support the choice for the harmonisation article was that 'whereas in order to avoid distortion of competition and in order to ensure the operation of the internal market, it is necessary to harmonise certain measures concerning the distribution of petrol on the basis of a high level of environmental protection; Whereas account should nevertheless be taken of the advantages and burdens which may result from action or the absence of action; Whereas it is therefore appropriate to provide for the possibility of derogations and sometimes the exclusions in certain cases; whereas certain Member States should also be given the option of longer periods in which to adopt in order to take account of any environmental measures of differing kinds which they may already have adopted in this area⁴¹⁸ or of the particular burden imposed by the measures in this Directive owing to the

414. *Ibid.*, points 2.4-2.6 and 2.9.

415. COM(93)422 submitted on September 9, 1993, in: OJ C270/12 of October 6, 1993.

416. *Ibid.*, article 6(2).

417. Directive 94/63/EC of December 20, 1994, in: OJ L365/24 of December 31, 1994.

418. *Ibid.*, see article 6(5) specifically for the Netherlands.

structure of their networks⁴¹⁹; whereas Community action must take account of environmental conditions in the various regions of the Community; Whereas in this connection Member States must be able to uphold or impose more stringent measures relating to the evaporative losses from fixed installations throughout their territory or in geographical areas where it is established that such measures are necessary for the protection of human health of the environment because of special conditions',⁴²⁰

The instrumental articles based on the aforementioned derogations were allowed because of special conditions, be they environmental or due to the economic structure. We can distinguish between two sets of derogations. The first set of derogations applies to one specific Member State. These derogations can be invoked by the Netherlands (article 6(5)), Spain (article 4(5) and 6(6)) and Portugal (article 6(6)). The derogation for the Netherlands was conditional in that the Commission needed to be informed. Derogations available (in principle) to several or all Member States concerned installations located in areas where emissions were unlikely to contribute significantly to environmental or health problems (article 6(4)) and new, small installations located in small remote islands (article 4(4)). The Commission needed to be informed about recourse to these exceptions. Furthermore, implementation periods depended on the size and type of installations. Table 7.2.1a below gives a non-exact indication of the timetable and standards.

419. Ibid., See article 4(5) allowing a 1 year derogation for Spain and article 6(5) allowing a 1 year derogation for Spain and Portugal.

420. Ibid., see articles 3(1), 4(1) and 6(1).

Category (all percentages refer to leakage norms expressed in weight/weight % of throughput)	Storage installations at terminals; 0,01%	(Un)loading of mobile containers at terminals; 0,005%	Loading into storage installations at service stations; 0,01%
By 1996	New installations	New installations	New service stations
By 1999	>50,000 tonnes/year	>150,000 tonnes/year	>1,000 m ³ /year
By 2002	>25,000 tonnes/year	>25,000 tonnes/year	>500 m ³ /year
By 2005	Other (small, existing) installations	Other (small, existing) installations	Other (small, existing) service stations
Excluded	-	<10,000 tonnes/year	<100 m ³ /year

In conclusion, the legislative history of the VOC Directive shows that the level playing field argument was still well and alive. However, views on strictness of application differed between the Institutions. The ECOSOC appears to be most rigorous in its application, only accepting national derogations from the harmonised norms after reviewing its implication on the internal market. The Commission is already more prone to allow differentiation - demonstrated by the amended proposal – despite basing the measure on the harmonisation article. The final Directive, agreed upon by the European Parliament and the Council, pays lip service to harmonisation on the bases of the level-playing field argument, but the content allows for considerable differentiation.

Volatile Organic Compounds (VOC) Directive 94/63	
Instrument	Emission standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	(Conditional) temporary exceptions for specific Member States and general exceptions relating to specific conditions
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	100a TEU

7.2.2 Incineration of Hazardous Waste Directive 94/67/EC

In 1992, the Commission submitted the Incineration of Hazardous Waste (hereafter also referred to as IHW) proposal.⁴²¹ This proposal was based on article 100a SEA. It was argued in the preamble of this proposal that: ‘The differences between technical standards and control and operating procedures relating to installations for the incineration of hazardous waste have an influence on incineration activity, in particular as a result of costs arising from the nature of the technical standards imposed and the level of environmental protection thus ensured. Whereas the current differences in national provisions applicable to the incineration of hazardous waste, and in some cases the absence of such provisions, may distort competition, affect the free movement of goods in the single market, and give rise to differences in the protection of health and the environment. Whereas it is necessary, for the smooth operation of the internal market, to harmonise the national provisions relating to the incineration of hazardous waste in such a way as to ensure a high level of protection of health

421. Proposal of March 23 1992 in: OJ C130/1 of May 21, 1992.

and the environment in all Member States'.⁴²² Thus, the underlying reason for centralisation is the need for harmonisation. Without this harmonisation, it is argued, the costs would be too high for some Member States to set technical standards.

On the bases of the IHW-proposal, incinerators would be required to have emission permits issued by the Member States but incorporating Community maximum emission concentration norms. These emission concentration norms (in pollutant/m³ exhaust gas) were given for a long list of pollutants. The principal norms are in tables 7.2.2a and b.

Table 7.2.2a Principal emission concentration norms of the IHW-proposal		
Pollutant	Daily average value (in mg/m ³)	Half-hourly average value (in mg/m ³)
Total dust	5	10
Gaseous and vaporous organic substances	5	10
Hydrogen chloride	5	10
Hydrogen fluoride	1	2
Sulphur dioxide	25	50
Carbon monoxide	50	150*
* = At least 95% of all measurements of 10 minute average values in any 24-hour period.		

Table 7.2.2b Average values over a sample period of a minimum of ½ and a maximum of 4 hours in mg/m³.	
Cadmium, thallium	Total 0,05
Mercury	0,05
Antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium and tin	Total 0,5

422. Ibid., preamble.

Implementation was to be by July 1995, but old installations were given 3 additional years or 5 if the installation would be dismantled afterwards.⁴²³

The ECOSOC in its advice⁴²⁴ had several points of critique regarding amongst other inconsistencies in terminology between Member States (resulting in hazardous waste accounting for between 2% and 20% of their total waste; point 1.10) and too lenient (long) time frames for implementation of the norms (points 2.3 and 2.13.1). The ECOSOC referred to its comments made in earlier opinions regarding the choice between article 100a and 130s as the bases of legislation on waste, without specifying which opinions specifically.⁴²⁵

The final IHW Directive 94/67/EC was based on article 130s TEU only.⁴²⁶ Thus, article 100a TEU had been replaced by 130s TEU. Accordingly, the direct reference to competitive distortions was deleted and replaced by the phrase that ‘the current differences in national provisions applicable to the incineration of hazardous waste, and in some cases the absence of such provisions, justify action at the Community level’. Thus, there was no longer a reference to harmonisation, only to centralisation.

As in the proposal, there was an extensive range of emission concentration norms for various substances.⁴²⁷ The norms are in tables 7.2.2c and d below.

423. *Ibid.*, articles 19 and 14.

424. Advice of October 22, 1992 in: OJ C332/49 of December 16, 1992.

425. *Ibid.*, point 1.2. This could relate to e.g. the advice published in OJ C56/2 of March 6, 1989: ‘If the waste Directives are extended along the lines described above, Article 100a of the EEC Treaty may not suffice any more as the legal basis, because the emphasis will have shifted to the protection of the environment (Articles 130r and 130s of the EEC Treaty). On no account should the limits on powers laid down in Article 100a result in unsatisfactory substantive provisions, even if Article 100a’s procedural rules offer unmistakable advantages’.

426. Directive 94/67/EC of December 16, 1994 in: OJ L365/34 of December 31, 1994.

427. *Ibid.*, article 7.

Table 7.2.2c Emission concentration norms from the IHW-Directive		
Pollutant	Daily average value (in mg/m ³)	All half-hourly average value (in mg/m ³)
Total dust	10	30*
Gaseous and vaporous organic substances	10	20*
Hydrogen chloride	10	60*
Hydrogen fluoride	1	4*
Sulphur dioxide	50	200*
Carbon monoxide	50	100**
* Or alternatively lower values (10/10/10/2/50) for 97% of the half-hourly values over the year.		
** Or alternatively 150 mg/m ³ for at least 95% of all measurements of 10 minute average values in any 24 hour period.		

Table 7.2.2d Average values over a sample period of a minimum of ½ and a maximum of 4 hours in mg/m³.	
Cadmium, thallium	Total 0,05
Mercury	0,05
Antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium and tin	Total 0,5

The norms from table 7.2.2c (from the directive) are more lenient than those in table 7.2.2a (from the proposal). In addition to weaker standards, Member States had some choice in choosing the yardstick by which to determine compliance with the standard. A Member State could either adhere to a relative lenient standard to be kept for all measurements or to a relative strict norm to be reached only for x% of the measurements. New installations needed to comply with these norms starting in 1997, existing installations had to comply with these norms 3½ years later. There were also some intermediate norms for existing plants. In

addition to the emission concentration norms, it was stated that appropriate preventive measures needed to be taken, but there was no reference to either BAT or BATNEEC.⁴²⁸ The emission norms were to be implemented with respect to new plants before June 30, 2000, where new plants were those given a permit before this date.⁴²⁹ A small plant that was to be shut down before 2002 was completely exempted from the norms.⁴³⁰

We can conclude that the IHW Directive offered many grounds for differentiation. The Member States could choose the yardstick and there were differences between new and existing installations. As we have argued before, differences between new and old installations are compatible with economic principles as retrofitting existing installations may be expensive relative to building a new installation incorporating the newest technology from scratch. It could also result in a reluctance to phase out existing installations by replacing them with new installations. In addition, the option to choose between different yardsticks seems to have been pragmatic rather than dogmatic.

Incineration of Hazardous Waste Directive 94/67	
Instrument	Emission (concentration) standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Temporary conditional, yardstick
Overall approximation of emission standards	Minimum harmonisation with exceptions
Legal Base	130s SEA

428. *Ibid.*, article 3.

429. *Ibid.*, articles 18 and 13.

430. *Ibid.*, article 13(2).

7.2.3 IPPC Directive 96/61/EC

In 1993, the Commission proposed a directive on integrated pollution prevention and control (IPPC).⁴³¹ The proposal was based on article 130s TEU. The objective, as summarised by the Commission, was to prevent or minimise air, water and soil pollution by emissions from industrial installations with a view of achieving a high level of environmental protection. The IPPC proposal aimed at integrating the protection of various environmental media in one directive. It was explicitly stated that harmonisation was limited to what was necessary to achieve a system of integrated prevention and protection that would result in a high level of environmental protection.

The core of the directive is very straightforward. New installations would be required to hold a permit issued on a temporary basis. Existing installations would be required to have such a permit by July 1, 2005 only.⁴³² These permits would be issued by the Member State. A permit would contain emission norms on the pollutants listed in the proposal.⁴³³ In addition, the emission permits should be based on BAT, however Member States were not to prescribe specific technologies so as to limit the effect on the market.⁴³⁴ The norms could only be less strict than those feasible by the BAT if this (a) would result in a very small increase in pollution and (b) would not contribute to transborder pollution.⁴³⁵ However, the Member State would be allowed to impose stricter environmental protection.⁴³⁶

The degree of harmonisation of the IPPC proposal is fairly high, especially after July 2005 when the existing installations would also be required to get a permit. The basis of the proposal is BAT, which would be fairly uniform given a

431. Proposal COM(93) 423 of September 30, 1993, in: OJ C311/6 of November 17, 1993.

432. *Ibid.*, articles 3 and 4.

433. *Ibid.*, article 8 and annex III.

434. *Ibid.*, article 8.

435. *Ibid.*, article 9.

production process. The derogation downwards can be only very limited, which would practically make the level of harmonisation of the proposal minimum harmonisation. The derogation upward effectively allows a Member State to impose stricter norms than BAT.

The ECOSOC had serious critique on the proposal.⁴³⁷ In particular, the ECOSOC proposed a general obligation to limit emission on the basis of BAT so that the individual licensing obligation could be limited to relatively large industrial installations. ECOSOC argued that whereas the proposal stated that European-level emission limit values were to be the exception, it argued that the subsidiarity principle was not inconsistent with the establishment of limit values at the European level.⁴³⁸ One of the reasons was that the Maastricht Treaty states that the subsidiarity principle is not allowed to cause distortions of competition or hamper environmentally-compatible growth in the Community (Article 2 - EC Treaty). It is to be feared that both might occur in the absence of European limit values'.⁴³⁹ It concluded that the subsidiarity principle should under no circumstances be allowed to give rise to any abandonment of the idea of introducing and applying uniform integrated environmental protection measures.⁴⁴⁰ In line with this argument for harmonisation, the ECOSOC rejected the provision that the Member States could allow more emissions than would result from the application from BAT. Such a derogation from the harmonised standard would 'create locational advantages which will distort industrial competition'.⁴⁴¹ In addition, it is interesting to note that the ECOSOC considered the proposal out of tune with the legal base. More specifically, it was not in tune with the objectives of article 130r TEU based on the prevention principle, the

436. *Ibid.*, article 18.

437. Opinion of April 27, 1994, in: OJ C195/54 of July 18, 1994.

438. *Ibid.*, points 3.3.3-3.3.4.

439. *Ibid.*, point 3.3.4.1.

440. *Ibid.*, point 3.3.4.2.

441. *Ibid.*, point 3.5.2.

principle of a high level of protection and the principle of combating environmental protection at the source.⁴⁴²

The European Parliament proposed a host of amendments on the proposal.⁴⁴³ Many of these focussed on extending the scope of the proposal, both with respect to pollutants and with respect to installations.

In 1996, the Council adopted the final IPPC Directive 96/61/EC.⁴⁴⁴ Like the proposal, the IPPC Directive was based on article 130s TEA. The reason for centralisation is that ‘the implementation of an integrated approach to reduce pollution requires action at Community level’.⁴⁴⁵ The proposal was followed closely, however the directive appears to be a bit less strict.

The emission limit values for pollutants should be based on BAT, without prescribing the use of any technique or specific technology, ‘but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions’.⁴⁴⁶ The wording of this article appears to allow room for downward national deviations below the BAT standard. For example, if the local environmental conditions allowed for large emissions without negative environmental effects, the article would allow this to be taken into account and consequently less strict environmental standards to be imposed upon facilities located there. The explicit upward derogation can be found in article 10 that states that where an EQS requires stricter conditions than those achievable by BAT, Member States are allowed to include additional (supplementary) measures in the permit. In case of significant transborder effects on the environment of another Member State, the Member States were required to consult each other ‘in the framework of the bilateral relations’.

442. *Ibid.*, point 3.1.

443. Resolution of December 14, 1995, in: OJ C18/82 of January 23, 1995

444. Directive 96/61/EC of September 24, 1996 in: OJ L257 of October 10, 1996.

445. *Ibid.*, preamble, point 3.

446. *Ibid.*, article 9(3).

We can conclude that the level of harmonisation was lower than in the proposal. This was because of the addition that exceptions from BAT were allowed of technical, geographical and environmental grounds. If the Member States would widely invoke these grounds, the level of harmonisation would become very low indeed. In turn, this would cast doubt over the choice for centralisation. The stated reason for centralisation is not very clear on exactly why Community legislation is required. The fact that the Community shirked from resolving conflicts relating to transborder pollution removes one obvious possible ground for centralisation.

IPPC Directive 96/61/EC	
Instrument	Best available technology
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Conditional exceptions
Overall approximation of emission standards	Minimum harmonisation with exceptions
Legal Base	130s SEA

7.2.4 Ambient Air Quality Directive 96/62/EC

In 1994, the Commission submitted a proposal on ambient air quality assessment and management (AAQ).⁴⁴⁷ The proposal was based on article 130s TEU. The AAQ-proposal stated that ambient air quality needed to be assessed taking into account air pollution levels and the size of populations and ecosystems exposed. Thus, there is a form of balancing costs and benefits of environmental policies, however using uniform yardsticks to calculate these costs and benefits. The AAQ-proposal in itself sets no standards, but required the Commission to submit proposals on environmental quality standards on SO₂, NO_x, black smoke,

447. Proposal of July 4, 1994, in: OJ C216/4 of August 6, 1994.

suspended particulates en lead by 1997 and on CO, cadmium, acid deposition, benzene, poly-aromatic hydrocarbons, arsenic, fluoride and nickel by 2000.⁴⁴⁸ There was an overlap with previous directives. In contrast to this earlier legislation there was no reference to distortions of competition. If a Member State wanted to set quality objectives for other pollutants, the commission needed to be informed in order to allow examination of the need for centralisation.⁴⁴⁹

The ECOSOC in its advice noted that ‘the Commission draft takes account of the conditions for the European environment protection law after Maastricht, i.e. the prevention of distortions of competition within the European Union, taking into account the principle of subsidiarity and the guaranteeing of the highest level of environmental protection.’⁴⁵⁰ Probably ‘notes’ indicates critique rather than consent as (1) the proposal neither explicitly mentions distortion of competition nor is based on article 100a TEU and (2) the subsidiarity principle has not been applied well. The ECOSOC failed to find any reference to the problems of cross-border atmospheric pollution.⁴⁵¹ Secondly, the ECOSOC did not agree with the list of pollutants in the annex of the proposal. The list would or could result in ‘European-level quality objectives for air pollutants which are of purely regional or local significance’ whereas other pollutants with significance for the European Union as a whole are neglected.⁴⁵²

The European Parliament in its Opinion also criticised the list with pollutants.⁴⁵³ It proposed dividing the pollutants over two lists. For pollutants on the first list measurement and reciprocal exchange of information were to be

448. Ibid., article 4 and annex I.

449. Ibid., article 4.

450. Advice of February 22, 1995, in: OJ C110/5 of May 2, 1995.

451. From the economic analysis of chapter 2, this should be the primary reason to centralise a policy.

452. Ibid., points 4.3.2.3 and 4.9. Level-playing field arguments can explain the inclusion of substances with local effects but not the exclusion of substances.

453. Opinion of June 16, 1995 in: OJ C166/173 of June 16, 1995.

compulsory, for pollutants on the second list this was requested to the extent that they were currently measured in Member States.⁴⁵⁴

In 1996, the final Ambient Air Quality 96/62/EC Directive was adopted on the basis of article 130s.⁴⁵⁵ The Ambient Air Quality Directive resembled the Aquatic Environment Directive in that it was to be supplemented by other directives with respect to individual pollutants. The last of these proposals were to be submitted before the year 2000. There was a long list of pollutants in annex I of the Directive, some of which were already covered by previous directives, including SO₂, NO₂, particles, lead, ozone, cadmium and mercury.

The stated aim was to define the basic principles of a common strategy to define and establish ambient air quality objectives (limit and target values with temporary margins of tolerance) in the Community.⁴⁵⁶ Despite centralisation, the norms to be set needed to take into account local factors. Factors to be taken into account when setting limit values are the degree of exposure the population at large and sensitive sub-groups in particular, climatic conditions, sensitivity of flora and fauna and their habitats, the historic heritage exposed to pollutants, the economic and technical feasibility and the long-range transmission of pollutants.⁴⁵⁷ The intention seems to be that under similar circumstances Member States have to adhere to a similar minimum air quality. Member States could adopt stricter norms given the Commission was informed.⁴⁵⁸ Another restriction on the EQS and its consequences is that the implementation must not result in significant negative environmental transborder effects within the Community. Thirdly, in areas with pollutant below the limit values the Member States must endeavour to preserve the best environmental quality compatible with sustainable

454. Ibid., amendment 10. The pollutants on the first list were SO₂, particulates (SPM and PM10), black smoke, O₃, NO_x, CO, Pb, Cd, Ni, As, benzene and poly-aromatic hydrocarbons (PAH).

455. Directive 96/62 of September 27, 1996, in: OJ L296/55 of November 21, 1996.

456. Ibid., article 1.

457. Ibid., annex II.

458. Ibid., article 4(6).

development. Consequently, the environmental quality standards can vary widely. Of course, this does not directly affect the polluters. The EQS have to be translated into emission standards at plant level, and these are already covered by the permit requirement of previous directives. Only if the emission standards were insufficient to attain the air quality goals would polluters in time face stricter norms.

The question is why the Community should set the differentiated norms if these are differentiated on the bases of local factors. Apparently the Community takes the view that the individual Member States differ on the bases of many factors but the valuation of such factors cannot be left to the discretion of the Member States. That is, a unique ecosystem in one Member State will be taken into account but the Community decides to what extent this will be done. This is a far cry from applying the subsidiarity principle. What the directive appears to do is establish environmental quality basic rights for citizens in the Community.

Ambient Air Quality Directive 96/62	
Instrument	- (basis for standstill, EQS)
Full or minimum harmonisation?	-
Exceptions (permanent? Conditional?)	- (basis for conditional exceptions)
Overall approximation of emission standards	Nil
Legal Base	130s SEA

7.2.5 Air Pollutants I Directive 1999/30

The previously discussed directive called for a number of subsequent directives on various pollutants. In late 1997, the Commission submitted the first proposal that was based on the Ambient Air I Directive 96/62/EC. The proposal set limit values for sulphur dioxides, oxides of nitrogen, particulate matter and lead in

ambient air.⁴⁵⁹ The proposal was based on article 130s TEU. The proposal was intended (partly) to replace the Sulphur Directive 80/779/EEC, the Lead Directive 82/884/EEC and the NO_x Directive 85/203/EEC.⁴⁶⁰ The old Lead Directive was based on article 235TR and the old Sulphur and the NO_x Directives were based on the double legal base of the harmonisation and the reserve articles.

The proposal set uniform limit values, i.e. minimum environmental quality standards. There were basically two kinds of standards: those for the protection of human health and those for the protection of ecosystems. The standards for the protection of ecosystems applied 'away from the immediate vicinity of sources', explained in the preamble as being 'agglomerations and other developments'. In addition, Member States could designate zones or agglomerations where the norms could be exceeded due to natural sources. These lower norms were harmonised in the proposal. There were standards on hourly, 24-hour, and annual basis. Table 7.2.5a below shows the limits on annual basis for the protection of human health:

459. Proposal of November 21, 1997 in: OJ C9/6 of January 14, 1998.

460. See sections 5.2.5, 5.2.7 and 5.2.12 respectively.

Table 7.2.5a Limit values: annual limit for the protection of human health			
Pollutant	Limit value	Margin of tolerance	Date by which the limit value is to be met
Sulphur dioxide	125 $\mu\text{g}/\text{m}^3$	Not to be exceeded more than three times per calendar year.	1 January 2005
Nitrogen dioxide and nitric oxide	40 $\mu\text{g}/\text{m}^3$ NO ₂	50% on entry into force, reducing linearly to reach 0% by 1 January 2010	1 January 2010
Particulate matter not in areas with significant concentrations in ambient air due to natural sources.	30 $\mu\text{g}/\text{m}^3$ PM10	50% on 1 January 2005, reducing linearly to reach 0% by 1 January 2005	1 January 2005
	20 $\mu\text{g}/\text{m}^3$ PM10	50% on entry into force, reducing linearly to reach 0% by 1 January 2010	1 January 2010
Lead	0,5 $\mu\text{g}/\text{m}^3$	100% on entry into force, reducing linearly to reach 0% by 1 January 2005	1 January 2005

The ECOSOC generally supported the proposal but had some remarks.⁴⁶¹ Firstly, it questioned the wisdom of letting the Member States delineate the distinction between agglomerations and other areas, i.e. between the applicability of the norms for the protection of human health and the norms for the protection of ecosystems. This liberty would decrease the degree of international harmonisation. Other remarks applied to the specific norms. Broadly speaking, the ECOSOC wanted stricter norms and tighter time frames.

The European Parliament proposed several amendments.⁴⁶² Amendment 8 states that ‘exceptionally Member States may designate zones or agglomerations

461. Opinion of April 29, 1998, in: OJ C214/1 from July 10, 1998.

462. Opinion of the European Parliament of May 13, 1998, published in OJ C 167/103 of Jun
Continued on next page

within which the limit value for lead cannot be met by 1 January 2005 owing to concentrations of lead in ambient air due to industrial processes'. This option would reduce the level of harmonisation of the proposal. The other amendments concerned stricter environmental norms and more information to the public.

The final Air Pollutants I Directive 1999/30/EC⁴⁶³ was adopted on the basis of article 130s SEA just like the proposal. This was the first Directive adopted under the aegis of the Ambient Air Quality Directive. It was explicitly stated that the limit values were minimum norms and that Member States may maintain or introduce more stringent protective measures in accordance with article 130t SEA. Allowance for the Member States to designate zones with lower applicable norms due to high background concentrations from natural sources was maintained but the allowance for zones with high background concentrations of particulates was specified to cover only 'natural events' and high concentrations due to the winter sanding of roads.⁴⁶⁴ There were some changes in specific norms but these do not detract from the conclusion that the proposal had been followed very closely.

The Air Pollutants I Directive repeals the Sulphur Directive, the Lead Directive and the NO_x Directive by July 19, 2001 but some articles and annexes remain in force until they are replaced by norms from the Air pollutants I Directive by 2005/2010. We have seen that the Sulphur and the NO_x Directives were based on (amongst others) the harmonisation article 100TR. Thus, the legal base changed from the reserve article and the harmonisation article for the previous directives to the environmental article in the new directive. We have seen from the contents of the Air Pollutants I Directive that the result will be a very low level of approximation of emission standards. The environmental

1, 1998.

463. Adopted on April 22, 1999, and published on OJ L163/41 of June 29, 1999. We will not separately address the Common Position adopted by the Council on September 24, 1998, in: OJ C360/99 of November 23, 1998.

464. Directive, articles 3 and 5.

quality standards were harmonised to some degree, but this will not imply that the emission standards on identical producers are similar. We can compare this with the conclusions based on the instrumental articles of the three repealed directives. The Lead Directive involved minimum harmonisation despite it being the only directive that was based solely on the reserve article. The level of harmonisation in the Sulphur Directive was probably less than minimum harmonisation. The NO_x Directive only set environmental quality standards and therefore is comparable to its successor. The Lead Directive had a relatively high level of harmonisation given that it was not based on the harmonisation article. The other two repealed directives had a level of harmonisation comparable to the Air Pollutants I Directive that was based on article 130sTEU. The differences between the contents of the three repealed directives and the new Air Pollutants I Directive was therefore not so big as to justify the change in legal base. It appears very likely that the previous directives would all have been based on the environmental article rather than the harmonisation article had this been available in the period of the Treaty of Rome.

Air Pollutants I Directive 1999/30	
Instrument	Environmental quality standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Conditional exceptions
Overall approximation of emission standards	Minimum harmonisation with exceptions
Legal Base	Nil

7.3 Secondary legislation from the Amsterdam period

7.3.1 Aquatic Environment II Directive 2000/60

In 1997, the Commission submitted a proposal on a framework directive on Community action in the field of water policy.⁴⁶⁵ The proposal was based on article 130s TEU. The proposal stated that the water policy required a transparent, effective and coherent legislative framework and that the Community should provide common principles and the overall framework for action.⁴⁶⁶ In addition, it was stated that there are diverse conditions and needs which require different solutions, and that priority should be given to action within the responsibility of the Member States through the drawing up of programmes or measures adjusted to regional and local conditions.⁴⁶⁷ Nevertheless, common environmental quality standards for pollutants needed to be set at Community level⁴⁶⁸, even though the Community offered room for less strict environmental goals.⁴⁶⁹ Following acceptance of the proposal, numerous previous directives would be repealed, including the Drinking Water Directive (see section 2.5.1). The proposal forced the Member States to draw up a specific water policy, however, the Community itself had very little involvement, not even in cases where it concerned transborder issues.⁴⁷⁰ This is a very strange application of the subsidiarity principle, which was addressed in point 11 of the preamble of the proposal. One would expect transborder issues to be one of the clearest examples of problems that cannot be resolved at the national level and would benefit from involvement from the Community.

465. Proposal of April 15, 1997, in: OJ C184/20 of June 17, 1997.

466. *Ibid.*, preamble, point 11.

467. *Ibid.*, preamble, point 13.

468. *Ibid.*, preamble point 18, article 2 and article 13(3)g.

469. *Ibid.*, preamble point 30 and article 4(4).

470. See e.g. article 3, points 3 and 4, and article 15 of the proposal.

The opinions of the ECOSOC⁴⁷¹ and the Committee of Regions⁴⁷² were overall positive, limiting their criticism to the vagueness of terms (e.g. ‘prohibitively expensive’) and (lack of) definitions. The Committee of Regions in addition added that the proposed rules for water prices - that would cover real costs – should be ‘thoroughly recast so that the introduction of water prices that reflect real costs does not burden agriculture and industry with unrepresentative, unjustified additional costs’ and that ‘exemptions from higher water prices to cover real costs can be granted (...) for example to prevent local or regional structural disadvantages’.⁴⁷³ This remark points to a fairness rather than an efficiency point of view with respect to pricing of external effects.

The final Aquatic Environment II Directive 2000/60 was adopted late 2000 on the basis of article 175TA.⁴⁷⁴ The preamble stated that the Community was to take account of environmental conditions in the various regions of the Community and that the diverse conditions and needs in the Community required different specific solutions.⁴⁷⁵ This suggests differentiated water quality norms. On the other hand, it was also stated that ‘good’ status of water and groundwater should be achieved throughout the Community and that deterioration in the status of waters is to be prevented at Community level.⁴⁷⁶ Common environmental quality standards and emission limit values for certain pollutants were to be laid down in Community legislation, even though less stringent environmental objectives could be set ‘in cases where a body of water is so affected by human activity or its natural condition is such that it may be unfeasible or unreasonable

471. Advice of October 1, 1997, in: OJ C353/83 of November 1, 1997.

472. Advice of 12/13 March 1998, in: OJ C180/38 of June 11, 1998.

473. *Ibid.*, point 11.

474. Directive 2000/60/EC of October 23, 2000, in: OJ L327/1 of December 22, 2000.

475. *Ibid.*, preamble, points 12 and 13.

476. *Ibid.*, preamble, points 25 and 27. This should be done within 15 years, but with possibilities for extensions (article 4).

expensive to achieve ‘good’ status’.⁴⁷⁷ This suggests some opportunities for national water quality standards below the uniform Community standard.

Article 16 points to a continuation of the practice that the Commission set harmonised emission standards per sector. Article 6 states that for the priority substances, the Commission shall submit proposals of controls for the progressive reduction of discharges, emission and the losses of substances concerned, and in particular with respect to the priority hazardous substances. The list of priority substances referred to was established by a Decision in late 2001.⁴⁷⁸ A list of 33 priority substances or groups of substances had been selected, which now constituted Annex X to the Aquatic Environment II Directive. Article 6 continues with the remark that the Commission should identify the ‘appropriate cost-effective and proportionate level and combination of product and process controls for both point and diffuse sources and take account of Community wide uniform emission limit values for process controls. Where appropriate, action at Community level for process controls may be established on a sector-by-sector basis.’ The former, comparable directives always based the need for harmonisation of emission standards on the necessity of preventing competitive distortions. In this light, we can conclude that the contents of the Aquatic Environment II Directive and the previous directives differed less markedly than the legal base could have suggested. From this observation it is remarkable that the harmonisation article 95TA was not used as a second legal base. However, one good reason for skipping article 95TA could have been the insight that minimum environmental quality standards lead to differentiated emission standards and do not create a level playing field. One can also venture the opinion that by 2000 Commission, Council and Parliament had come to the view that creating such a level playing field by equalising costs of

477. *Ibid.*, preamble, points 31 and 42. The precise conditions for the derogation are in article 4(5).

478. Decision 2455/2001/EC of November 20, 2001, in: OJ L331/1 of December 15, 2001. Continued on next page

water pollution control for firms is of minor importance, which would be an indication of leaning more towards the efficiency view. But there is no proof for that to be found in the directive.

A second observation concerns the fact that the Aquatic Environment II Directive would in due time completely replace the Aquatic Environment Directive 76/464 as the new framework directive for water policy. One of the key-points of the Aquatic Environment Directive had been the fact that Member States could chose between emission standards and environmental standards. Such a choice no longer existed in the Aquatic Environment II Directive, since this is restricted to setting water quality standards only.

Aquatic Environment II Directive 2000/60	
Instrument	EQS, standstill
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? Conditional?)	Conditional
Overall approximation of emission standards	Minimum harmonisation with exceptions
Legal Base	175TA

7.3.2 LCP II Directive 2001/80

In 1998, the Commission proposed a LCP II Directive.⁴⁷⁹ The proposal aimed at amending the LCP Directive 88/609/EEC discussed in subsection 6.2.1 above. In line with the LCP Directive that was based on article 130s SEA, the proposal for the LCP II Directive was based on article 130s TEU. The reason for centralisation was given in point 4 of the preamble, i.e. ‘in accordance with the principle of subsidiarity (...), the objective of reducing acidifying emissions cannot be sufficiently achieved by the Member States acting individually and

Like the directive, the decision was based on the environmental article 175TA.

unconcerted action offers no guarantee of achieving the desired objective; (...) in view of the need to reduce acidifying emissions across the Community, it is more effective to take action at the level of the Community'. The argument is completely in line with economic theory and the efficiency view explained in chapter 2, which recommend co-ordinated action in case of transborder pollution. No level playing field argument appears in the text of the proposal.

The emission concentration limits for new plants (in annexes III up to and including VII) were altered relative to the proposal in that new, stricter norms were established for new plants for which the operating license was granted on or after January 1, 2000 ('2K plants') and for processes (gas turbines) and fuels (biomass) not yet covered. Some of the existing norms applicable to new (1987) plants were also stricter. According to the ECOSOC, the limit values proposed for new (2K) combustion plants were roughly half those applied to new (1987) plants.⁴⁸⁰ The LCP Directive had had a derogation for new plants that operated less than 2200 hours a year. The proposal added that this derogation did not apply to 2K plants. Article 7 was replaced in that there was to be a provision for combined generation of heat and electricity for 2K plants, however with the provision that this should be technically and economically feasible. In article 9(3), the norm of 1000 mg SO₂/Nm³ was replaced by a stricter norm of 450 mg SO₂/Nm³ for 2K plants, and article 15 also had specific obligations on 2K plants.

The Commission opposed the European Parliament proposals (amendments) for more stringent emission limit values, extension of the proposal to existing (pre 2K) plants and deletion of the exception for Spain that came from the predecessor LCP Directive.⁴⁸¹ The ECOSOC welcomed the proposal, but also had some criticism with regards to the standards.⁴⁸² In the decade following the original LCP Directive, 'the vast majority of plants of this kind' had already had

479. Proposal COM(1998)415 of August 31, 1998, in: OJ C 300/6 of September 29, 1998.

480. Opinion of January 27, 1999, in: OJ C101/25 of April 12, 1999.

481. Amended proposal 599PC0611.

to reduce their emission substantially relative to the LCP Directive. The reasons were stricter national or local standards, the IPPC Directive (see section 7.2.3) and commitments entered into under the UNECE LRTAP Convention.⁴⁸³ The LCP II proposal laid down emission limits that amounted to a 50% reduction in SO₂-emissions and 30 to 50% reduction in NO_x and suspended particulate emissions compared to the values in the LCP Directive. In ECOSOC's (and the energy producing sector's) opinion, economically viable technologies had not progressed at the same rate, in particular the minimum desulphurisation limits for plants using solid fuels seemed disproportionate.⁴⁸⁴ ECOSOC stated that 'many of the organisations consulted are highly critical of them (the economic assessments – RL) and regard the proposal as very damaging to the competitiveness of the Community economy'.⁴⁸⁵ It called for a study into the impact of the proposal on the Community's 'most remote regions where geographic and atmospheric conditions make it worthwhile considering exempting them from some of the current proposals'.⁴⁸⁶

It should be noted however that the LCP II proposal only changed the LCP Directive where it concerned new (1987) plants, and not existing (pre 1987) plants. In relation to a defeated amendment of the proposal, it was argued that implementation of the proposal would reduce overall 2010 emission by large combustion plants by only 3% for SO₂ and by 6% for NO_x respectively because the existing plants were excluded from the scope of the directive. If the limit values were also to apply to existing plants, this would reduce overall 2010

482. Ibid.

483. The Convention on Long-Range Transboundary Air Pollution (LRTAP) was concluded in 1979. There are various extension to the basic Treaty concerning specific pollutants.

484. Proposal, points 2.5, 2.8.

485. Ibid., 2.10.

486. Ibid., 2.12. This amounts to a call for further differentiation. In this light it is interesting to note that an amendment containing the phrase 'this harmonisation will at the same time create uniform conditions of competition; was defeated by 58 against 56 votes (annex to the Opinion).

emissions by large combustion plants by 78% for SO₂ and by 40% for NO_x respectively.⁴⁸⁷

In October 2001, the final LCP II Directive was adopted on the basis of article 175TA.⁴⁸⁸ It was stated explicitly that the emission limits from the directive were a necessary but not sufficient condition for compliance with the IPPC Directive regarding the use of BAT. Included was an express permission to Member States to require compliance with national emission limit values that were more stringent.⁴⁸⁹ There were very big differences compared to the LCP II proposal. In line with the critique from ECOSOC, it was explicitly confirmed that existing plants were significant contributors to emissions and that it was necessary to reduce these emissions.⁴⁹⁰ Articles 4(3) and 4(4) stated that existing plants needed to conform to the emission standards specified in annexes III to VII by 2008 at the latest, notwithstanding exceptions for plants that would be operated for 20,000 hours only in the period 2008-2015. The changes relative to the emission standards from the LCP I Directive and the proposal are too numerous to mention given the distinctions made between fuels, capacity et cetera. Suffice it to say that the norms were overall much stricter compared to the previous directive and often even stricter than the proposal, but that there were also many possibilities for exceptions (i.e. more lenient standards). Such exception include the characteristics of the fuel⁴⁹¹, the location of the plants in 'Outermost Regions'⁴⁹², Crete and Rhodos⁴⁹³, plants that operate less than a specific number of hours per year⁴⁹⁴ and process characteristics.⁴⁹⁵

487. Annex to the Opinion.

488. Directive 2001/80/EC on the limitation of emission of certain pollutants into the air from large combustion plants of October 23, 2001, published OJ L309/1 of November 27, 2001.

489. *Ibid.*, article 4 (5).

490. *Ibid.*, preamble, point 6.

491. *Ibid.*, e.g. annex III under A.

492. *Ibid.*, e.g. annex III under B.

493. *Ibid.*, e.g. annex IV under B.

494. *Ibid.*, e.g. annex VI under A.

495. *Ibid.*, e.g. annex VII under A.

In conclusion, the LCP II Directive had a mixed effect on the approximation of emission standards. The much more stringent minimum requirements for existing and new combustion plants, bringing the minimum nearer to what is technically feasible had the tendency to reduce existing differences between progressive Member States. On the other hand the many exceptions allowing emission standards below the minimum undermined such approximation. Therefore the reduced outcome might be a very low level of harmonisation. This would reflect the efficiency view that emission standards should be more stringent where environmental damage is high and lenient where it is low. So we are far away from the level playing field argument: the words distortion of competition requiring harmonisation do not appear in the text. Still there are rudiments left. A consistent common approach of transborder pollution would have focussed on emission caps for Member States and how to enforce compliance and leave implementation – by way of setting emission standards or using other instruments – to the Member States. But this still was a bridge too far in 2001.

LCP II Directive 2001/80	
Instrument	Emission (concentration) standards
Full or minimum harmonisation?	Minimum harmonisation
Exceptions (permanent? conditional?)	Specific, conditional
Overall approximation of emission standards	Less than minimum harmonisation
Legal Base	175TA

7.4 Conclusions from the period during and after the Maastricht Treaty

7.4.1 The level of harmonisation

The first question we posed at the beginning of this chapter is on the actual level of harmonisation. Table 7.3 below summarises the level of harmonisation from the seven directives adopted during the post-SEA period. Most directives have the property of minimum harmonisation, and the exception – the Ambient Air Quality Directive that sets no harmonisation - implies that future legislation based on this directive should set minimum harmonisation. Often, this is made implicit in the directives themselves but where the legal base is the environmental article this is implied.

Whereas the previous periods showed many directives offering a choice between emission standards and environmental quality standards, the post-SEA period showed a clear distinction between directives setting emission standards (including BAT) and directives setting a minimum value for environmental quality. The environmental quality standards result in a low level of approximation in emission standards. This reflects the efficiency view that emission standards should be tailored to national and regional conditions. The non-economic element here is the political intention to guarantee a bottom line of environmental quality everywhere in the Community.

Table 7.4 Level of harmonisation of directives covered in chapter 7			
Name (subject) of the directive (section)	Instrument	Exceptions	Overall approximation of emission standards
Volatile Organic Compounds (VOC)	ES	Conditional, temporary	Less than minimum harmonisation
Incineration of Hazardous Waste	ES	Temporary conditional, yardstick	Minimum harmonisation with exceptions
IPPC	BAT	Conditional	Minimum harmonisation with exceptions
Ambient Air Quality	-	-	-
Air Pollutants I (SO ₂ - NO _x -PM-Pb)	EQS	Conditional	Minimum harmonisation with exceptions
Aquatic Environment II	EQS	Conditional	Minimum harmonisation with exceptions
LCP II	ES	Specific, conditional	Less than minimum harmonisation

7.4.2 Internal consistency

The internal consistency between the level of harmonisation possible or preferred by legal base and the level of harmonisation as read from the contents of the directives increased. An overview of the legal bases is given in table 7.3.2 below.

Table 7.3.2: The legal base of the Directives and the associated proposals from the post-SEA periods.				
Number	Name (subject) of the directive	Legal base of the directive	Proposal	Legal base of the proposal
94/63	Volatile organic compounds (VOC)	100a TEU	9.1992	100a SEA
94/67	Incineration of hazardous waste	130s TEU	3.1992	100a SEA
96/61	IPPC	130s TEU	11.1993	130s TEU
96/62	Ambient air quality assessment	130s TEU	7.1994	130s TEU
1999/30	Air pollutants I (SO ₂ - NO _x -PM-Pb)	130s TEU	11.1997	130s TEU
2000/60	Aquatic Environment II Directive	175TA	4.1997	130s TEU
2001/80	LCP II Directive	175TA	8.1998	130s TEU

The two directives on the basis of a proposal from the previous SEA period were based on the article 100a SEA despite the fact that most of the directives from the SEA period were based on article 130s SEA. The most plausible cause was legal uncertainty from the fact that the European Court of Justice had forced the Titanium Dioxide II Directive to be based on the harmonisation article. Another possibility is that the difference emanates from the fact that these directives set uniform emission standards in a sector, arguably creating a level playing field. For the VOC Directive - pertaining to petrol stations - and the Incineration of Hazardous Waste Directive, it is not so evident that efforts to create a level playing field makes real sense as it is doubtful whether such installations in different Member States do actively compete with each other. The three directives based on a proposal from the Maastricht period were based on the environmental article, as were the two directives adopted in the Amsterdam period.

The trend in the legal bases of the proposals is reflected in the column with the legal bases of the directives. The first directive on VOC was adopted on the bases of the harmonisation article just like the proposal. The next directive, which was the other proposal based on the harmonisation article, was adopted on the

basis of the environmental article. Likewise, the other five directives from the post-SEA period were all based on the environmental article.

The environmental article did not pose limits or requirements on the level of harmonisation that a directive based on the harmonisation article should have. Therefore there was no possibility for an inconsistency between the legal base and the contents of the directive.

7.4.3 The choice for centralisation

A question asked at the beginning of this chapter was whether the level of harmonisation supports the choice for centralisation of the environmental issue. We have seen that the point of departure for neo-classical economic theory is that there is a need for international co-ordination only in very specific circumstances. The VOC directive was the only directive that was based on the harmonisation article. However, from the neo-classical economic perspective, it is not likely that harmonisation of spill norms for petrol stations would require international co-ordination, and harmonisation is certainly not an efficient approach from this perspective. Even though the level playing field argument emerged during the legislative process, it is also not directly clear that this reasoning would result in the conclusion that harmonisation would be necessary. This would require that petrol stations in different Member States compete with each other.

The proposal on the directive on incineration of hazardous waste invoked the well-known reasoning that differences in national applications might distort competition as the proposal was based on the harmonisation article. Again, this was not a convincing argument in this specific case. Perhaps this was perceived during the decision-making process, resulting in the legal base being changed to the environmental article. Even though the directive was based on the environmental article, the level of harmonisation was fairly high.

The Ambient Air Quality Directive, the Air Pollutants I Directive and the LCP II Directive set a very low level of harmonisation and allow for variation on various grounds. All the directives had a very low level of harmonisation. It should be reminded however that harmonisation in the sense of approximation of emission standards was not the stated overriding argument of these directives. They basically set a minimum environmental quality level in the Member States. This was the stated principal reason for centralisation, a striking change from the stated reasons for the legislation covered in chapter 5.

We can also conclude that the elevation of the subsidiarity principle from the environmental chapter to a general principle had not resulted in a more prominent place of this principle in legislation. Whereas references to the subsidiarity principle became more common, this did not imply that directives included a test based on the effectiveness criterion of the subsidiarity principle.

7.4.4 The perceived adequacy of the legal bases

We have seen that there have not been great differences between the legal base of the proposal and the legal base of the directives. Indeed, the results from the post-SEA period reflect the results from the SEA period – generally the directives are based on the environmental article but with exceptions that are based on the harmonisation article.

We have concluded in the previous chapter that the Community did not have the option to maintain the double legal base following the Single European Act, or at least this could not be introduced without creating additional obstacles. This was because of the differences in the voting procedures for the respective legal bases. Thus, we could not rule out the possibility that the Council would have preferred to continue the use of the double legal base had this been feasible. For example, the Council could have preferred to replace the double legal base

100TR and 235TR with the double legal base 100a SEA and 130s SEA. The incompatibility of articles was continued during the period of the Maastricht Treaty: it was not possible to base legislation on a double legal base of both 100a TEU and 130s TEU due to incompatible decision making procedures. However, this changed with the Amsterdam Treaty.

With the Amsterdam Treaty, both the harmonisation article 95TA and the environmental article 175TA referred to the decision-making procedure of 251TA. Thus article describes that the Council can agree on a proposal by qualified majority if either the European Parliament does not propose any amendments or if the Council approves of all the amendments made by the Parliament. An elaborate procedure is foreseen in for the situations where the Council does not accept some amendments made by the European Parliament. We need not go into the specifics of this article, suffices to say that the possibility for a double legal base reappeared in the Amsterdam Treaty. That is, the Amsterdam Treaty offered the possibility to enact secondary legislation on the joint legal base of the harmonisation article 95TA and the environmental article 175TA.

The fact that the Council did not return to the double legal base does imply that the environmental legal base was considered superior to including the harmonisation, or at least that the sole use of article 175TA was considered sufficient. If we extrapolate this result to the previous chapters, this implies that the double legal base from the first period, i.e. 100TR and 235TR, was considered inferior in contents to the use of the environmental article alone. In hindsight, it appeared that the Council felt forced to use the double legal base for environmental legislation. This legal base was abandoned as soon as a possibility arose, i.e. with the introduction of the environmental article. The question that follows from this conclusion is why the Council felt that the harmonisation article had to be used in addition to the reserve article. A plausible reason is the development of the ideas on environmental policy. The development in the

Treaties can be viewed as a reflection of changing insights. Initially, the accent was on the effects of environmental laws on the common market. More specifically, environmental standards needed to be harmonised within the common market in order to prevent distortion of competition. Over time, the protection of the environment as such, and possibly (a right to?) provision of a minimum environmental quality throughout the Community has taken precedence as the primary goal. Thus, the introduction of legal bases and changing insights into the goals of the Community environmental policy have developed in the same direction but not parallel in time. This explains why the Council preferred the use of the harmonisation article for environmental legislation with respect to stationary sources in the first years after the Paris Summit despite the fact that the reserve article would have provided sufficient legal base whereas the harmonisation article and the associated level playing field reasoning was virtually abandoned in the last years.

Chapter 8 Conclusions

8.1 Introduction

The book has been inspired by an apparent discrepancy between theory, providing economic arguments against international harmonisation of environmental standards for stationary sources and the harmonisation practice of the European Community. This observation raises the question whether that perception of a discrepancy is correct, how serious it is and whether it can be explained. In order to answer this principal question, we have looked at both the contents of economic theory and the contents of the European environmental law with respect to stationary sources. The questions that were investigated in the previous chapters were:

- What exactly has economic theory to say about the international harmonisation of environmental standards? This question has been answered in chapter 2. The main results are summarised in section 8.2 below.
- What has been the legal base for the environmental secondary legislation chosen by the European Institutions? We have looked at the legal bases and the arguments used for choosing these legal bases in chapters 5 to 7. The results from these chapters are summarised in section 8.3
- What are the reasons stated in secondary legislation for harmonisation? This question was answered in chapters 5 to 7. The results are summarised in section 8.4.

- What has been the actual level of harmonisation of environmental standards in the European Community? In chapters 3 and 4, we have looked for guidance about the type and the level of harmonisation that might be required in Community environmental legislation. In chapters 5 to 7 we have looked at the actual level of harmonisation as set in the directives. The results from these chapters have been summarised and integrated in section 8.5 below.
- Is harmonisation in EU environmental legislation in correspondence with the conclusions of neo-classical economic theory as established in chapter 2? We have at various places drawn conclusions about the implicit economic view underlying specific articles in the Treaty, in action programmes on the environment and in secondary legislation. In section 8.6 we will present the overall assessment of this principal question.

8.2 What are the economic arguments for and against uniform environmental standards?

In chapter 2, we have given a survey of the economic arguments for and against international co-ordination of environmental policy and harmonisation of emission standards. Mainstream economics, that is - neo-classical economics, investigates how welfare is affected by the economic arrangements in society. Economic theory focuses on efficiency. The Heckscher-Ohlin theorem on international trade states that relative differences in factor endowments create the opportunity for mutually beneficial international trade and increases welfare in the States participating in such free international trade. Environmental quality is one of the factor endowments that determines comparative advantage of countries with respect to the production of goods that are relatively intensive respectively extensive in the environmental endowment. Harmonisation of the environmental

standards of Member States would decrease income of the Community because it effectively prevents specialisation in the common market on the basis of relative abundance of the environmental endowment. In addition, harmonisation of national environmental policies also reduces welfare because it ignores the fact that differences in preferences for environmental quality exist between Member States.

Economic theory therefore generally considers international harmonisation of environmental standards as a distortion of competition, resulting in a reduced welfare. In some circumstances, there is a need for international co-ordination. These situations arise (a) when the pollution crosses borders so that external effects occur and (b) when a Member State can increase its welfare to the detriment of other Member States by setting environmental standards strategically. The need for international co-ordination does not imply that the environmental standards should be harmonised. In conclusion, neo-classical theory accepts that there may be a need for co-ordination of environmental policies of Member States. This co-ordination in turn often implies centralisation, i.e. the transfer of powers of Member States to Commission, Council and European Parliament. Using environmental standards as the policy instrument will be a second best approach compared to economic instruments. Harmonisation of emission standards for stationary sources in the form of uniform environmental standards everywhere within the Community or even mandatory reduction of differences in standards between Member States is basically not an efficient approach.

In chapter 2, we have also identified an alternative train of thought on international trade that may be called the fair trade doctrine. It aims at equal or equitable competitive positions for competing firms. If all producers have identical competitive positions, the goal of a level playing field is reached. From the fair trade point of view, international harmonisation of environmental standards will prevent 'unfair trade'. Competitive positions can be equalised by

reducing or even eliminating those elements or conditions that create cost differences. Among those conditions are the cost differences due to differences in national environmental regulations. This is seen as a cause of unfair competition. Notice that the result of this alternative doctrine is opposite to the results from neo-classical economic theory. In the neo-classical theory differences in prices that are reflections of differences in e.g. relative abundance of inputs or preferences are an incentive for international trade that increases total welfare. The fair trade doctrine applied rigorously would imply that international trade would cease to exist.

8.3 The legal base of the directives

In this section we will give an overview of the developments related to the legal base in a chronological order.

In table 8.3a below, we have listed all the directives covered, with their legal bases as (primarily) decided upon by the Council of Ministers in chronological order. From this list we can easily see the development over time. We can distinguish two periods on the basis of the legal base used. During the first period from 1975 to 1987, directives were generally based on the double legal base composed of the harmonisation article 100TR and the reserve article 235TR. That is, thirteen directives were based on both articles 100TR and 235TR whereas only one directive was based on article 235TR only. None was based on article 100TR only. The second period runs from 1988 up to 2002. In this period, the directives were predominantly based on the environmental article that had become available in 1987. In numbers, ten directives were based on the environmental article (130s SEA/130s TEU/175TA) and two directives were based on the harmonisation article (100a SEA/100a TEU). No directive was based on the reserve article.

Table 8.3a Legal bases of the directives		
Number	Name (subject) of the directive	Legal base of the directive
75/440	Drinking water	100TR+235TR
76/464	Aquatic environment	100TR+235TR
78/176	Titanium Dioxide	100TR+235TR
80/68	Groundwater	100TR+235TR
80/779	Sulphur	100TR+235TR
82/176	Mercury	100TR+235TR
82/884	Lead	235TR
83/513	Cadmium	100TR+235TR
84/152	Mercury II	100TR+235TR
84/360	Air pollution by industrial installations	100TR+235TR
84/491	Hexachlorocyclohexane (HCH)	100TR+235TR
85/203	Nitrogen dioxide (NO _x)	100TR+235TR
86/280	Dangerous substances	100TR+235TR
87/217	Asbestos	100TR+235TR
88/609	Large combustion plant	130s SEA
89/369, 89/429	Incineration of domestic waste	130s SEA
89/428	Titanium Dioxide II	130s SEA
91/127	Urban waste water treatment	130s SEA
92/112	Titanium Dioxide III	100a SEA
94/63	Volatile organic compounds (VOC)	100a TEU
94/67	Incineration of hazardous waste	130s TEU
96/61	IPPC	130s TEU
96/62	Ambient air quality assessment	130s TEU
1999/30	Air pollutants I (SO ₂ - NO _x –PM-Pb)	130s TEU
2000/60	Aquatic Environment II Directive	175TA
2001/80	LCP II Directive	175TA

The situation is different if we look at the legal base of the proposals for these directives submitted by the European Commission to the Council. The legal bases of the proposals are listed in table 8.3b below. We can distinguish three periods

on the bases of the legal base proposed by the Commission. In the first period from January 1974 to February 1981, six proposals were based on a single legal base. In five of the six cases this was the reserve article, in one case the harmonisation article. In another case, the proposal was based on the double legal base and one proposal only referred to a framework directive rather than to a Treaty article. In the second period from December 1982 to December 1985, eight proposals were based on the double legal base of both the reserve article and the harmonisation article. Another possible categorisation would draw the dividing line at January 1978, but the noted trend from a single legal base to a double legal base remains. In the third period starting March 1988, the proposals reverted to a single legal base. In three of the ten cases this was the harmonisation article, in the other seven cases it was the environmental article.

Table 8.3b Legal bases of the proposals		
Date (month.year)	Name (subject) of the proposal	Legal base of the proposal
1.1974	Drinking water	235TR
10.1974	Aquatic environment	235TR
3.1975	Sulphur	235TR
4.1975	Lead	235TR
7.1975	Titanium Dioxide	100TR
1.1978	Groundwater	100TR+235TR
7.1979	Mercury	*
2.1981	Cadmium	235TR
12.1982	Mercury II	100TR+235TR
4.1983	Titanium Dioxide II	100TR +235TR
4.1983	Air pollution by industrial installations	100TR+235TR
7.1983	Hexachlorocyclohexane (HCH)	100TR+235TR
9.1983	Nitrogen dioxide (NO _x)	100TR+235TR
12.1983	Large combustion plant	100TR+235TR
1985	Dangerous substances	100TR+235TR
12.1985	Asbestos	100TR+235TR
3.1988	Incineration of domestic waste	130s SEA
11.1989	Urban waste water treatment	130s SEA
9.1992	Titanium Dioxide III	100a TEU
9.1992	Volatile organic compounds (VOC)	100a TEU
3.1992	Incineration of hazardous waste	100a TEU
11.1993	IPPC	130s TEU
7.1994	Ambient air quality assessment	130s TEU
4.1997	Aquatic environment II	130s TEU
11.1997	Air pollutants I (SO ₂ - NO _x –PM-Pb)	130s TEU
8.1998	Large combustion plants II	130s TEU
* Indirectly based on 100TR and 235TR		

From these two tables, the differences in opinion between the Commission and the Council (as the primary legislator) become clear.

The first four proposals were all based on article 235TR only. The subsequent proposal for the Titanium Dioxide Directive was based on article 100TR only. Thus, the Commission apparently made a judgement with respect to the most suitable legal base for a proposal on a case-by-case basis. Its criterion was whether the main objective was to harmonise national environmental standards or to protect the natural environment. However, the Council opted for a double legal base, thus underlining the two-fold objective of the directive protection of the natural environment and furthering of the common market. Given the resolution of the Council to use a double legal base, the Commission apparently did not insist any longer on a single legal base from 1982 on and adopted the reasoning of the Council.

The Large Combustion Plant as well as the Titanium dioxide II proposal, both of 1983, were based on both 100TR and 235TR. The proposal was overtaken by events, however, as the Single European Act was adopted in the meantime. The SEA introduced a specific environmental article 130s SEA. Both directives, of 1988 and 1989 respectively, were based on this article. The single legal base was going to be practice from then on for proposed directives submitted by the Commissions as well as the definitive directives laid down by the Council. The options were either environmental article 130s SEA (respectively 130s TEU, respectively 175TA) or harmonisation article 100a SEA (respectively 100a TEU, respectively 95TA). In all but two cases Commission and Council agreed on the article to be chosen as legal base. The first exception is the Titanium dioxide case. The Council had based the Titanium Dioxide II Directive on article 130s SEA only. Both the European Parliament and the Commission wanted the harmonisation article 100a SEA to be used. The Commission subsequently initiated a procedure against the Council with the Court of Justice with respect to the proper legal base. The ECJ concurred with the Commission and the European Parliament, found against the Council and declared the 1989 Titanium Dioxide II Directive void on June 11, 1991. Hence, the Commission introduced another

proposal, reintroducing the clauses contained in original Directive, but this time based on article 100a SEA. The final Titanium Dioxide Directive III based on article 100a SEA was adopted in December 1992. So it had been made crystal clear that in the case of the titanium dioxide industry, directly competing on the common market, harmonisation with the objective of creating a level playing field in the sense of equalising conditions of competition prevailed. A comparable conflict but with a different outcome existed with the Incineration of Hazardous Waste Directive, which was proposed on the basis of article 100a but which was adopted on the basis of article 130s.

Article 100 TR was used in most directives before the SEA. Article 100 was designed to reduce cost differences between Member States, which cause competitive distortions and consequently hinder the common market. According to Delbeke and Bergman (1998, p.1), 'when environmental legislation and harmonisation of the laws of individual Member States started in the European Community in the 1970s, it was mainly related to the functioning of the internal market'. As we have seen, the Commission had proposed directives on the bases of article 235TR only, and this had not resulted in negative responses by either ECOSOC or the European Parliament. The introduction of article 100TR was as an explicit choice by the Council rather than a legal necessity thus underlining the importance of the economic considerations next to the environmental objective.

Kapteyn, a former member of the ECJ, (1990, p.471) focuses on the use of article 235TR in the period before SEA and reaches the opposite conclusion: 'Because the harmonisation of environmental provisions is not primarily determined by competition policy considerations, harmonisation in this field has hitherto been based on article 235 EEC'. Even though Kapteyn recognises the 'possible additional use of articles 100 or 100a', he focuses on article 235 to stress the environmental aims by the EEC. Given the fact that the Commission initially opted for the reserve article, one can draw the conclusion that the Commission in contrast to the Council considered a common approach to

protecting the European environment as the overriding objective and not the creation of a level playing field as a condition for fair competition.

The observation that the Council generally did not adopt legislation without the use of the harmonisation article does not imply that the double legal base was considered optimal from the Council's perspective. One can argue that the choice for the harmonisation article had been for lack of suitable alternatives. We can see from table 8.3a that after the adoption of the SEA the harmonisation article was substituted by the environmental articles 130s SEA despite the continued availability of the harmonisation article. Indeed, the changes in article 100a SEA relative to article 100TR had improved its suitability for environmental purposes. From this changes we could have expected an increased rather than a decreased use of the harmonisation article.

However one can also interpret the switch from a double to a single legal base as indication of a change in the attitude of the Council. It strikes that in only two cases the Council opted for the harmonisation article and in all others cases it chose the environmental article. The Council even substituted article 100a SEA that was proposed as the base for the Incineration of hazardous waste Directive by article 130s SEA. This reflects a change in the Council's opinion on what the major aim of the directives is. The environmental objective is emphasised in the Directives adopted from 1988 on.

8.4 What are the reasons for harmonisation stated in legislation?

In chapter 3 on primary legislation, we have seen that the Spaak report argued that a competitive distortion could arise if a specific industry was taxed more severely in one Member State than in another Member State. A reason for harmonised (environmental) standards was thus to prevent such distortion of competition. This reasoning appears to lean on the fair trade theory rather than

neo-classical economic theory when applied to stationary sources. However, the Spaak report also includes phrases that are consistent with neo-classical economic theory rather than the level playing field. The Spaak report does not allow firm conclusions on whether it adheres to the neo-classical economic view, which focuses on efficiency, or the fair trade view, which stresses equity when it comes to assessing cost differences due to differences in national regulations. As we have seen in chapter 3 the same ambiguities turn up in interpreting the relevant articles in the Treaty of Rome and its successors. From the Treaty itself it can not be read whether and when harmonisation is appropriate and whether divergences in environmental regulation of Member States are a good ground for harmonisation.

In chapter 4 on the action programmes, we have concluded that all programmes contain references concerning the need to counter distortion of competition by way of harmonisation of environmental standards. Such references do appear to adopt the reasoning of the fair trade theories. On the other hand, all programmes also stress the need to allow for differences in standards due to local and regional variation, which is compatible with neo-classical economic thinking, which focuses on efficiency. The action programmes therefore also did not allow us to draw firm conclusion on the theories underlying the Community environmental policy. One interpretation of these ambiguities is that implicitly a compromise is sought between efficiency and equity.

In chapter 5, we looked at the environmental directives from the period up to the Single European Act. The proposal for the Titanium Dioxide Directive read: 'Whereas national laws on waste from the titanium industry vary from one Member State to another; whereas these disparities are likely to constitute barriers to trade within the Community and will therefore have a direct effect on the functioning of the common market.' The reasoning is very clear - cost differences between national environmental legislation of Member States should be avoided. This strand of reasoning reflects the fair trade view that differences in

production costs due to differences in national legislation result in an uneven playing field for competing firms which is seen as a competitive distortion.

The reasoning was adopted in a somewhat different shape in many subsequent proposals and directives. The standard phrase used in some variations was: ‘Whereas any disparities between the provisions on (...) already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market. Whereas it is therefore necessary to approximate laws in this field, as provided for in article 100 of the Treaty.’ The part between accolades depended on the subject, e.g. ‘the quality required of surface water intended for the abstraction of drinking water’ (from the Drinking Water Directive), ‘the discharge of certain dangerous substances into the aquatic environment’ (from the Aquatic Environment Directive), ‘waste from the titanium dioxide industry’ (from the Titanium Dioxide Directive) and ‘the discharge of certain dangerous substances into groundwater’ (from the Groundwater Directive).

From these phrases from the preambles it is clear that legislation was needed in order to harmonise national legislation to prevent unequal conditions of competition. We have seen that the neo-classical economic theory rejects such harmonisation because it is inefficient, reducing welfare in the Community. This implies that the preamble was not inspired by the neo-classical economic theory. It appears more likely that it was instead inspired by the fair trade and level playing field doctrines. The level playing field conception is that producers in different Member States should have identical costs resulting from e.g. environmental policies, and that trade is unfair in case producers face different abatement costs. From this perspective, national environmental policies should be co-ordinated to prevent distortion of competition. In conclusion, we can see from the wording of the preambles and the directives from the period up to the SEA that the reasoning underlying harmonised Community environmental standards is the fair trade theory that aims at a level playing field.

In the years following the entering into force of the Single European Act, the number of references to the need to harmonise environmental standards in order to prevent distortions of competition were becoming less and less abundant over time. In parallel, there was less and less recourse to the harmonisation article as the base for environmental directives, since over time more and more directives were based on the environmental article. Consequently there was no longer a compelling reason to make a reference to this level playing field argument. The increased recourse to the environmental article after it had become available as a legal base was matched by a parallel development to invoke environmental protection as the sole principal reason for the legislative activities and to refrain from references to prevention of distortion of competition.

From a neo-classical economic point of view one might welcome the disappearance of flawed economic reasoning as an argument for harmonisation of environmental standards. However, neo-classical economics does not see a good reason why coordinated environmental policies of Member States should take the form of harmonised standards. The consequence is that an economic assessment of the arguments for harmonisation given in the more recent directives has to be rather negative. The later environmental legislation emphasises the importance of having at least a minimum uniform environmental quality throughout the Community, whereas economic theory sees no necessity for such a uniform minimum environmental quality as this depends on preferences among other things, which will differ between Member States. If the Council of Ministers decides to see minimum environmental quality as a kind of basis right to which all Europeans are entitled economics has not to say much about such a meta-economic decision. The consequence of harmonisation of national environmental quality is that differences in emission standards are accepted and consequently the ensuring cost differences as well. Although uniform minimum environmental quality was the objective, that principle tended to be rather diluted when it came down to establishing it in the directives. Often, the directives included exceptions

for heavily polluted areas, densely populated areas, et cetera, thus reducing the overall level of harmonised environmental quality.

In conclusion, we can see that the design of environmental policy with respect to stationary sources - as shown by the preambles and the legal bases - moved towards stronger application of the efficiency criterion as advocated by economic theory. Whereas the legislation of the first years was based on the notion that differences in national emission standards and their costs should be reduced on the basis of the harmonisation article, later years aimed for fairly uniform environmental quality levels throughout the Community that implied more variation in emission standards and their costs on the basis of national and regional differences.

8.5 What has been the actual level of harmonisation of environmental standards for stationary sources in the European Community?

For a discussion of the actual level of harmonisation of environmental standards we need a yardstick. In order to distinguish between several levels of harmonisation, we have created the following categories: 'full harmonisation', 'less than full harmonisation', 'minimum harmonisation' and 'less than minimum harmonisation'.

Full harmonisation and minimum harmonisation apply to the situation where some uniform standard on producers is set on Community level. Full harmonisation is defined as the situation where the Community sets uniform environmental standards without the possibility for a Member State to set either stricter or less strict emission standards for its industry. In other words, similar technical installations throughout the Community face identical emission standards. Minimum harmonisation allows Member States to set national

environmental standards that are more stringent than the environmental standard required by the Community. As we have seen harmonisation can also pertain to environmental quality.

In practice, the arche-typical categories of full harmonisation and minimum harmonisation are not very common. In most cases, the directives allow some deviation from these respective points of departure that allow a Member State to set less strict environmental standards on its industry. These options for derogation, explicitly mentioned in the directive, result in the categories 'less than full harmonisation' and 'less than minimum harmonisation' also labelled 'minimum harmonisation with exceptions'.

In table 8.5a below, we have listed the instruments and exceptions contained in the directives. It is constructed on the basis of tables 5.3.1, 6.3.1 and 7.3.1. From table 8.5a we can see that BAT (Best Available Technology) is mentioned 9 times, EQS (Environmental Quality Standards) 13 times and ES (Emission Standards) 14 times. BAT includes the directives that impose best available technology, best available technology not entailing excessive costs or best technical means. EQS includes all environmental quality standards including standstill clauses that stipulate that the environmental quality should not deteriorate. ES includes all emission standards including full bans on emissions, i.e. an emission standard of zero emissions. The lone reference to ceilings refers to national emission ceilings for Member States. Where the symbol '-' is placed the directive does not give the specific information. For example, the Urban Wastewater Treatment Directive and Ambient Air Quality Directive are framework directives that do not define standards and consequently cannot contain exceptions on standards.

Table 8.5a The level of harmonisation of the directives covered in this book		
Name (subject) of the directive (section)	Instrument	Exceptions
Drinking water	EQS	Yes
Aquatic environment	ES	-
Titanium Dioxide	BAT	-
Groundwater	ES	Temporary
Sulphur	EQS	Temporary
Mercury	ES/EQS, BAT	Yes
Lead	EQS	Temporary
Cadmium	ES/EQS, BAT	Conditional, Greenland
Mercury II	ES/EQS, BAT	Yes
Industrial installations	BAT	-
HCH	ES/EQS, BAT	Conditional
Nitrogen dioxide	EQS	Temporary conditional
Dangerous substances	ES/EQS, BAT	Conditional
Asbestos	ES, BAT	Conditional
LCP	ES, ceilings	Conditional, Spain
IDW	ES	-
Titanium Dioxide II	ES/EQS	Temporary
Urban waste water treatment	-	-
Titanium Dioxide III	ES/EQS	Temporary
VOC	ES	Conditional, temporary
IHW	ES	Temporary conditional, yardstick
IPPC	BAT	Conditional
Ambient Air Quality	-	-
Air Pollutants I	EQS	Conditional
Aquatic Environment II	EQS	Conditional
LCP II	ES	Specific, conditional

Exceptions that are included in the directives are summarised in the last column of table 8.5a. The exceptions have been categorised as follows:

unconditional versus conditional, permanent versus temporary and general versus specific. Notice that there are no exceptions that are unconditional, permanent or general in table 8.5a.

Many of the directives make a distinction between existing installations and new installations. Often BAT standards only apply to new installations. We have also encountered examples of directives that allow existing installations more time to reach the ES applicable to new installations. These features imply that the level of approximation of emission standards will increase over time.

Taking all of these remarks into account, we have estimated the overall level of approximation of emission standards for the directives and summarised these in table 8.5b below. The results correspond with the results in tables 5.3.1, 6.3.1 and 7.3.1.

Table 8.5b The level of harmonisation of the directives covered in this book	
Name (subject) of the directive (section)	Overall approximation of emission standards
Drinking water	Less than minimum harmonisation
Aquatic environment	Harmonised ban on direct emissions of category I pollutants into groundwater
Titanium Dioxide	Minimum harmonisation for new installations
Groundwater	Ban on emissions of list I pollutants, less than minimum harmonisation for list II pollutants
Sulphur	Minimum harmonisation with temporary exceptions
Mercury	Less than minimum harmonisation
Lead	Minimum harmonisation with temporary exception and standstill
Cadmium	Less than minimum harmonisation
Mercury II	Less than minimum harmonisation
Industrial Installations	Minimum harmonisation for new installations
HCH	Less than minimum harmonisation
Nitrogen Dioxide	Minimum harmonisation with temporary exception
Dangerous Substances	Less than minimum harmonisation
Asbestos	Less than minimum harmonisation
LCP	Less than minimum harmonisation
IDW	Minimum harmonisation per size-category
Titanium Dioxide II	Minimum harmonisation with temporary exceptions
Urban Wastewater Treatment	
Titanium Dioxide III	Less than minimum harmonisation
VOC	Less than minimum harmonisation
IHW	Less than minimum harmonisation
IPPC	Less than minimum harmonisation
Ambient Air Quality	
Air Pollutants I	Less than minimum harmonisation
Aquatic Environment II	Less than minimum harmonisation
LCP II	Less than minimum harmonisation

The first observation is that there are no directives that set full harmonisation of environmental standards for stationary sources. There is only one directive that includes one fully harmonised norm. This is the Aquatic Environment Directive that includes a ban on direct emissions of pollutants into groundwater. This is only a small part of the directive however. This ban was later transferred to the Groundwater Directive.

Basically, the point of departure for all directives is minimum harmonisation. Minimum harmonisation allows countries to have more stringent environmental standards, e.g. tighter emission standards, than the values mentioned in the directive. Many times it is clear from the definition of the norms themselves that these are minimum norms.⁴⁹⁶ More often it is explicitly stated that countries can impose stricter environmental norms however. Even the directives that do not define standards - the framework directives Ambient Air Quality, Urban Wastewater Treatment and Aquatic Environment (with the exception of the ban mentioned in the table) - stated that directives that were based on these directives set minimum harmonisation. As we have seen before, the legal base often already implied that Member States could adopt stricter environmental standards. Notice that much of the legislation could involve minimum harmonisation even where this cannot be read from the directive itself. For example, article 100a(4) SEA allows for more stringent national environmental norms and the IDW Directive confirms explicitly that the legislation based on article 130s SEA allows for more stringent (national) environmental norms compatible with the Treaty on the basis of article 130t SEA. We will discuss minimum harmonisation in more detail below.

We can see from table 8.5b that minimum harmonisation in its strict form is practically non-existent. Exceptions, which allow a less stringent emission (or

496. For example art.5 Groundwater Directive, art. 3(2) Sulphur Directive, art. 2(2) Lead Directive, art. 3 NO_x Directive, art. 4(6) Ambient Air Quality Assessment Directive. The minimum harmonisation character of the Industrial Installations Directive is evident as the aim
Continued on next page

environmental quality) standard than the minimum abound. These cases have been classified 'less than minimum harmonisation'. Where it was possible to specify the exceptions this has been done. It should be remembered that the directives setting minimum environmental quality standards do not imply uniform emission standards. In many directives countries can choose between several environmental standards, for example whether to use environmental quality standards (EQS) or emission standards.

The overall conclusion must be that the level of harmonisation defined as approximation of emission standards set in the directives has been very low. This conclusion applies to all periods, as there are no discernible differences between directives from several periods on the basis of the table above. For the later period, this conclusion is not remarkable given the fact that these directives were often based on the environmental articles and that there were few references to a need for harmonisation of standards in order to prevent distortion of competition. For the first period, this conclusion is more remarkable, given the fact that harmonisation was stressed and that many of the directives were based on the double legal base including the harmonisation article.

We will go a bit deeper into the various kinds of exceptions encountered in the directives. These exceptions include e.g. minimum harmonisation, standstill clauses, BATNEEC clauses and temporary exemptions (temporary variation between Member States was not included in the table 8.3). The greater the number of exceptions in a directive, the lower the resulting level of harmonisation.

Minimum harmonisation

All Community legislation in our sample entails minimum harmonisation as the directives in our sample generally allow for more progressive policies. This can often already be inferred only by looking at the legal base. The exceptions are

is to avoid significant air pollution only - article 4(2).

bans. This power to enforce stricter norms is generally unqualified, i.e. there is no upper limit to the norms and the countries need not justify the choice of the norm they have. In some directives, however, stricter standards are allowed for specific reasons or in specific conditions only. In practice, however, these conditions may not pose much of a restriction, as demonstrated by the generally worded conditions set in article 2 of the Aquatic Environment Directive ('if necessary considering the toxicity, persistence, and the bio-accumulation of the pollutants in the environment') and articles 9 and 14 of the Industrial Installations Directive ('for public health and environmental reasons'). Other similar examples include allowances for countries that want to impose stricter norms to counter the expected increase of pollutants as a result of urban or industrial development⁴⁹⁷, in heavily polluted areas⁴⁹⁸ and in areas that, according to the Member State, justify special environmental protection.⁴⁹⁹ The power to implement stricter environmental policies can be limited in that these policies are permitted only if the national norms do not impose excessive costs on the installations.⁵⁰⁰ The Sulphur Directive states that the measures proposed should not interfere with the economic development⁵⁰¹ and should be economically possible.

Local circumstances

Minimum standards are sometimes differentiated to reflect specific local aspects. In the Drinking Water Directive, some norms could diverge from the uniform standard because of specific geographic or meteorological circumstances.⁵⁰² This implies that Member States facing such conditions can set less strict standards

497. Art. 4(1) Sulphur Directive, article 4(1) NO_x Directive.

498. Art 5 Industrial Installations Directive.

499. Art. 4(2) Sulphur Directive, art. 5 Industrial Installations Directive, art.4(2) NO_x Directive.

500. Preamble Industrial Installations directive.

501. The exact wording is 'balanced development'. If we look at the contents of the Directive however, it is clear that the norms are lenient enough to not restrict economic growth.

501. This applies to the categories temperature, colouring, nitrates, copper (A1), sulphates (A2/3), fluorides and ammonia (A3).

than the harmonised Community standard. There are also general exemptions from all emission norms to accommodate natural emissions.⁵⁰³ In the Aquatic Environment Directive, countries could still allow direct emissions of list I pollutants if the groundwater was permanently unsuitable for any other use. This unsuitability of course depends on local characteristics as well as previous emissions, which also vary locally.

National designation of areas

In many directives, Member States are required to indicate areas and regions that are covered by the directive or that require specific treatment. We have seen some examples in the previous chapters but the practice was much more widespread. Examples in directives that were not included in our selection are the Bathing Water Directive, the Shellfish Water Directive⁵⁰⁴ and the Fish Breeding Directive.⁵⁰⁵ In these directives, minimum quality standards are set for waters that are designated by the Member States for the use of bathing, shellfish breeding and fish breeding respectively. Member States reluctant to set environmental quality standards (maintained through emission standards) could simply limit the number of locations to which the norms would apply. A famous case is the Bathing Waters Directive where the number of sites indicated by the smallest and landlocked Member State Luxembourg was totally disproportionate to the number of sites indicated by the large island Member State the United Kingdom. With respect to the 1991 Agricultural Nitrates Directives (not covered) in which Member States had to identify vulnerable zones, the Commission noted that most Member States had not yet met their obligations.⁵⁰⁶

503. Article 8C.

504. Directive 79/923/EEC of October 30, 1979 in: OJ L281 of November 10, 1979 amended by Directive 91/692/EEC of December 23, 1991 in: OJ L377 of December 31, 1991.

505. Directive 78/659/EEC of July 18, 1978 in: OJ L222 of August 14, 1978 amended by Directives 90/656/EEC of December 4, 1990 (OJ L353 of December 17, 1990) and 91/692/EEC of December 23, 1991 (OJ L377 of December 31, 1991)

506. The Commission mentions Belgium, Greece, Spain, Portugal, Finland and the UK
Continued on next page

Alternative harmonisation

In some directives countries can chose, for example whether to use environmental quality standards (EQS) or emission standards. This is also called alternative harmonisation. This was first done in the Aquatic Environment Directive: the emission standards apply unless the Member State can prove that environmental quality standards are maintained As this directive serves as an intermediate legal base for many subsequent directives in our sample, the practice became widespread.⁵⁰⁷ An identical choice is also offered in the Titanium Dioxide Directive II but it is stressed that the quality objectives are applied in such a way ‘that the effects in terms of protecting the environment and avoiding distortions of competition are equivalent to that of the limit values’.

Thus, legislation based on the Aquatic Environment Directive on, for example or mercury, came in two parts, one aimed at countries which prefer emission standards (version I) and one aimed at countries which prefer ambient quality standards (version II). If countries can chose the norms applicable, it is to be expected that they will select the EQS if that environmental quality can be achieved with less stringent ES than the European minimum emission standard. Therefore allowing the choice between the two options reduces the degree of harmonisation in the sense of approximation of emission standards More specifically, in practice Britain was the main user of the environmental quality standards.⁵⁰⁸ With respect to equating emission norms and EQS, we agree with

(<http://europa.eu.int/scadplus/leg/en/lvb/120813.htm>).

507. The Aquatic Environment Directive is quoted in the Mercury, the Cadmium and the HCH directives. In addition, the Ground water directive contains a de minimis clause which scores the same effect: The norms were not applicable where the concentration of pollutants was so small as to rule out any deterioration of water quality (article 2B).

508. According to Howe (1993), the British preference was influenced by the fact that the U.S. Clean Air Act amendments of 1970 also set uniform ambient standards. Haigh (1992) tries to explain the British preference for ambient quality standards from a socio-historical context. These explanations are not very convincing given the fact that emission standards were used readily when this was more convenient: of the five chloralkali plants in Britain within the

Continued on next page

Rehbinder (1985, p.212) that ‘alternative harmonisation represents an unlimited, although not permanent exception in favour of countries who wish to take advantage of environmental conditions that permit higher discharge levels’.⁵⁰⁹ In other words, by opting for EQS Member States might create for themselves the possibility to set more lenient emission standards than the minimum emission standards specified in the directive. Harmonisation (i.e. approximation of emission standards) will be less than in the case where only emission standards are allowed. From an efficiency point of view the scope for more differentiation should be welcomed however.

The same can be said about other Directives where Member States are left other choices. In the Sulphur Directive for example, two methods were used in order to check the compliance with the norms: the ‘black smoke’ method and the ‘gravimetric’ method. Countries were free to opt for either of these two methods. The norms from both of the methods were considered to have an equal impact, and countries opting for the gravimetric method were required to perform parallel measurements based on the black smoke method to ensure that this was indeed the case.⁵¹⁰ In practice, Germany, Italy and Denmark were the only countries to use the gravimetric method.⁵¹¹ From the parallel measurements, it had become clear that the black smoke norms were more lenient with respect to particles and

scope of Directive 82/176, four met the ambient (water) quality standards without serious difficulties, and hence were regulated through EQS. For the fifth plant, where meeting the quality targets would have been very costly, the authority opted to apply the emission standards rather than the ambient standards. Secondly, the first air quality standard was introduced only as the result of EEC legislation (Weale, 1996, p.599). Finally, the objective seems to be minimisation of costs for the industry rather than protection of the environment through ambient standards. The British have also shown a preference ‘for an alternative regime in the LCP directive so one has two options with new plants: one can either set an emission limit in terms of milligrams per cubic metre or an emission limit in terms of percentage desulphurization’

509. In this case it is interesting to note that Delbeke and Bergman (1998) expect the increased use of environmental quality standards as such.

510. Article 10, Directive 89/427/EEC.

511. Point 1.4, ECOSOC Advice 89/C56/03

that the gravimetric method was more lenient with respect to SO₂.⁵¹² To solve this inequality, the particle norms based on the black smoke method were revised in 1989.⁵¹³

BAT and BATNEEC clauses

Many directives prescribe BAT or BATNEEC as a standard way to reduce emissions. Since the adoption of the IPPC Directive it is basically implicit in all directives for stationary sources. Both BAT and BATNEEC refer to the best available and applied technology. It does not mean technology with highest effectiveness in catching or preventing potential emissions. For both types of technology cost considerations are taken into account. The discussion whether BATNEEC does imply somewhat more lenient requirements than BAT does not make much sense. What counts is that the effort to specify BAT or BATNEEC is co-ordinated at EU level. A special EU bureau established in Sevilla prepares the BAT, respectively BATNEEC documents for pollution intensive sectors in consultation with the environmental bureaucracies of Member States, which can bring in their views on what is appropriate technology. The result is a list of BAT or BATNEEC technologies. It is a kind of shopping list from which Member States can make a choice when translating the EU BAT and BATNEEC technologies in national legislation. Since BAT and BATNEEC are defined as a range of technologies the implication is that the emission standards achieved by installing the technologies will not be uniform but are differentiated within a certain range. In setting the bottom-line for emissions of national industry. Member States have the option to pick the more stringent or less stringent technology subset from of the BAT/BATNEEC defined in the EU documents. BAT and BATNEEC therefore boil down to a set of differentiated minimum requirements for emissions: minimum harmonization with a fuzzy bottom-line.

512. Ibid., point 1.5.

513. Directive 89/427/EEC,

Best available technologies that take the total production process into account can be expected to vary more than in the case only end-of pipe solutions are compared. There are reasons to assume, however, that, especially in practice and especially in the initial years, the focus of BAT applications was on end-of pipe technologies. The same process was observed in the USA, where, since the EPA was ill-equipped to understand the internal processes of all industries, the technologies prescribed were all end-of-pipe technologies (Folmer and Howe, 1991, p.30). There is no reason to assume that the European environmental authorities were better prepared.

In the Community, the requirement to use the best available technology was often limited to the situation where this was considered necessary either to reduce pollution or to counter or prevent competitive distortions. This reference to competitive distortions exists in article 3(3) Mercury Directive 82/176 and article 3(4) of the Mercury Directive 84/156, the HCH Directive 84/491, the Dangerous Substances Directive 86/280 and the Cadmium Directive 83/513.

Sometimes a Member State could circumvent the BAT requirement for its producers. Generally, Member States were required to justify to the Commission whenever they intended to issue a permit to a new polluter that did not specify BAT. If a Member States concluded that BAT was not necessary to reach the environmental goals, the question was where and how competitive considerations came into play.

In many Directives, BAT and BATNEEC were limited to new installations. This implied that over time after the existing installations have been replaced by new installations, the level of harmonisation would increase After a transition period all installations would be covered by standards based on BAT(NEEC).

Country specific clauses

There also exist clauses with respect to specific countries. These are the clearest indication that harmonisation may not be the most advisable approach. The exemptions are based on the insufficient technical and administrative infrastructure of Greece⁵¹⁴, the low level of industrialisation, the low population density and specific geographic features of Greenland⁵¹⁵, and the Spanish need to accommodate economic growth.⁵¹⁶ Temporary exemptions were granted to Germany in the light of the re-unification with the heavily polluted GDR area.⁵¹⁷

Implementation periods

Many directives contain clauses allowing additional time to implement the directive and to comply with the minimum norms. For example, in the Agreement on the European Economic Area, Iceland was given preferential treatment in that implementation for 11 of the directives from our sample was not required until 1995. According to Sevenster (1993, p.3), allowing States a longer period for compliance was the concession to Member States with economic difficulties in the period up to the creation of the Cohesion Fund. The principle that Member States could obtain longer implementation periods can today even be found in the Treaty. Article 175 states that 'if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, the Council shall, in the act of adopting that measure, lay down appropriate provisions in the form of temporary derogations and/or financial support from the Cohesion Fund set up pursuant to article 161'. In addition, many directives set different norms and time tables on new and old facilities. This kind of temporary exception can well be defended on efficiency

514. Preamble Ground Water Directive.

515. Preambles Mercury Directive 84/156/EEC and Cadmium Directive.

516. Preamble Large Combustion plant directive

517. Directive 90/656/EEC (OJ L353/59 of 1990). This included the Drinking Water, the Aquatic Environment, the Mercury, the Cadmium and the HCH Directives.

grounds as generally it will be cheaper to install BAT in a plant that is newly constructed than to retrofit an existing plant with the required BAT abatement technology afterwards. Nevertheless, this distinction can and will result in temporary differences between Member States that are in a different phase of economic development.

8.6 To what extent is the level of harmonisation in the Community environmental legislation with respect to stationary sources in correspondence with neo-classical economic theory?

This dissertation has been inspired by the apparent discrepancy between the advice from neo-classical economic theory and the perceived Community environmental policy with respect to stationary sources. The first question was whether this perception of a discrepancy was correct or not. A next question was whether an explanation could be given for the discrepancy in so far as it turns out to exist.

As we said in chapter one, ‘glancing at the actual development of environmental policy in the European Community over the past three decades, one sees a picture that seems to be very much in contradiction with the advice of neo-classical economics. With the support of the Council, the European Commission has been developing a Community environmental policy from 1972 on. Principal instruments of this Community environmental policy have been directives that require harmonisation of environmental standards for similar industries in the various Member States’.

We can conclude that our investigation has shown that this perception is not completely correct. In the initial years, especially before the Single European Act, most of the directives containing rules to restrict emissions from stationary sources were adopted on a double legal base: the reserve article 235TR which

was interpreted as the legal basis for common action in the field of environmental protection and article 100TR requiring harmonisation of emission standards of stationary sources. The use of the harmonisation article and the reasoning underlying it implies a fair trade or equity view on distortion of competition and is incompatible with the neo-classical efficiency view. According to this view differences in national environmental regulations reflect differences in natural endowment and preferences, in short differences in relative scarcity which should be respected and not levelled out by uniform regulations. Therefore, on the level of choice of legal base there certainly was a wide gap between European environmental policy with regard to stationary sources and the policy advised from welfare economics in the period running from 1972 till the adoption of the Single European Act in 1987. However, actual emission standards did leave scope for considerable differentiation by Member States, as we have seen. Therefore the discrepancy between emission standards actually set in the European Union and emission standards that would have been chosen in the absence of a common policy might be modest. A priori one would expect that it has helped to speed up the process of setting emission standards in the economically least developed Member States. For the environmentally most progressive Member States European harmonisation of emission standards never has been a restriction keeping them from setting more stringent emission standards.

From the Single European Act on, environmental article 130s SEA was available, explicitly authorising a common environmental policy. It does not specify certain types of action; consequently it does not force Commission and Council to shape a more stringent environmental policy into the form of harmonised emission standards. As we have seen, article 130s and its successors have been the favourite legal base for directives geared to emissions of stationary sources during the past fifteen years. Consequently the discrepancy between legal

base and the policy advice from neo-classical economics has disappeared and the conflict between the fair trade view that was expressed in the preambles and the efficiency view of neo-classical economic theory has been terminated. Yet the form of environmental policy remained harmonisation, thereby maintaining the potential conflict between policy advice from economic theory and actual environmental policy. As we have seen the approach in harmonisation continued to boil down to less than minimum harmonisation. Next to that the idea that (cost) conditions of competition have to be equalised was slackened further by focussing more on equal environmental quality standards, which imply differentiated emission standards. As a result the conflict between neo-classical economic ideas on co-ordination of national environmental standards and the actual practice of Community environmental legislation with respect to stationary sources has scaled down to a state of peaceful co-existence.

ANNEX TREATY ARTICLES

Articles from the Treaty establishing the European Economic Community, the Treaty of Rome⁵¹⁸

Article 2 TR⁵¹⁹

The Community shall have as its task, by establishing a common market and progressively approximating the economic policies of Member States, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standards of living and closer relations between the Member States belonging to it.

518. Office for official publications of the European Communities 1973. The wording differs slightly from the wording given in a version by the Publishing Services of the European Communities 8012/5/XII/1961/5. This version starts with the remark that 'it should be emphasized that this translation that no legal authority whatsoever' because only those version of the Treaty are valid which were drawn up, signed and ratified in the four languages of the European Economic Community: Dutch, French, German and Italian.

519. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: It shall be the aim of the Community, by establishing a common market and progressively approximating the economic policies of Member States, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increased stability, an accelerated raising of the standard of living and closer relations between its Member States.

Article 3 TR⁵²⁰

For the purposes set out in article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein.

(a) the elimination, as between Member States, of customs duties and of quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect;

(b) the establishment of a common customs tariff and of a common commercial policy toward third countries;

(c) the abolition, as between Member States, of obstacles to freedom of movement for persons;

(d) services in the sphere of agriculture

(e) the adoption of a common policy in the sphere of transport;

(f) the institution of a system ensuring that competition in the common market is not distorted;⁵²¹

520. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: For the purposes set out in the preceding article, the activities of the Community shall include, under the conditions and with the timing provided for in this Treaty:

(a) the elimination, as between Member States, of customs duties and of quantitative restrictions in regard to the importation and exportation of goods, as well as of all measures with equivalent effect;

(b) the establishment of a common customs tariff and a common commercial policy toward third countries;

(c) the abolition, as between Member States, of the obstacles to the free movement of persons, services and capital;

(d) the inauguration of a common transport policy;

(e) the inauguration of common transport policy;

(f) the establishment of a system ensuring that competition shall not be distorted in the Common Market;

(g) the application of procedures which shall make it possible to co-ordinate the economic policies of Member States and to remedy disequilibria in their balances of payments;

(h) the approximation of their respective municipal law to the extent necessary for the functioning of the Common Market;

(i) the creation of a European Social Fund in order to improve the possibilities of employment for workers and to contribute to the raising of their standard of living;

(k) the association of overseas countries and territories with the Community with a view to increasing trade and to pursuing jointly their effort towards economic and social development.

521. Die Errichtung eines Systems, das den Wettbewerb innerhalb des Gemeinsamen Marktes
Continued on next page

(g) the application of procedures by which the economic policies of Member States can be co-ordinated and disequilibria in their balances of payments remedied;

(h) the approximation of the laws of Member States to the extent required for the proper functioning of the common market;

(i) the creation of a European Social Fund in order to improve employment opportunities for workers and to contribute to the raising of their standard of living;

(k) the association of the overseas countries and territories in order to increase trade and to promote jointly economic and social development.

Article 6 TR⁵²²

1. Member States shall, in close co-operation with the institutions of the Community, co-ordinate their respective economic policies to the extent necessary to attain the objectives of this Treaty.

2. The institutions of the Community shall take care not to prejudice the internal and external financial stability of the Member States.

vor Fälschungen schützt.

522. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: (1) Member States, acting in close collaboration with the institutions of the Community, shall co-ordinate their respective economic policies to the extent that is necessary to attain the objectives of this Treaty. (2) The institutions of the Community shall take care not to prejudice the internal and external financial stability of Member States.

Article 36 TR⁵²³

The provision of articles 30 to 34 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants, the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.

Article 100 TR⁵²⁴

The Council shall, acting unanimously on a proposal from the Commission, issue directives for the approximation of such provisions laid down by law, regulation or administrative action in Member States as directly affect the establishment or functioning of the common market.

The Assembly and the Economic and Social Committee shall be consulted in the case of directives whose implementation would, in one or more Member States, involve the amendment of legislation.

523. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: The provision of Articles 30 to 34 inclusive shall not be an obstacle to prohibitions or restrictions in respect of importation, exportation or transit which are justified on grounds of public morality, public order, public safety, the protection of human and plant life or health, the preservation of plant life, the protection of national treasures of artistic, historical or archaeological value or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however constitute either a means of arbitrary discrimination or a disguised restriction on trade between Member States.

524. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: The Council, acting by means of unanimous vote on a proposal of the Commission, shall issue directives for the approximation of such legislative and administrative provisions of the Member States as have a direct incidence on the establishment or functioning of the Common Market. The Assembly and the Economic and Social Committee shall be consulted concerning any of directives whose implementation in one or more of the Member States would involve amendment of legislative provisions.

Article 101 TR⁵²⁵

Where the Commission finds that a disparity existing between the legislative and administrative provisions of the Member States distorts the conditions of competition in the Common Market and thereby causes a state of affairs which must be eliminated, it shall enter into consultation with the interested Member States. If such consultation does not result in an agreement which eliminates the particular distortion, the Council, acting during the first stage by means by a qualified majority vote on a proposal of the Commission, shall issue the directives necessary for this purpose. The Commission and the Council may take any other appropriate measures provided for in this Treaty.

Article 102 TR⁵²⁶

1 If there is reason to fear that enactment or amendment of a legislative or administrative provision will cause a distortion within the meaning of the preceding Article, the Member State desiring the proceed therewith shall consult the Commission. After consulting the Member States, the Commission shall recommend to the States concerned such measures as may be appropriate to avoid the particular distortion.

2 If the State desiring to enact or amend its own provisions does not comply with the recommendation made to it by the Commission, other Member States may not be requested, in application of Article 101 to amend their own provisions in order to eliminate such distortion. If the Member State which has ignored the Commission's recommendation causes a distortion to its own detriment only, the provisions of Article 101 shall not apply.

525. Version by the Publishing Services of the European Communities 8012/5/XII/1961/5.

526. Version by the Publishing Services of the European Communities 8012/5/XII/1961/5.

Article 235 TR⁵²⁷

If action by the Community should prove necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and this Treaty has not provided the necessary powers, the Council shall, acting unanimously on a proposal from the Commission and after consulting the Assembly, take the appropriate measures.

Articles from the Treaty of Rome including the Amendments from the Single European Act⁵²⁸

Article 2 SEA

The Community shall have as its task, by establishing a common market and progressively approximating the economic policies of the Member States, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standard of living and closer relations between the states belonging to it.

Article 3 SEA

For the purposes set out in article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein:

527. The version by the Publishing Services of the European Communities 8012/5/XII/1961/5 reads: If any action by the Community appears necessary to achieve, in the functioning of the common market, one of the aims of the community where this Treaty has not provided for the requisite powers of action, the Council, acting by means of a unanimous vote on a proposal of the Commission and after the Assembly has been consulted, shall enact the appropriate provisions.

528. Office for official publications of the European Communities, 1987.

- (a) the elimination, as between Member States, of customs duties and quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect;
- (b) The establishment of a common customs tariff and of a common commercial policy towards third countries
- (c) the abolition, as between Member States, of obstacles to freedom of movement for persons, services and capital ;
- (d) the adoption of a common policy in the sphere of agriculture;
- (e) the adoption of a common policy in the sphere of transport;
- (f) a system ensuring that competition in the internal market is not distorted;
- (g) the application of procedures by which the economic policies of Member States can be co-ordinated and disequilibria in their balances of payments remedied;
- (h) the approximation of the laws of Member States to the extent required for the proper functioning of the common market;
- (i) the creation of a European Social Fund in order to improve employment opportunities for workers and contribute to the raising of their standard of living;
- (j) the establishment of a European Investment bank to facilitate the economic expansion of the Community by opening up fresh resources;
- (k) the association of the overseas countries and territories in order to increase trade and promote jointly economic and social development.

Article 36 SEA: unchanged relative to article 36 TR

Article 100 SEA: unchanged relative to article 100TR

Article 100a SEA

1. By way of derogation from article 100 and save where otherwise provided in this Treaty, the following provisions shall apply for the achievement of the objectives set out in article 8a. The Council shall, acting by a qualified majority on a proposal from the Commission in co-operation with the European Parliament and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market.

2. Paragraph 1 shall not apply to fiscal provisions, to those relating to the free movement of persons nor to those relating to the rights and interests of employed persons.

3. The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection.

4. If, after the adoption of a harmonisation measure by the Council acting by a qualified majority, a Member State deems it necessary to apply national provisions on grounds of major needs referred to in article 36, or relating to protection of the environment or the working environment, it shall notify the Commission of these provisions.

The Commission shall confirm the provisions involved after having verified that they are not a means of arbitrary discrimination or a disguised restriction on trade between Member States.

By way of derogation from the procedure laid down in articles 169 and 170, the Commission or any Member State may bring the matter directly before the Court of Justice if it considers that another Member State is making improper use of the powers provided in this article.

5. The harmonisation measures referred to above shall, in appropriate cases, include a safeguard clause authorising the Member State to take, for one or more

of the Non-economic reasons referred to in article 36, provisional measures subject to a Community control procedure.’

Article 101 SEA

Where the Commission finds that a difference between the provisions laid down by law, regulation or administrative action in Member States is distorting the conditions of competition in the common market and that the resulting distortion of competition needs to be eliminated, it shall consult the Member States concerned.

If such consultation does not result in an agreement eliminating the distortion in question, the Council shall, on a proposal from the Commission, acting unanimously during the first stage and by qualified majority thereafter, issue the necessary directives. The Commission and the Council may take any other appropriate measures provided for in this treaty.

Article 102 SEA

1. Where there is reason to fear that the adoption or amendment of a provision laid down by law, regulation or administrative action may cause distortion within the meaning of article 101, a Member State desiring to proceed therewith shall consult the Commission. After consulting the Member States, the Commission shall recommend to the Member States concerned such measures as may be appropriate to avoid the distortion in question.

2. If a Member desiring to introduce to amend its own provisions does not comply with the recommendation addressed to it by the Commission, other Member States shall not be required, in pursuance of article 101, to amend their own provisions in order to eliminate such distortion. If the Member State which has ignored the recommendation of the Commission causes distortion detrimental only to itself, the provisions of article 101 shall not apply.

part 3, Title VII, ENVIRONMENT

Article 130r SEA

1. Action by the Community relating to the environment shall have the following objectives:

- to preserve, protect and improve the quality of the environment,
- to contribute towards protecting human health,
- to ensure a prudent and rational utilisation of natural resources.

2. Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community's other policies.

3. In preparing its actions to the environment, the Community shall take account of:

- (i) available scientific and technical data,
- (ii) environmental conditions in the various regions of the Community,
- (iii) the potential benefits and costs of action or of lack of action,
- (IV) the economic and social development of the Community as a whole and the balanced development of its regions.

4. The Community shall take action relating to the environment to the extent to which the objectives referred to in paragraph 1 can be attained better at Community level than at the level of the individual Member States. Without prejudice to certain measures of a Community nature. the Member States shall finance and implement the other measures.

5. Within their respective spheres of competence, the Community and the Member States shall co-operate with third countries and with the relevant international organisations. the arrangements for Community co-operation may

be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with article 228.

The previous paragraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

Article 130s SEA

The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, shall decide what action is to be taken by the Community.

The Council shall, under the condition laid down in the preceding subparagraph, define those matters on which decisions are to be taken by a qualified majority.

Article 130t SEA

The protective measures adopted in common pursuant to article 130s shall not prevent any Member State from maintaining or introducing more stringent protective measures compatible with this Treaty.'

Article 235 SEA: unchanged relative to article 235TR

Articles from the Treaty of Maastricht on European Union⁵²⁹

Article 2 TEU

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing the common policies and activities referred to in articles 3 and 3a, to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and

non-inflationary growth reflecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of live, and economic and social cohesion and solidarity among the Member States.

Article 3 TEU

For the purposes set out in article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein:

- (a) the elimination, as between Member States, of customs duties and quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect;
- (b) a common commercial policy;
- (c) an internal market characterised by the abolition, as between Member States, of obstacles to the free movement of goods, persons, services and capital;
- (d) measures concerning the entry and movement of persons in the internal market as provided for in article 100c;
- (e) a common policy in the sphere of agriculture and fisheries
- (f) a common policy in the sphere of transport;
- (g) a system ensuring that competition in the internal market is not distorted;
- (h) the approximation of laws of Member States to the extent required for the functioning of the common market;
- (i) a policy in the social sphere comprising a European Social Fund;
- (j) the strengthening of economic and social cohesion;
- (k) a policy in the sphere of the environment
- (l) the strengthening of the competitiveness of the Community industry
- (m) the promotion of research and technological development;

529. Office for official publications of the European Communities, 1995.

- (n) encouragement for the establishment and development of trans-European networks
- (o) a contribution to the attainment of a high level of health protection
- (p) a contribution to education and training of quality and to the flowering of cultures of the Member States;
- (q) a policy in the sphere of development co-operation;
- (r) the association of the overseas countries and territories in order to increase trade and promote jointly economic and social development;
- (s) a contribution to the strengthening of consumer protection;
- (t) measures in the spheres of energy, civil protection and tourism.

Article 3b TEU

The Community shall act within the limits of the powers conferred upon it by this Treaty and the objectives assigned to it therein.

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as those objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.

Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty.

Title V Common rules on competition, taxation and the approximation of laws, Chapter 3 approximation of laws

Article 6 TEU (as amended by article G (8) TEU)

Within the scope of the application of this treaty, and without prejudice to any special provisions contained therein, any discrimination on the grounds of nationality shall be prohibited.

The Council, acting in accordance with the procedure referred to in article 189c, may adopt rules designed to prohibit such discrimination.

Article 100 TEU

The Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, issue directives for the approximation of such laws, regulations or administrative provisions of the Member States as directly affect the establishment of functioning of the common market.

Article 100a TEU

1. By way of derogation from article 100 and save where otherwise provided in this Treaty, the following provisions shall apply for the achievement of the objectives set out in article 7a. The Council shall, acting in accordance with the procedure referred to in article 189b and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market.

2. Paragraph 1 shall not apply to fiscal provisions, to those relating to the free movement of persons nor to those relating to the rights and interests of employed persons.

3. The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection.

4. If, after the adoption of a harmonisation measure by the Council acting by a qualified majority, a Member State deems it necessary to apply national provisions on grounds of major needs referred to in article 36, or relating to protection of the environment or the working environment, it shall notify the Commission of these provisions.

The Commission shall confirm the provisions involved after having verified that they are not a means of arbitrary discrimination or a disguised restriction on trade between Member States.

By way of derogation from the procedure laid down in articles 169 and 170, the Commission or any Member State may bring the matter directly before the Court of Justice if it considers that another Member State is making improper use of the powers provided in this article.

5. The harmonisation measures referred to above shall, in appropriate cases, include a safeguard clause authorising the Member State to take, for one or more of the Non-economic reasons referred to in article 36, provisional measures subject to a Community control procedure.'

Article 101 TEU and article 102 TEU: unaltered relatively to the SEA

TITEL XVI ENVIRONMENT (not amended by the Maastricht treaty)

Article 130r TEU

1. Community policy on the environment shall contribute to pursuit of the following objectives:

- preserving, protecting and improving the quality of the environment;
- protection human health;

- prudent and rational utilisation of natural resources;
- promoting measures at international level to deal with regional or world-wide environmental problems.

2. Community policy on the environment shall aim at a high level of protection taking into account the diversity of the situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay. Environmental protection requirements must be integrated into the definition and implementation of other Community policies.

In this context, harmonisation measures answering these requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic reasons, subject to a Community inspection procedure.

3. In preparing its action relating to the environment, the Community shall take account of:

- available scientific and technical data
- environmental conditions in the various regions of the Community;
- the potential benefits and costs of action or of lack of action;
- the economic and social development of the Community as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Community and the Member States shall cooperate with third countries and with competent international organisations. The arrangements for Community co-operation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with article 228.

The previous paragraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

Article 130s TEU

1. The Council, acting in accordance with the procedure referred to in article 189c and after consulting the Economic and Social Committee, shall decide what action is to be taken by the Community in order to achieve the objectives referred to in article 130r.

2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to article 100a, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, shall adopt:

-provisions primarily of a fiscal nature;

-measures concerning town and country planning, land use with the exception of waste management and measures of a general nature, and management of water resources;

-measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.

The Council may, under the conditions laid down in the proceeding subparagraph, define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority.

3. In other areas, general action programmes setting out priority objectives to be attained shall be adopted by the Council, acting in accordance with the procedure referred to in article 189b and after consulting the Economic and Social Committee.

The Council, acting under the terms of paragraph 1 or paragraph 2 according to the case, shall adopt the measures necessary for the implementation of these programmes.

4. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environment policy.

5. Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, the Council shall, in the act adopting that measure, lay down appropriate provisions in the form of:

-temporary derogations and/or

-financial support from the Cohesion Fund to be set up no later than 31

December 1993 pursuant to article 130d.⁵³⁰

Article 130t TEU

The protective measures adopted pursuant to article 130s shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with this Treaty. They shall be notified to the Commission.

Article 235 TEU: unaltered

Articles from the Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related Acts.

Article 2 TA (ex article 3)

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in articles 3 and 3a, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women,

530. The Cohesion Fund provides support to four Member States for environmental projects (European Commission, 1995, p.49)

sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic convergence, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

Article 3 TA (ex article 3)

For the purposes set out in article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein:

- (a) the prohibition, as between Member States, of customs duties and quantitative restrictions on the import and export of goods, and all measures having equivalent effect;
- (b) a common commercial policy
- (c) an internal market characterised by the abolition, as between Member States, of obstacles to the free movement of goods, persons, services and capital;
- (d) measures concerning the entry and movement of persons as provided for in Title IV;
- (e) a common policy in the sphere of agriculture and fisheries
- (f) a common policy in the sphere of transport
- (g) a system ensuring that the competition in the internal market is not distorted;
- (h) the approximation of laws of Member States to the extent required for the functioning of the common market;
- (i) the promotion of co-ordination between employment policies of the Member States with a view to enhancing their effectiveness by developing a co-ordinated strategy for employment
- (j) a policy in the social sphere comprising a European Social Fund;
- (k) the strengthening of economic and social cohesion;

- (l) a policy in the sphere of the environment;
 - (m) the strengthening of the competitiveness of Community industry;
 - (n) the promotion of research and technological development
 - (o) encouragement for the establishment and development of trans-European networks;
 - (p) a contribution to the attainment of a high level of health protection
 - (q) a contribution to education and training of quality and to the flowering of the cultures of the Member States;
 - (r) a policy in the sphere of development co-operation;
 - (s) the association of the overseas countries and territories in order to increase trade and promote jointly economic and social development;
 - (t) a contribution to the strengthening of consumer protection;
 - (u) measures in the spheres of energy, civil protection and tourism
2. In all the activities referred to in this article, the Community shall aim to eliminate inequalities and to promote equality between men and woman.

Article 6 TA (ex article 3c)

Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in article 3, in particular with a view to promoting sustainable development

Article 94 TA (ex article 100)

The Council shall, acting unanimously on a proposal from the commission and after consulting the European parliament and the Economics and Social Committee, issue directives for the approximation of such laws, regulation or administrative provisions of the Member States as directly affect the establishment or functioning of the common market.

Article 95 TA (ex article 100a)

1. By way of derogation from article 94 and save where otherwise provided in this treaty, the following provisions shall apply for the achievement of the objectives set out in article 14 (The internal market - RL). The Council shall, acting in accordance with the procedures referred to in article 251 and after consulting the Economics and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market.
2. Paragraph 1 shall not apply to fiscal provisions, to those relating to the free movement of persons not to those relating to the rights and interests of employed persons.
3. The Commission, in its proposals envisaged in paragraph 1 concerning health, safety and environmental protection and consumer protection, will take as a base a high level of protection, taking account in particular of any new development based on scientific facts. Within their respective powers, the European parliament and the council will also seek to achieve this objective.
4. If, after the adoption by the Council or by the Commission of a harmonisation measure, a Member State deems it necessary to maintain national provisions on grounds of major needs referred to in article 30, or relating to the protection of the environment or the working environment, it shall notify the Commission of these provisions as well as the grounds for maintaining them.
5. Moreover, without prejudice to paragraph 4, if, after the adoption by the Council or by the Commission of a harmonisation measure, a Member State deems it necessary to introduce national provisions based on new scientific evidence relating to the protection of the environment or the working environment on grounds of a problem specific to that Member state arising after the adoption of the harmonisation measure, it shall notify the Commission of the envisaged provisions as well as the ground for introducing them.

6. The Commission shall, within six months of the notification as referred to in paragraph 4 and 5, approve or reject the national provisions involved after having verified whether or not they are a means of arbitrary discrimination or a disguised restriction on trade between Member states and whether or not they shall constitute an obstacle to the functioning of the internal market. In absence of a decision by the Commission within this period the national provisions referred to in paragraphs 4 and 5 shall be deemed to have been approved. When justified by the complexity of the matter and in the absence of danger for human health, the Commission may notify the Member States concerned that the period referred to in this paragraph may be extended for a further period of up to six months.

7. When, pursuant to paragraph 6, a Member State is authorised to maintain or introduce national provisions derogating from a harmonisation measure, the Commission shall immediately examine whether to propose an adaptation to that measure.

8. When a Member State raises a specific problem on public health in a field which has been the subject of prior harmonisation measures, it shall bring it to the attention of the Commission which shall immediately examine whether to propose appropriate measures to the Council.

9. By way of derogation from the procedure laid down in articles 226 and 227, the Commission and any Member State may bring the matter directly to the Court of Justice if it considers that another Member State is making improper use of the powers provided for in this article.

10. The harmonisation measures referred to above shall, in appropriate cases, include a safeguard clause authorising the Member States to take, for one or more of the non-economic reasons referred to in article 30, provisional measures subject to a Community control procedure.

Article 96 TA (ex article 101)

Where the Commission finds that a difference between the provisions laid down by law, regulation, or administrative action in Member States is distorting the conditions of competition in the common market and that the resultant distortion needs to be eliminated, it shall consult the Member States concerned.

If such consultation does not result in an agreement eliminating the distortion in question, the Council shall, on a proposal from the Commission, acting by a qualified majority, issue the necessary directives. The Commission and the Council may take any other appropriate measures provided for in this treaty.

Article 97 TA (ex article 102)

1. Where there is a reason to fear that the adoption or amendment of a provision laid down by law, regulation or administrative action may cause distortion within the meaning of article 96, a Member State desiring to proceed therewith shall consult the Commission. After consulting the Member States, the Commission shall recommend to the States concerned such measures as may be appropriate to avoid the distortion in question

2. If a state desiring to introduce or amend its own provisions does not comply with the recommendation addressed to it by the Commission, other Member States shall not be required, in pursuance of article 96, to amend their own provisions in order to eliminate such distortion. If the Member State which has ignored the recommendation of the Commission causes distortion detrimental only to itself, the provisions of article 96 shall not apply

Article 174 TA (ex 130r)

1. Community policy on the environment shall contribute to pursuit of the following objectives:

- preserving, protecting and improving the quality of the environment;
- protecting human health;

- prudent and rational utilisation of natural resources
- promoting measures at international level to deal with regional or world-wide environmental problems.

2. Community policy on the environment shall aim at a high level of protection taking into account the diversity of situation in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at the source and that the polluter should pay.

In this context, harmonisation measures answering environmental protection requirements shall include where appropriate, a safeguard clause allowing the Member State to take provisional measures, for non-economic environmental reasons, subject to a Community inspection procedure.

3. In preparing its policy on the environment, the Community shall take account of:

- available scientific and technical data
- environmental conditions in the various regions of the Community
- the potential benefits and costs of action or lack of action;
- the economic and social development of the Community as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Community and the Member States shall co-operate with third countries and with the competent international organisations. The arrangements for Community co-operation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with article 300.

The previous paragraph shall be without prejudice to Member States competence to negotiate in international bodies and to conclude international agreements

Article 175 TA (ex 130s)

1. The Council, acting in accordance with the procedure referred to in article 251 and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Community in order to achieve the objectives referred to in article 174.

2. By way of derogation from the decision making procedure provided for in paragraph 1 and without prejudice to article 95, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt:

- provisions primarily of a fiscal nature;
- measures concerning town and country planning, land use with the exception of waste management and measures of a general nature, and management of water resources;
- measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.

The Council may, under the conditions laid down in the preceding paragraph, define those matters referred to in this paragraph on which decisions are taken by a qualified majority.

3. In other areas, general action programmes setting out priority objectives to be attained shall be adopted by the Council, acting in accordance with the procedure referred to in article 251 and after consulting the Economic and Social Committee and the Committee of the Regions.

The council, acting under the terms of paragraph 1 or paragraph 2 according to the case, shall adopt the measures necessary for the implementation of these programmes.

4. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environmental policy.

5. Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, the Council shall, in the act adopting that measure, lay down appropriate provisions in the form of:

-temporary derogations and/or

-financial support from the Cohesion Fund set up pursuant to article 161.

Article 176 TA (ex article 130t)

The protective measures adopted pursuant to article 175 shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with this Treaty. They shall be notified to the Commission.

References

Adler, J.H. (1998), A New Environmental Federalism, *Forum for Applied Research & Public Policy*, vol.13, 1998

Aftalion, F. (1999), Regulatory Competition, Extraterritorial Powers and Harmonization: The Case of the European Union, in: *Journal des Economistes et des Etudes Humaines*, Vol.9, nr.1, pp.83-105, March 1999

Anderson, K. and B. Blackhurst (eds.) (1992), *The Greening of World Trade Issues*, Harvester Wheatsheaf.

Arden-Clarke, C. (1993), An Action Agenda for Trade Policy Reform to Support Sustainable Development: A United Nations Conference on Environment and Development Follow-up, in D. Zaelke, P. Orbuch, and R. F. Housman (eds.), *Trade and the Environment; Law, Economics and Policy*, Centre for International Environmental Law, Island Press.

Asako, K. (1979), Environmental Pollution in an Open Economy, *The Economic Record*, Vol.55, nr.151, December 1979, pp.359-367

Barrett, S., (1993), Strategic Environmental Policy and International Competitiveness, in D. Zaelke, P. Orbuch, and R. F. Housman (eds.), *Trade and the Environment: Law, Economics and Policy*, pp.158-167, Center for International Environmental Law, Island Press.

Barrett, S. (1994), Strategic Environmental Policy and International Trade, *Journal of Public Economics*, nr.54, pp.325-338

Bohm, T., Russell, C.S. (1985), Comparative Analysis of Alternative Policy Instruments, in: Kneese, A.V., Sweeney, J.L. (eds.), Handbook of Natural Resource and Energy Economics, Vol.1, pp.395-460, Elsevier Science Publishing, Amsterdam

Boom, J.T. et al (1998), *Market Performance and Environmental Policy*, SEO report nr. 460, Amsterdam/Groningen

Brander, J. A. and B. J. Spencer (1985), Export Subsidies and Market Share Rivalry, *Journal of International Economics*, Nr.18, pp.83-100.

Calster, G., van, et al (1998), Amsterdam, the Intergovernmental Conference and greening the EU Treaty, *European Environmental Law Review*, January 1998.

Charnovitz, S. (1993), Environmental Harmonization and Trade Policy, in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.), *Trade and the Environment; Law, Economics and Policy*, Center for International Environmental Law, pp.267-286, Island Press

Delbeke, J., Bergman, H. (1998), *Environmental Taxes and Charges in the EU*, EUI working paper RSC no.98/22, San Domenico

Dijkstra, B. R. (1999), *The Political Economy of Environmental Policy: A Public Choice Approach to Market Instruments*, Cheltenham, UK, Edward Elgar.

Esty, D.C., Geradin, D. (2001), Regulatory Co-Opetition, in: Esty, D.C., Geradin, D., (eds.), *Regulatory Competition and Economic Integration: Comparative Perspectives*, Oxford University Press, 2001, pp.30-46

Ethier, W.J. (1988), *Modern International Economics*, 2nd edition, Norton

European Commission (1995), *Intergovernmental Conference 1996: Commission report for the Reflection Group*, Luxembourg

Faure, M. (2001), Regulatory Competition vs Harmonization in EU Environmental Law, in: Esty, D.C., Geradin, D., (eds.), *Regulatory Competition and Economic Integration: Comparative Perspectives*, Oxford University Press, 2001, pp.261-286

Folmer, H., Howe, C.W. (1991), Environmental Problems and the single European Market, *Environmental and resource economics*, nr.1, pp.17-41

Groeben, H., von der (1967), Zur Politik der Rechtsangleichung in der Europäischen Wirtschaftsgemeinschaft, *Zeitschrift für Rechtsvergleichung*, p.129

Groeben, H, von der, Boekh, H., von, Thiesing, J. (1974), *Kommentar zum EWG-Vertrag*, 2nd edition, Nomos Verlagsgesellschaft, Baden-baden

Haigh, N. (1992), The European Community and International Environmental Policy, in: Hurrell, A., Kingsbury, B. (eds.), *The International Politics of Environment: Actors, Interests and Institutions*, pp.228-249, Clarendon Press

Haigh, N. (ed.) (1992), *Manual of Environmental Policy: The EC and Britain*, Cartermill Publishing, London

Hansson, G. (1990), *Harmonization and International Trade*, Routledge, 1990

Helfand, G.E. (1991), Standards versus Standards: The Effects of Different Pollution Restrictions, *The American Economic Review*, June 1991, pp.621-623

Heyes, A. and B. R. Dijkstra (2001), Interest Groups and the Demand for Environmental Policy, in: T. Tietenberg and H. Folmer, *The International Yearbook of Environmental and Resource Economics 2001/ 2002*, Cheltenham, Edward Elgar.

Howe, C.W. (1993), The US Environmental Policy Experience: A Critique with suggestions for the European Community, *Environmental and Resource Economics*, nr.3, pp.359-379, Kluwer Academic Publishers

Huelshoff, M.G., Pfeiffer, T. (1991), Environmental policy in the EC; neo-functional sovereignty transfer or neo-realist gate-keeping?, *International Journal*, nr. XLVII, winter 1991-2, pp.136-158

Jans, J.H. (1990), *European Environmental Law*, Kluwer Law International, The Hague

Jans, J.H. (1994), *Europees Milieurecht in Nederland*, Groningen

Jans, J.H. (2000), *European Environmental Law*, reader, Rijksuniversiteit Groningen, Groningen.

Kapteyn, P. J. G., Verloren van Themaat, P. (1990), *Introduction to the law of the European communities after the coming into force of the Single European Act*, 2nd ed., Deventer Boston, Kluwer Law and Taxation Publishers

Kapteyn, P. J. G. and P. Verloren van Themaat (1987), *Inleiding tot het recht van de Europese Gemeenschappen*, 4th ed., Deventer, the Netherlands, Kluwer.

Kennedy, P. (1994), Equilibrium Pollution in Open Economies, in: *Journal of Environmental Economics and Management*, 27, pp. 49-63

Klaassen, G. (1996), *Acid Rain and Environmental Degradation, The Economics of Emission Trading*, Edward Elgar Publishing

Kryazhinskii, A., Nentjes, A., Shibayev, S., Tarasyev, A. (2000), A Game Model of Negotiations and Market Equilibria, *Journal of Mathematical Sciences*, nr.100/6, pp.2601-2612

Lauwaars, R. H., and J. M. Maarleveld (1987), *Harmonisatie van wetgeving in Europese organisaties*, Europese Monografieën 33, Deventer, the Netherlands, Kluwer.

Leonard, H. (1988), *Pollution and the Struggle for the World Product*, Cambridge, Cambridge University Press

Liefferink, J.D. (1996), *Environment and the nation state. The Netherlands, the European Union and acid rain*, Manchester/New York, Manchester University Press

Lloyd, P.J. (1992), The problem of optimal environmental policy, in: Anderson, K. and B. Blackhurst (eds.), *The Greening of World Trade Issues*, pp.49-72, Harvester Wheatsheaf

Mäler, K.G. (1990), International Environmental Problems, *Oxford Review of Economic Policy*, 6.

Markusen, J. R., E. R. Morey, and N. D. Olewiler (1995), Competition in Regional Environmental Policies When Plant Locations Are Endogenous, *Journal of Public Economics*, 56, pp.55-77

Morris, R. J. (1993), A Business Perspective on Trade and the Environment, in D. Zaelke, P. Orbuch, and R. F. Housman (eds.), *Trade and the Environment: Law, Economics and Policy*, Center for International Environmental Law, Island Press

Nentjes, A. (1993), Hoe schoon is de EG: het milieubeleid, in: J. Muijsken and L. L. G. Soete (eds.), *Maastricht 1991 kritisch beschouwd*, Preadviezen van de Koninklijke Vereniging voor de Staathuishoudkunde 1993, pp. 59-87, Utrecht, Lemma

Nentjes, A. (1994), Control of Reciprocal Transboundary Air Pollution and Joint Implementation, in: G. Klaassen and F. Forsund (eds.), *Economic Instruments for Air Pollution Control*, pp. 121-132, Dordrecht, the Netherlands, Kluwer

Oates, W., and R. Schwab (1988), Economic Competition among Jurisdictions: Efficiency enhancing or Distortion Inducing?, *Journal of Public Economics*, 35, pp.333-54

Peltzman, S. C. (1976), Toward a More General Theory of Regulation, *Journal of Law and Economics*, nr.19, pp. 211-240

Porter, M. E. (1990), *The Competitive Advantage of Nations*, New York, The Free Press.

Porter, M., (1991), America's Green Strategy, *Scientific American*, p.168

Rauscher, M., (1994), *On ecological Dumping*, Oxford Economic Papers, 46, pp.822-840

Rauscher, M. (1995), Environmental Regulation and the Location of Polluting Industries, *International Tax and Public Finance*, 2(2), pp.229-245

Rauscher, M. (1997), *International Trade, Factor Movements and the Environment*, Oxford, Clarendon.

Rehbinder, E., Stewart, R. (1985), *Environmental Protection Policy*, European University Institute, Walter de Gruyter, Berlin

Revesz, R. (1992), Rehabilitating Interstate Competition: Rethinking the Race for the Bottom Rational for Federal Environmental Regulation, *New York University Law Review*, 1992, pp.1210-1254

Ricardo., D. (1817) *On the Principles of Political Economy and Taxation*

Richardson, J. D. (1990), The New Political Economy of Trade Policy, in: P. R. Krugman (ed.), *Strategic Trade Policy and the New International Economics*, Cambridge, MA, MIT Press.

Sevenster, H.G., (2000), The Environmental guarantee after Amsterdam: does the emperor have new clothes?, in: Somsen, H., (ed.), *Yearbook of European Environmental Law*, pp.292-310, Oxford University Press

Sevenster, H.G. (1993), Preface - The International Approach to Common Environmental Threats and the Example of the European Community, *Ecology Law Quarterly*, vol.20, nr.1

Siebert, H. (1995), *Economics of the Environment: Theory and Policy*, 4th ed. Berlin: Springer Verlag

Snape, R. (1992), The Environment, International Trade and Competitiveness, in: Anderson, K. and B. Blackhurst (eds.), *The Greening of World Trade Issues*, Harvester Wheatsheaf

Spaak, H. (1956), Comite intergouvernemental cree par la conference de Messine, *Rapport des Chefs de Delegation aux Ministres des Affaires Etrangeres*, Bruxelles

Stigler, G. J. (1971), The Theory of Economic Regulation, *Journal of Economics and Management*, 2, pp.3-21

Tiebout, C. (1956), A Pure Theory of Local Expenditures, *Journal of Political Economy*, 64, pp.416-424

Trebilcock, M. and R. Howse (1998), Trade Liberalization and Regulatory Diversity: Reconciling Competitive Policies, *European Journal of Law and Economics*, 6(1), pp.5-39.

Ulph, A.M. (1992), The choice of Environmental Policy Instruments and Strategic International Trade, in: Pethig, R., (ed.), *Conflicts and Cooperation in Managing Environmental Resources*, Berlin, Springer Verlag

Ulph, A.M. (1994), Strategic Environmental Policy and International Competitiveness, in H. Siebert (ed.), *Elements of Rational Environmental Policy*, Tübingen.

Ulph, A.M. (1996), Environmental Policy and International Trade when Governments and Producers Act Strategically, *Journal of Environmental Economics and Management*, **30**, 3, 265-81

Ulph, A.M. (1997), International Trade and the Environment: A Survey of Recent Economic Analysis, in: H. Folmer and T. Tietenberg (eds.), *The International Yearbook of Environmental and Resource Economics 1997/1998*, pp. 205-242, Aldershot, Edward Elgar.

Urwin, D.W. (1991), *The Community of Europe; A History of European Integration since 1945*, Longman Group, London

Vaubel, R. (1992), The Political Economy of Centralisation and the European Community, *Journal des Economistes et des Etudes Humaines*, volume 3(1), 1992, pp.11-48

Viscusi, W.K., Vernon, J.M., Harington Jr., J.E. (2000), *Economics of Regulation and Antitrust*, Cambridge, MA, MIT Press

Vogel, D. (1995a), *The Relationship between Environmental and Consumer Regulation and International Trade*, Jean Monnet Chair Papers, Robert Schuman Centre, European University Institute

Vogel, D. (1995b), *Trading Up: Consumer and Environmental Regulation in a Global Economy*, Cambridge MA, Harvard University Press

Vogelaar, Th.W. (1974), Het nader tot elkaar brengen van de national wetgeving bij toepassing van het Verdrag van Rome, *S.E.W.*, nr.5, May 1974

Wasmeier, M. (2001), The Integration of Environmental Protection as a General Rule for Interpreting Community Law, *Common Market Law Review*, nr.38, pp.159-177, Kluwer Law International, Nederland

Weale, A. (1996), Environmental rules and rulemaking in the European Union, *Journal of European Public Policy*, 3:4, December 1996, pp.594-611

Withagen, C.A. (1999), Milieubeleid en concurrentievermogen, *Milieu* 1999/1

Yandle, B. (1999), Public Choice at the Intersection of Law and Economics, *European Journal of Law and Economics*, 8(1), pp.5-29

Other literature used

Andersen, P., Jeppesen, I. (1998), Coordination of Local Pollution Control in a Federal System, presented at the 1998 World Congress of Environmental and Resource Economists, Venice

Andriessen, J.E. (1968), *Economie in theorie en praktijk*, Elsevier, Amsterdam

Antola, E. (1980), *Political Harmonization of Economic Integration; Competition Policy as an Indicator of Political Integration in the EEC in 1958-1972*, Turku

Arden-Clarke, C. (1993), Environment, competitiveness and countervailing measures', in: *Environmental Policies and Industrial Competitiveness*, pp.150-157, OECD, Paris

Ashworth, J., Papps, I. (1991), Equity in European Community Pollution Control, in: *Journal of Environmental Economics and Management*, nr.20, pp.46-54

Barrett, S. (1998), On the Theory and Diplomacy of Environmental Treaty-Making, in: *Environmental and Resource Economics*, 11(3-4), pp.317-333, Kluwer Academic Publishers

Baumol, W.J. (1971), *Environmental Protection, International Spillovers and Trade*, Wicksell Lectures 1971, Almqvist & Wicksell, Stockholm

Baumol, W.J., Oates, W.E. (1988), *The theory of environmental policy*, 2nd edition, Cambridge University Press

Van Beers, C. (1998), Labour Standards and Trade Flows of OECD Countries, *The World Economy*, Vol.21, nr.1, January, pp.57-73.

Beers, van, C.P., Van den Bergh, J.C.J.M.(1995), Internationale handel, milieu en de GATT/WHO, *Milieu*, nr.2, pp.56-64

Bennet, G., E.U.von Weizsäcker, D.Baldock, T.Lavoux, J.P.Hannequart, G.Maier-Riguad, G.Vonkeman (1989), *The internal market and environmental policy in the Federal Republic of Germany and the Netherlands*, Institute for European Environmental Policy, Arnhem

Bennett, G. (1990), The Implementation of EC Environmental Directives: The Gap between Law and Practice, *Milieu*, 1990/6, p.174

Bergh, R., van den (1998), Subsidiarity as an Economic Demarcation Principle and the Emergence of European Private Law, *Maastricht Journal of European and Comparative Law*, 1998

Bergh, J. van den, C. van Beers (1996), *The Impact of Environmental Policy on Trade Flows: An Empirical Analysis*, Research Memorandum 96.05, Faculty of Law, Department of Economics, Rijksuniversiteit Leiden

Beuve-Mery (1967), J.J., L'article 100 du Traité C.E.E. et ses applications', *Revue trimestrielle du droit européen*, 1967, p.845

Beuve-Mery (1970), J.J., Les applications des articles 100, 101 et 102 du traité de la C.E.E.; de 1958 à 1970, *Revue trimestrielle du droit européen*, 1970, p.303

Bhagwati, J. (1996), The demands to reduce domestic diversity among trading nations, in: Bhagwati, J.N., Hudec, R.E. (Eds.), *Fair Trade and Harmonization; Prerequisites for free trade?* Volume 1: Economic Analysis, Massachusetts Institute of Technology, 1996

Bhagwati, J., Srinivasn, T.N.(1996), Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?, in: Bhagwati (1996), J.N., Hudec, R.E. (Eds.), *Fair Trade and Harmonization; Prerequisites for free trade?* Volume 1: Economic Analysis, Massachusetts Institute of Technology, 1996

Bhagwati, J. (1993), Trade and Environment: The False Conflict?, in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.), *Trade and the Environment; Law, Economics and Policy*, Center for International Environmental Law, Island Press, pp.159-190

Boehmer-Christiansen, S., Skea, J. (1991), *Acid Politics: Environmental and Energy Policies in Britain and Germany*, London, Belhaven Press

Bommer, R. (1996), The Environmental Regulation of Production Processes in the European Union: A Political-Economy Approach, *Aussenwirtschaft*, 51(IV), pp.559-582

Bovenberg, L., Cnossen, S., (eds.) 1995, *Public Economics and the Environment in an Imperfect World*, Natural Resource management and Policy 8, Kluwer

Braden, J.B., Folmer, H., Ulen, T.S. (1996), *Environmental Policy with Political and Economic Integration*, Edward Elgar Publishing

Brinkhorst, L.J. (1991), Subsidiarity and European Environmental Policy', in: 'Subsidiarity: The Challenge of Change', Proceedings of the Jacques Delors Colloquium 1991 organised by the European Institute of Public Administration, p.89

Brinkhorst, L.J., Van Buitenen, A. (1994), *Focus on Environment and Trade: EU and US Strategies in the Nineties*, Europa Instituut, 1994

Brown, D.K., Deardorff, A.V., Stern, R.M. (1996), International Labor standards and Trade: A Theoretical Analysis, in: Bhagwati, J.N., Hudec, R.E. (Eds.), *Fair Trade and Harmonization; Prerequisites for free trade?* Volume 1: Economic Analysis, Massachusetts Institute of Technology, p.227

Buller, H., Lowe, P., Flynn, A. (1993), National responses to the Europeanisation of environmental policy: a selective review of comparative research', in: Liefferink et al (eds.), *European Integration and Environmental Policy*, Belhaven Press, London

Butterworths Competition Law, Issue 0, July 1991, Butterworth and co, London

Calster, G., van, et al (1998), Amsterdam, the Intergovernmental Conference and greening the EU Treaty, *European Environmental Law Review*, January 1998

A Campo, E. (1991), Report of the Panel Discussion Dealing with the European Environmental Policy, in: *Subsidiarity: The Challenge of Change*, Proceedings of the Jacques Delors Colloquium 1991 organised by the European Institute of Public Administration, p.115

Carbaugh, R.J. (1992), *International Economics*, Wadsworth Publishing Company, 4th edition

Castells, N. (1994), *Distributional conflicts as constraints on national implementation and international harmonization of environmental policy*, mimeo

Charnovitz, S. (1994), Environmental Harmonization and Trade Policy, in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.), *Trade and the Environment; Law, Economics and Policy*, Center for International Environmental Law, pp.267-286, Island Press

Charnovitz, S., (1994), Free Trade, Fair Trade, Green Trade; Defogging the Debate, *Cornell International Law Journal*, vol.27, pp.460-525

Cofala, J. Amann, M. (2001), *Emission Reductions from Existing Large Combustion Plants Resulting from the Amendment of the Large Combustion Plants Directive*, Report to the European Commission, DG ENV, IIASA, Laxenburg, January 2001

Coleman, M. (1994), Environmental Barriers to Trade and European Community Law', in: *Environmental Regulation and Economic Growth*, Boyle, A.E. (Ed.), p.131, Clarendon Press, Oxford, 1994

Commission of the European Communities (1972), Communication from the Commission to the Council on a European Communities' programme concerning the environment, *Supplement 5/72, Bulletin of the European Communities*, Brussels

Crombez, C. (1992), *The Co-Decision Procedure in the European Union*, paper, January 22 1996

Czychowski, M. (1982), Die EG-Grundwasserschutz-Richtlinie and ihre Auswirkungen auf das Deutsche Recht, *Zeitschrift fur Wasserrecht*, 21/1982, Heft 3/82, p.323

Dean, J.M. (1992), Trade and the Environment: A survey of the Literature, in P.Low (ed.) *International Trade and the Environment*, World Bank Discussion Paper 159, Washington DC, The World Bank.

Dijkstra, B. R. (1998), *The International Dimension of Environmental Policy Instruments*, ECOF, Research memorandum 18, Department of Economics and Public Finance, Faculty of Law, Groningen University, Groningen.

Delors, J. (1991), The Principle of Subsidiarity: Contribution to the Debate', in: *Subsidiarity: The Challenge of Change*, Proceedings of the Jaques Delors Colloquium 1991 organised by the European Institute of Public Administration, p.7

DG.XI, *The State of the Environment in the European Community* (accompanying document to the proposal for APE1993)

DG Voorlichting, Communicatie, Cultuur (1990), *Het milieubeleid in de Europese Gemeenschap*, Europese Documentatie, Brussel

Dixit, A., Norman, V. (1980), *Theory of International Trade; A dual, general equilibrium approach*, Cambridge Economic Handbooks

Downing, P.B., (1982), Cross-national comparisons in environment protection introduction to the issues, *Policy Studies Journal*, II, pp.39-43

Downing, P.B. (1984), *Environmental Economics and Policy*, Boston, 1984

Economic Commission for Europe (1986), *Transboundary Air Pollution; Effects and control*, Air Pollution Studies 3, United Nations, New York,

Stibbe Simont, Monahan Duhot (1994), *Environment and Europe - European Union environmental law and policy and its impact on industry*, Kluwer Law and Taxation Publishers, Deventer

Energy Committee, House of Commons (1990), *The Flue Gas Desulphurization Programme*, Third Report, June 1990

Esty, D.C. (1994), *Greening the GATT; Trade, Environment and the Future*, Institute for International Economics, Washington

Ethier, W.J. (1984), 'Higher Dimensional Issues in Trade Theory', in: *Handbook of International Economics I*, Elsevier Science Publishers

European Commission (1996), *Intergovernmental Conference 1996: Reinforcing and preparing for enlargement*, Commission opinion, Luxembourg

Europese Commissie (1997), *De Vijftien Lidstaten van Europa: kerncijfers*, Bureau voor officiële publicaties der Europese gemeenschappen, Luxembourg

Faure, M., Lefevere, M.J. (1994), *Some Public Interest and Private Interest Aspects of Environmental Standard Setting in Europe*, first draft, METRO Maastricht, March 1994

- Folmer, H., and Musu, I. (1992), Transboundary Pollution Problems, Environmental Policy and International Cooperation: An Introduction, *Environmental and Resource Economics*, nr.2, 1992, p.107
- Gil, J., Folmer, H. (1995), *International Environmental Problems and the European Union*, July 1995
- Gilhuis, P.C. (1984), De Verhouding van het Europees milieurecht tot het Nederlands Milieurecht, *De Europese Gemeente*, nr.2, pp.13-16
- Golub, J. (1996), *Why Did They Sign? Explaining EC Environmental Policy Bargaining*, EUI Working Paper, RSC no.96/52, 1996
- Golub, J. (1998), *Global Competition and EU Environmental Policy: An Overview*, EUI working paper RSC no.98/1, San Domenico di Fiesole
- Halkos, G.E. (1994), Optimal Abatement of Sulphur Emissions in Europe, *Environmental and Resource Economics*, no.4, pp.127-150
- Hayes-Renshaw, F., Wallace, H. (1995), Executive Power in the European Union: the functions and limits of the Council of Ministers, *Journal of European Public Policy*, vol.2, nr.4, December 1995, pp.559-582
- Heerings, H.(1993), The Role of Environmental Policies in Influencing Patterns of Investment of Transnational Corporations: Case Study of the Phosphate Fertiliser Industry, in: OECD, *Environmental Policies and Industrial Competitiveness*, Paris.

Himanen, V., Nijkamp, P., and Padjen, J. (1991), *Environmental Quality and Transport Policy in Europe*, Research Memorandum 1991-7, Vrije Universiteit Amsterdam, December 1991

Holland, M., Krewitt, M. (1997), *Benefits of an Acidification Strategy for the European Union*, DG.XI, European Commission, Brussels

House of Lords (1978) Select Committee on the European Communities, *Approximation of laws under article 100 of the EEC Treaty*, 22nd report, Session 1977-78, London

Høyer, K.G. (1993), The Role of the Nordic Environmental Policies in the European Union: Highest Common Standard or Lowest Common Denominator?, *European Environment*, vol.3, part 6, December 1993, pp.2-7

Hudec: Introduction to the Legal Studies (1996), in: Bhagwati, J.N., Hudec, R.E. (Eds.), *Fair Trade and Harmonization; Prerequisites for free trade?* Volume 1: Economic Analysis, Massachusetts Institute of Technology, 1996

Hurrell, A., Kingsbury, B. (Eds) (1992), *The International Politics of the Environment: Actors, Interests and Institutions*, Clarendon Press, Oxford

Johnson, S.P., Corcelle, G. (1995), *The Environmental Policy of the European Communities*, 2nd edition, International Environmental Law & Policy Series, Kluwer Law International, London,

Karadegolou, P., Ikweu, T., Skea, J. (1995), Environmental Policy in the European Union, in: Folmer, H., Landis Gabel, H., Opschoor, H. (eds.),

Principles of Environmental and Resource Economics: A guide for students and Decision-Makers, Edward Elgar Publishing Limited,

Kemp, M.C., Long, N.V. (1984), Natural Resources in Trade Models, in: *Handbook of International Economics I*, Elsevier Science Publishers, 1984

Kingsbury, B. (1994), Environment and Trade: The GATT/WTO Regime in the International Legal System, in: Boyle, A.E. (ed.), *Environmental Regulation and Economic Growth*, Clarendon Press, Oxford

Kiss, A., Shelton, D. (1993), *Manual of European Environmental Law*, Grotius Publications, Cambridge University Press

Klepper, G. (1994), *Trade implications of environmental taxes*, working paper 628, The Kiel Institute of World Economics, April 1994

Knoepfel, P., Weidner, H., (1986), Explaining differences in the performance of clean air policies, *Policy and Politics*, 14, pp.71-91

Koppen, I.J. (1988), *The European Community's environmental policy: From the Summit in Paris, 1972 to the Single European Act, 1987*, EUI Working Paper, San Domenico di Fiesole,

Korah, V. (1990), *An Introductory Guide to EEC Competition Law and Practice*, 4th edition, Oxford

Kox, H.L.M. (1993), *International Commodity-Related Environmental Agreements and the GATT System of Trade Rules*, Research Memorandum 1993-

76, Department of Economics and Econometrics, Free University Amsterdam,
December 1993

Krewitt, W., Holland, M., Trukenmüller, A., Mayerhofer, P., Heck, T., Friedrich, R. (1998), *Comparing Costs and Environmental Benefits of an Acidification Strategy for the European Union*, paper presented at the 1998 World Congress of Environmental and Resource Economists

Krugman, P.R., Obstfeld (1991), M., *International Economics; Theory and Policy*, 2nd edition, HarperCollins Publishers

Lamgille, B.A. (1996), General Reflections on the Relationship of Trade and Labor (Or: Fair Trade Is Free Trade's Destiny), in: Bhagwati, J.N., Hudec, R.E. (Eds.), *Fair Trade and Harmonization; Prerequisites for free trade? Volume 2: Legal Analysis*, pp.231-261, Massachusetts Institute of Technology

Larsen, B.M. (1997), Economic Impacts of Reducing NO_x Emissions in Norway, *Environmental and Resource Economics*, no.9, pp.125-132

Lenaerts, K. (1994), The principle of subsidiarity and the environment in the European Union: Keeping the balance of federalism, *Fordham International Law Journal*, Volume 17, pp.846-895

Leveque, F. (ed.) (1996), *Environmental Policy in Europe*, Edward Elgar Publishing

Liberatore, A. (1991), Problems of transnational policymaking: Environmental policy in the European Union, *European Journal of Policy Research*, nr19, pp.281-305

Liefferink, J.D. & W. Brussaard (1993), Introductie. Internationaal milieubeleid in zijn context, in: G. Spaargaren, A.P.J. Mol, W. Brussaard en W.J. Kakebeeke (red.), *Internationaal Milieubeleid* (Den Haag: SDU Uitgeverij), pp. 3-18

Liefferink, J.D., Lowe, P.D., Mol, A.P.J. (eds.) (1993), *European Integration and Environmental Policy*, Belhaven Press, London

Livernois, J., McKenna, C.J. (1997), *Truth of Consequences? Enforcing Pollution Standards*, paper presented at the 1997 EAERE Conference.

Mäler, K.G., (1989), The acid rain game, in: Folmer, H., Van Ierland, E. (eds), *valuation methods and policy-making in environmental economics*, Elsevier, Amsterdam

Mann, D.E. (Ed) (1982), *Environmental Policy Implementation*, Lexington Books, Lexington, Mass

Markusen, J. R., E. R. Morey, and N. D. Olewiler (1993), Environmental Policy When Market Structure and Plant Locations Are Endogenous, *Journal of Environmental Economics and Management*, nr.24, pp.69-86

McKenzie, M.B. (1994), European Community Law and the Environment, in: *Environmental Regulation and Economic Growth*, Byyle, A.E. (ed.), pp.71-97, Clarendon Press, Oxford, 1994

Murdoch, J.C., Sandler, T., Sargent, K. (1997), A tale of two collectives: sulphur versus nitrogen oxides emission reduction in Europe, *Economica*, no.64, pp.281-301

Pappas, S.A., The Legal Basis for Action to be Taken by the European Community in the Field of Environment', in: *Subsidiarity: The Challenge of Change*, Proceedings of the Jaques Delors Colloquium 1991 organised by the European Institute of Public Administration, p.119

Patterson, E.(1992), GATT and the Environment: Rules change to minimize adverse trade and environmental effects, *Journal of World Trade*, p.100

Pearce, D. (1992), *Should the GATT be reformed for Environmental Reasons?*, CSERGE Working Paper GEC 92-06, University College London and University of East Anglia.

Pearson, C. S. (1993), The Trade and Environment Nexus: What is New Since '72? In D. Zaelke, P. Orbuch, and R. F. Housman (eds.), *Trade and the Environment: Law, Economics and Policy*, pp. 23-32. Center for International Environmental Law, Island Press.

Porter M., Van der Linde, C. (1995), Towards a New Conception of the Environment-Competitiveness relationship, *Journal of Economic Perspectives*, vol.9, pp.97-118

Puéchal, J. (1993), Europese milieu- en energiepolitiek bedreiging voor concurrentiepositie, *VNCI jubileumnummer*, June 3, p.65

Rauch-Kallat, M. (1994), Im Umweltbereich treibt Österreich die EU an, *Wiener Stadtblatt*, May 1994, p.5

Sands, P. (1991), European Community Environmental Law: The evolution of a Regional Regime of International Environmental Protection, *The Yale Law Journal*, volume 100, pp.2511-2523

Sauter, W.(1997), *Competition Law and Industrial Policy in the EU*, Clarendon Press, Oxford

Schaefer, G.F. (1991), The Subsidiarity Principle and European Environmental Policy, in: *Subsidiarity: The Challenge of Change*, Proceedings of the Jaques Delors Colloquium 1991 organised by the European Institute of Public Administration, p.101

Sevenster, H.G. (1992), *Milieubeleid en Gemeenschapsrecht: Het Interne Juridische Kader and de Praktijk*, Europese Monografien 38, Deventer

Sevenster, H.G.(1993), Preface - The International Approach to Common Environmental Threats and the Example of the European Community, *Ecology Law Quarterly*, vol.20, nr.1

Siebert, H. (1974), Environmental Protection and International Specialisation, *Weltwirtschaftliches Archiv*, 110, pp.494-508

Siebert, H. (1991), Environmental policy and European integration, in: Siebert, H. (ed.) *Environmental Scarcity: The International Dimension*, pp. 57-70, Tübingen

Siebert, H.(1992), Europe 1992. Decentralizing Environmental Policy in the Single Market, *Environmental and Resource Economics*, 1, pp.271-287

Skea, J. (1995), Acid Rain: A Business-as-Usual Scenario, in: Gray, T.S.(ed.), *UK Environmental Policy in the 1990s*, pp.189-209, MacMillan Press Ltd

Stewart R.B. (1993), Environmental Regulation and International Competitiveness, *The Yale Law Journal*, pp.2039-2106, volume 102, 1993

Steward R.B. (1995), *Markets versus Environment*, Jean Monet Chair Papers 19, The Robert Schuman Centre at the European University Institute, San Domenico di Fiesole

Stibbe Simont Monahan Duhot (1994), *Environment and Europe: European Union environmental law and policy and its impact on industry*, Kluwer, Deventer

Task Force 'Environment and the Internal Market' (1990), *1992: The Environmental Dimension*, task force report on the environment and the internal market, Economica Verlag, Bonn

Toth A.G. (1992), The Principle of Subsidiarity in the Maastricht Treaty, *Common Market Review*, vol.29, pp.1079-1105, Kluwer

Van Long, N., Siebert, H. (1991), Institutional Competition Versus ex-ante Harmonization: The Case of Environmental Policy, *Journal of Institutional and Theoretical Economics*, no.147/2, pp.296-311

Verbruggen, H., and Kuik, O., *Environmental Policies, International Competitiveness and the WTO Agenda*, draft version presented at the PSG environment

Verbruggen, H., Kuik, O. (1997), WTO Ministerial Conference in Singapore : Environmental Diversity versus Harmonisation, *Environmental and Resource Economics*, nr.10, pp.405-413, Kluwer Academic Publishers, The Netherlands

Vogel, D. (1995a), *The Relationship between Environmental and Consumer Regulation and International Trade*, Jean Monnet Chair Papers, Robert Schuman Centre, European University Institute, 1995

Von Moltke (1993) European Perspective on Trade and the Environment', in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.), *Trade and the Environment; Law, Economics and Policy*, Center for International Environmental Law, Island Press, Washington

VROM (1990), *Environmental Policy in a Federal System; The United States and the European Community*, Publicatiereeks milieubeheer, nr.1990/3

Wathen, T. (1993), A Guide to Trade and the Environment', in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.), *Trade and the Environment; Law, Economics and Policy*, Center for International Environmental Law, Island Press

Weatherill, S. (1994), Beyond Preemption? Shared competence and constitutional Change in the European Community, in: O'Keefe, T., and Twomey, P.M. (eds.), *Legal Issues of the Maastricht Treaty*, p.13, Chancery Law Publishing

Winter, G. (ed.) (1996), *European Environmental Law - A Comparative Perspective*, Tempus series, Dartmouth Publishing Company, England

Wirth, D.A.(1993), The international trade regime and the municipal law of federal states: how close a fit?, in: Zaelke, D., Orbuch, P., Housman, R.F. (Eds.),

Trade and the Environment; Law, Economics and Policy, Center for International Environmental Law, Island Press

Xing, Y., and Kolstad, C.D. (1995), Do Lax Environmental Regulations Attract Foreign Investment?, Working Paper in Economics 6-95, May 1995, University of California, Santa Barbara, Dept of Economics.