The Programmatic Approach; a Flexible and Complex Tool to Achieve Environmental Quality Standards

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1. Introduction

Environmental quality standards are an important instrument by which to achieve European environmental policy aims. These standards determine the quality of the receiving environment as they set out allowable levels of pollution in water, air and soil. They can be very strict in the sense that the standards must be attained at a certain point in time, especially when limit values are concerned. This contribution focuses on the integrated or programmatic approaches at both the European and national level, which are used as a tool to attain environmental quality standards. These approaches leave much room for flexibility with respect to the choice of measures to be adopted in order to achieve the quality standards. This results in freedom for the Member States, or at the national level for the competent authorities, to weigh the different environmental, spatial and economic interests at stake. However, difficulties can arise while adopting the integrated or programmatic approach. Instruments or measures that are laid down in other relevant EU legislation can for instance restrict flexibility in the choice of measures. This can lead to specific legal challenges, like the issue of who would be responsible for the costs of additional measures. As a consequence, achieving the environmental quality standards can become a complex matter.

The aim of this contribution is to explore the legal challenges that can arise while using the integrated or programmatic approach in order to achieve environmental quality standards. First, we will go into the environmental quality standards as an instrument to obtain environmental objectives (Section 2). Then we will focus on the various programmatic and integrated approaches at the European and national level. At the national level we will specifically highlight the Dutch approach (Section 3). Subsequently, we examine the legal challenges in these approaches (Section 4). The exploration in this article will be concluded by addressing the difficulties and opportunities for the programmatic approach (Section 5).

2. Environmental quality standards

Traditionally, environmental quality standards are used as an environmental policy instrument to obtain environmental objectives. In general, they prescribe a certain quality of the environment that must be
achieved within a certain period. These standards complement the instrument of emission limit values that regulate a specific source of pollution. Emission limit values impose restrictions on individual activities, whereas the quality standards apply to the environmental quality of a certain area.

Environmental quality standards can be found in various environmental directives. Examples are the limit values in the Air Quality Directive\(^1\) and the quality standards based upon the Water Framework Directive.\(^2\) However, a uniform definition of environmental quality standard cannot be found in European legislation. This is reflected in the various ways these standards are laid down in the different directives. The quality standards can state a maximum quantitative level of allowable pollution, but they can also be defined in a more qualitative way (like the obligation to achieve ‘a good ecological status’ of surface water).\(^3\) The standards often set out an obligation to achieve a certain result.\(^4\) Yet, the legal meaning can differ. Some standards are very strict and may not be exceeded after a certain period, like the ‘limit values’ for air quality.\(^5\) Other standards leave some room for deviation, like the ‘target values’ for air quality which have to be attained ‘where possible’\(^6\).

The legal status of the environmental quality standards cannot be determined by the way they are named. Even when the same terms are used in various directives, the interpretation can be different. For instance, limit values in the Air Quality Directive should, according to the definition, ‘be attained within a given period and not to be exceeded once attained’; while the Noise Pollution Directive (2002/49) defines limit values as ‘a value (...) as determined by the Member State, the exceeding of which causes competent authorities to consider or enforce mitigation measures’.\(^7\) Although the directives use the same wording, the definitions show a difference between the legal status of the limit values. The Air Quality Directive is an example of a directive where the environmental quality standards are set at the European level. Other directives, like the Noise Pollution Directive and the Seveso II Directive (96/82), provide for obligations to set quality standards at the national level.\(^8\) Regarding the quality of soil (land use) there are no provisions in European law to set quality standards.\(^9\) Especially the principle of subsidiarity – as laid down in Article 5 TEU – leads to a reluctance to set environmental quality standards at the European level. According to this principle, the European Union only acts if the objectives of the proposed action cannot be sufficiently achieved by the Member States themselves. When the environmental issue at stake does not have any so-called ‘cross-border effects’, it is more difficult to pass the subsidiarity test.\(^10\) This argument has been used for not setting (European) quality standards for noise and soil pollution. Yet, the subsidiarity principle leaves room for (political) discussion and one could also argue that the standards for noise or soil should be set at the European level because of the health impact of noise and soil pollution.\(^11\)

The legal background of the environmental quality standards influences their legal meaning and the possibilities to deviate from these standards. The EU environmental quality standards have to be transposed into national law. They set out an outer boundary and leave less or no room for deviation at the national level, especially when limit values are concerned. When there are no EU limit values and the standards are set at the national level (e.g. standards for noise nuisance), there is more room for a flexible approach. The differentiation in legal background and legal interpretation can make the adaptation of

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1. Air Quality Directive 2008/50.
2. Water Framework Directive 2000/60.
3. See Art. 4 Water Framework Directive. J.J.H. van Kempen, ‘Countering the Obscurity of Obligations in European Environmental Law: An Analysis of Article 4 of the European Water Framework Directive’, 2012 Journal of Environmental Law, doi: 10.1093/jel/eqs020.
4. See for standards regarding water quality for instance: H.F.M.W. van Rijswick, Moving Water and the Law, 2008, p. 29. A classification of the different types of obligations of result (drawn up by J.J.H. van Kempen) can be found in Dutch in C.W. Backes et al. (eds.), Effectgerichte normen in het omgevingsrecht. De betekenis van kwaliteitsseisen, instandhoudingsdoelstellingen en emissieplafonds voor de bescherming van milieu, water en natuur, 2012, pp. 20-25.
5. Art. 2 (5) Air Quality Directive.
6. Art. 2 (9) Air Quality Directive.
7. Art. 2 (5) Air Quality Directive.
8. Art. 3 sub. s Noise Pollution Directive.
9. See Art. 8 Noise Pollution Directive and Art. 12 Seveso II Directive.
10. A proposal for a Soil Framework Directive COM(2006) 232 was blocked by the Member States.
11. J.J. Jans & H.H.B. Wedder, European Environmental Law, 2012, pp. 15-17.
12. See for a discussion e.g. F. McManus, ‘European Noise Law’, in R. Macrory (ed.), Reflections on 30 Years of EU Environmental Law. A high level of Protection?, 2006, pp. 378-381.
the quality standards somewhat complex. This can become especially visible in areas where there is an accumulation of environmental problems, like urban areas, where different policies and obligations are applicable.13

The Member States must ensure compliance with EU environmental quality standards. The directives often leave flexibility in the choice of how to meet the quality standards.14 In many cases a programme or plan is promoted as a tool to attain these standards. The next section will address the programmatic and integrated approach where such a plan or programme plays a central role.

3. Programmatic and integrated approaches

3.1. Programmatic approaches at the European level

EU environmental directives provide more and more for a programmatic approach under which the Member States enjoy a great deal of flexibility with respect to the choice of measures adopted in order to achieve the environmental objectives of the directive.15 Examples are the methodology of the Water Framework Directive, the Noise Pollution Directive and the Air Quality Directive. These directives require the Member States to draw up (action) plans for water systems or certain agglomerations. Such a plan has to define the measures in order to obtain the environmental quality standards or must be designed to manage the environmental issues at stake.16 There are differences between the obligations to draw up (action) plans. Only in the Air Quality Directive is this obligation linked to exceeding the EU-set air quality target and limit values for certain substances, whereas the obligations in the Water Framework Directive and the Noise Pollution Directive are not restricted to this situation. Yet, all directives leave the Member States with a great deal of freedom in their choice of measures. This choice is not limited to environmental decision-making; the measures can, for instance, also concern spatial planning decisions. However, there are some (important) limitations. In the TA Luft case the ECJ clarified that when quality standards are at stake the transposition cannot be confined to certain sources and to certain measures to be adopted by the competent authorities.17 In this case (in Germany) the application of the air quality standards was limited to industrial installations for which a permit was required. Also other activities which might cause air pollution had to be linked to the air quality standards.18 Another boundary is set by the fundamental rules of the Treaty on the free movement of goods (Article 34 TFEU). The Tiroler Case C-28/09, for instance, (again) made clear that sectoral traffic measures to improve air quality – by prohibiting heavy goods vehicles of over 7.5 tonnes carrying certain goods from using a section of the A 12 motorway in the Inn Valley – constitute a breach of Article 34 TFEU.19 Despite these restrictions, the programmatic approaches leave much room for flexibility. As an illustration of the programmatic approach, in the next subsection we will elaborate on the requirements of the Air Quality Directive.

3.2. Example: Air Quality Directive 2008/50

The Air Quality Directive 2008/50 requires, in its Article 13, that limit values for certain substances (such as PM10) are to be attained within a certain period. Member States shall ensure compliance with the limit values laid down in Annex XI. The Directive does not prescribe any specific measures, which

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13 See, for instance, European Environment Agency, 'The European Environment. State and Outlook 2010, Urban environment', available via [http://www.eea.europa.eu/soer/europe/urban-environment](http://www.eea.europa.eu/soer/europe/urban-environment) (last accessed 5 November 2012) and the Communication on the Thematic Strategy on the Urban Environment, COM(2005) 0718 final.

14 Flexibility can also exist on the level of 'ambition' in a directive (e.g. the target, the time path, the use of exit clauses), see A. Farmer et al., 'Taking Advantage of Flexibility in Implementing EU Environmental Law', 2006 Journal for European and Environmental Planning Law, no. 5, p. 397.

15 Another example is the NEC Directive. The ECJ explicitly accepted the programmatic approach as a tool to obtain the objectives of this Directive, see ECJ 26 May 2011, Joined Cases C-165/09 to 167/09 (esp. 75, 97).

16 E.g. Art. 2 (8) Air Quality Directive, Art. 8 Noise Pollution Directive and Art. 11 Water Framework Directive.

17 ECJ 30 May 1991, Case 361/88.

18 See Jans & Vedder, supra note 11, pp. 149-150. Also interesting is the decision of the Court of 15 September 2011, Case C-53/10 in which the Court decided that the obligation of Art. 12 of the Seveso II Directive to ensure that account is taken of the need, in the long term, to maintain appropriate distances between establishments covered by that Directive and buildings of public use also applies to a public authority even when it has no discretion in the exercise of that prerogative.

19 ECJ 21 December 2011, Case C-28/09.
means that Member States have wide, discretionary powers to decide which measures are appropriate. However, this wide discretion is restricted by the obligation to observe the limit values by the deadlines specified in Annex XI. The selected measures must be effective and the implementation of the measures must be guaranteed because the measures should result in the observance of the limit values before the deadline expires.

Article 22 of the Air Quality Directive introduces a possibility to postpone the deadlines for the achievement of the limit values for nitrogen dioxide or benzene. The same article also provides for an exemption for the achievement of the limit values for PM10. One of the conditions is that Member States draw up an air quality plan in accordance with Article 23 of the Directive. Article 23 requires Member States to establish air quality plans in zones where limit values are exceeded in order to achieve the limit values specified in Annex XI. In the event of exceeding those limit values for which the attainment deadline has already expired, the air quality plans shall set out appropriate measures in order to keep the exceedance period as short as possible. Article 23 does not prescribe any specific measures but refers to Article 24. An air quality plan may include measures pursuant to Article 24 of the Directive.20

The Air Quality Directive therefore prescribes a programmatic approach in areas where limit values are exceeded. An air quality plan should include the information listed in Section A of Annex XV. Information is to be provided on the localization of the excess pollution, the origin, nature and assessment of the pollution, an analysis of the factors responsible for the pollution and an analysis of the factors responsible for the exceedance, the details of the measures or projects for improvement that already exist and the observed effects of the measures, details of the measures or projects adopted with a view to reducing pollution and a timetable for implementation. If an air quality plan is established in the context of a postponement or an exemption as specified in Article 22, consideration must be given to the measures listed in Section 3 of Part B of Annex XV as provided for in the Directive. If any of those measures are not to be implemented, even though they are relevant to the sources identified, due justification must be provided.21

Although the Air Quality Directive does not prescribe specific measures to be included in an air quality plan, it is clear that an air quality plan should aim at compliance with the limit values, before the initial or postponed deadlines. When the deadlines for attaining the limit values have expired, the requirement of Article 13 to attain the limit values has to be met and measures have to be taken to ensure that the exceedance period is kept to a minimum.

3.3. Integrated approaches at the European level

The plans in the programmatic approach as described above do not aim to link different environmental issues. These programmatic approaches apply mostly to a single environmental issue like air quality or water quality. The integration of different policies is reflected in the measures; Member States can choose a wide range of measures. This fits in with the traditional ‘sectoral approach’22 of the European environmental legislation. Yet, on the European level, there is increasing attention for a more integrated approach. Such an integrated approach links different (environmental) issues and coordinates various measures and policies. The integration of environmental interests and economic or spatial development is the most important aim of these approaches. The environmental interests also concern the attainment of environmental quality standards, such as limit values. Examples of such integrated approaches in policy and law are the Thematic Strategy on the Urban Environment and the Marine Strategy Framework (2008/56). The Thematic Strategy on the Urban Environment was published in 2006 and aimed ‘to contribute to a better implementation of existing EU environment policies and legislation at the local level’ by promoting an integrated approach to urban management, inter alia by integrating environmental

20 Article 24 mentions measures that may be included in short-term action plans: measures in relation to motor vehicle traffic, construction works, ships at berth, and the use of industrial plants or products and domestic heating. In addition, specific measures aimed at the protection of sensitive population groups may be included in both plans.
21 Communication from the Commission on notifications of postponements of attainment deadlines and exemptions from the obligation to apply certain limit values pursuant to Article 22 of Directive 2008/50/EC on ambient air quality and cleaner air for Europe, (COM)2008 403 final p. 7.
22 Within the meaning of tackling a single environmental issue like air, water, soil.
aspects into urban planning.\textsuperscript{23} The EU supported this integrated approach by offering assistance based on examples of best practice and financial support.\textsuperscript{24} The relatively new Marine Strategy Framework requires an integrated approach for the sea. The Directive requires that the Member States develop a marine strategy for their marine waters by 2012. For that, the Member States have to undertake five steps.\textsuperscript{25} They have to assess the current state of the environment and define the good environmental status of the water concerned, as well as the establishment of environmental targets and monitoring programmes. Then the Member States must draw up a programme of measures by 2015 in order to achieve or maintain a good environmental status. These programmes of measures have to be operational within a year. The Directive shows an integrated approach because it integrates existing plan and programme obligations and improves coherence between different policies and legal measures (e.g. spatial planning measures).\textsuperscript{26}

A distinctive element of the Directive is that it provides for an explicit role for social and economic development.\textsuperscript{27} Furthermore, the Marine Framework Directive complements other directives (for instance, when a deadline is lacking).\textsuperscript{28} The Directive therefore shows some promising elements, although the actual impact of the Directive will depend on the Member States while it provides for a procedural framework for coherence and coordination and not for a substantive integration of different policies.

Interestingly, in Dutch law a combination of the described European integrated or programmatic approaches can be seen.

### 3.4. The Dutch approach

For the last decade, public authorities in the Netherlands have been struggling to find an effective approach to achieve the (European and national) environmental quality standards. At first, much attention was devoted to the possibilities to relax the rules, meaning a deviation from limit values under strict conditions.\textsuperscript{29} Later, more integrated or programmatic approaches in which there is room for a 'per balance system' became popular.

The central element of the Dutch integrated approach is the (policy) aim to make room for new spatial and economic developments, while at the same time the environmental quality will improve in order to attain the environmental quality standards. The background of this goal is to solve the conflict between environmental policy and economic and spatial planning ambitions. This conflict became particularly visible in the issue of air quality, due to the way the Netherlands had transposed the Air Quality Directive into Dutch law. Before 2008, air quality standards had to be taken into account in all spatial planning decisions and therefore affected the realization of projects which led to the obstruction of spatial development.\textsuperscript{30}

In 2008 a new approach to a legal framework for air quality came into force in the Netherlands. The new regime is aimed at both attaining the limit values for PM10 and NO2 and allowing new building and infrastructure projects. This regime includes a plan as required under Article 23 (1) of the Air Quality Directive (see Section 3.2). The Dutch Government established such an air quality plan

\textsuperscript{23} Communication from the Commission to the Council and the European Parliament on the Thematic Strategy on the Urban Environment, COM(2005), 718 final.

\textsuperscript{24} See M.N. Boeve & L. Van Middelkoop, ‘Sustainable Urban Development, the Dutch method: best practice for the European Integrated Approach?’, 2010 Journal for European Environmental & Planning Law 7, no. 1, pp. 1-23. The assessment of the 6th Environmental Action Plan clarified that there is still work to be done. The impact of the Strategy had been insufficient and it recommended that the urban environment needs to be better reflected in policy development, The Sixth Community Environment Action Programme, Final Assessment, COM(2011) 531 final, p. 6.

\textsuperscript{25} Art. 5, par. 2 Marine Strategy Framework Directive.

\textsuperscript{26} R. Long, ‘The Marine Strategy Framework Directive: A new European approach to the regulation of the marine environment, marine natural resources and marine ecological services’, 2011 Journal of Energy and Natural Resources Law 29, no. 1, pp. 1-44.

\textsuperscript{27} E.g. Art. 8 (1) sub. c MSFD. See also T. Markus et al., ‘Legal Implementation of Integrated Ocean Policies: The EU’s Marine Strategy Framework Directive’, 2011 The International Journal of Marine and Coastal Law, no. 1, pp. 59-90.

\textsuperscript{28} A. Hildering et al., ‘Tackling pollution of the Mediterranean Sea from land-based sources by an integrated ecosystem approach and the use of the combined international and European legal regimes’, 2009 Utrecht Law Review 5, no. 1, pp. 80-100.

\textsuperscript{29} This approach can be seen in the Dutch ‘Interim Act on an Urban and Environment Approach’, Stb. 2006, 7 (available in Dutch at <www.overheid.nl>).

\textsuperscript{30} See F. Fleurke & N.S.J. Koeman, ‘The Impact of the EU Quality Standards on the Planning and Authorisation of Large Scale Infrastructure Projects in the Netherlands’, 2005 Journal for European Environmental & Planning Law 2, no. 5, pp. 375-383 and Toon de Gier et al., ‘The Influence of Environmental Quality Standards and Safety Standards on Spatial Planning’, 2007 Journal for European Environmental & Planning Law 4, no. 1, pp. 23-36.
The Dutch air quality programme had to include all measures to improve air quality and all planned activities that can lead to a further deterioration in air quality. If a new (spatial) development is listed in the programme an individual assessment of the project in the light of the limit values on air quality is not required. By using an ‘on balance system’ (measures versus polluting developments) the overall outcome of the programme should result in an improvement in the air quality in the Netherlands. Furthermore, the Dutch air quality programme provides a framework for cooperation between national, regional, and local authorities. The obligation to comply with air quality standards is considered to be a shared responsibility of national, regional, and local authorities. Both general (European and national) measures and specific (regional and local) measures are included. Local and regional authorities have cooperated in establishing regional cooperation programmes, including specific measures for zones where limit values are being exceeded. These regional cooperation programmes are included in the national programme. In the programme various sources of pollution are addressed. It includes measures aimed at reducing emissions caused by traffic, agriculture and industry. The competent authorities are obliged to carry out the measures in good time.

The Dutch air quality approach is an example of a programmatic approach in the Netherlands. Other more general approaches have recently been developed. A follow-up to the approach on air quality can for instance be found in the Crisis and Recovery Act.32 This Act aims to speed up the development and realization of spatial and infrastructural projects to contribute to combating the economic crisis. The Act introduces a new type of plan which aims to optimize the ‘environmental room’ that can be used for environmentally harmful activities in a designated area in order to strengthen the sustainable spatial and economic development of this area in combination with a high environmental quality. The intention is to make room for new activities, without losing sight of the environmental quality of the areas. For that, the plan must include a programme of measures – including all necessary compensatory measures – and all planned activities. The local authority may deviate temporarily from environmental quality standards, while staying within European boundaries.33 The integrated plan is used as an instrument to weigh the sum of polluting projects and the sum of compensatory measures. The approach increases the possibilities for local authorities to address existing pollution rights and to deviate temporarily from environmental quality standards and it shows a further integration of environmental policy and spatial planning.

4. Legal challenges

In areas where limit values are exceeded there is only room for new activities that are expected to contribute to a further deterioration of environmental quality if additional compensatory measures will be taken. It is not unlikely that existing sources of pollution must reduce their emissions in order to create room for new sources of pollution. In this context the programmatic approach might be considered as an instrument to distribute the burdens associated with the obligation to attain environmental quality standards. A plan, such as the air quality plan, distributes these burdens among the various sources of pollution. Here new questions arise: which sources of pollution will be addressed, does national law allow competent authorities to change existing permit conditions, what is the role of the best available techniques, who is responsible for the costs of reducing emission levels? These legal challenges make the implementation of a programme aimed at achieving environmental quality standards very complex. In this section we describe the legal challenges involved in a programmatic approach.

31 Decision C(2009) 2560 final of 7 April 2009.
32 In Dutch ‘Crisis- en herstelwet’, Stb. 2010, 135 (available via <www.overheid.nl>). See also M.N. Boeve & L. Van Middelkoop, ‘Sustainable Urban Development, the Dutch Method: best practice for the European Integrated Approach?’, 2010 Journal for European Environmental & Planning Law 7, no. 1, p. 21-22.
33 E.g. the limit values for air quality which have to be transposed into Dutch law. They leave less or no room for deviation at the national level.
4.1. Measures must be effective and implemented

With regard to the content of a programme Member States have wide discretion in the identification of measures. However, this discretion is not unlimited. A general condition is that the selected measures must be effective and the implementation of the measures must be guaranteed because the measures should result in the observance of the environmental quality standards before the deadline expires. According to Article 249 of the EC Treaty directives are binding as far as they concern the results that should be achieved.

It is important that the realization of measures or compensation is secured. This can be problematic if further decision-making is necessary to carry out the measures. In this regard, it is significant that, for instance, in the Netherlands there is wide access to justice before the administrative courts. Problems may also arise when proposed measures are not implemented for political reasons. An example is the introduction of a national road pricing system for both heavy goods vehicles and passenger vehicles in the Netherlands. This measure was proposed in the Dutch Air Quality Programme in order to lower the emission of NO2 and PM10, but was withdrawn for political reasons. In this situation, additional measures have to be adopted. In the Netherlands there is fierce debate between local and national authorities on the question of who is responsible for these additional measures.

One could argue that it is questionable whether the aim of the Dutch programmatic approach – to make room for new activities even when limit values are exceeded – is in line with the (European) obligation to attain the environmental quality standards on time. In the Dutch literature it is stated that the two-fold aim of the Dutch air quality programme is not in itself contrary to the purpose of the Air Quality Directive. With reference to the principle of proportionality, Backes states that Member States cannot be required to exclude all economic developments resulting in a deterioration of the ambient air quality. This statement is confirmed by the ECJ Janecek case where the Court decided that with regard to the content of an action plan under Article 7 (3) Directive 96/62, Member States had a discretion in the identification of measures. Member States were obliged to take adequate measures, taking into account the balance which must be maintained between the objective of reducing to a minimum the risk of the limit values and the duration of such an occurrence, and the various opposing public and private interests. Similar considerations are to be found in ECJ Case C-165/09 regarding the NEC Directive, where the Court emphasized the wide flexibility accorded to the Member States with regard to the contents of a programme required under the NEC Directive. Member States are allowed to strike a certain balance between the various interests involved. Nevertheless, in the Janecek case the Court also noted that in Article 7 (3) of Directive 96/62 limits were included on the exercise of the discretion relating to the adequacy of the measures. In the cases regarding the NEC Directive, the Court referred to the obligation to take all measures which are necessary to achieve the result prescribed by a directive (Article 288 TFEU). Similar limits and obligations are to be found in the Air Quality Directive (see Section 3.2). Furthermore, it can be derived from Section 3 of Part B of Annex XV as provided for in the Directive that the discretion of Member States is even more limited in case of a postponement of the initial deadlines.

The effectiveness of the proposed measures is related to the role of the programmatic approach as a tool to distribute the burdens of the observance of environmental quality standards. ECJ case law concerning the polluter pays principle provides basic starting points for such a fair distribution of burdens. This issue will be discussed in the next subsection.

4.2. A fair distribution of burdens

Although the polluter pays principle lacks a precise legal definition, the core of the principle is that the polluter should bear the costs of measures aimed at preventing and reducing pollution. It is a fair and

34 J.R.C. Tieman et al., Recht op Schone lucht, 2007, p. 17.
35 Ch.W. Backes, ‘Het dossier luchtkwaliteit: anders verder’, BR 2006, pp. 88-102.
36 ECJ 25 July 2008, Case C-237/07 (Janecek). Directive 96/62 is the former Air Quality Framework Directive.
37 ECJ 26 May 2011 Cases C-165/09 to C-167/09 (Stichting Natuur en milieu and Others v College van Gedeputeerde Staten van Groningen (C-165/09) and College van Gedeputeerde Staten van Zuid-Holland (C-166/09 and C-167/09)).
38 Communication from the Commission on notifications of postponements of attainment deadlines and exemptions from the obligation to apply certain limit values pursuant to Article 22 of Directive 2008/50/EC on ambient air quality and cleaner air for Europe, (COM)2008 403 final p. 7.
logical principle that polluters are responsible for the pollution they have caused. Those who generate pollution, and not the Government or society in general, should bear pollution costs.\(^{39}\) There are many interpretations of the polluter pays principle, but in the literature two fundamental interpretations are identified: an efficiency interpretation and an equity interpretation.\(^{40}\) Woerdman considers the efficiency interpretation to be the core of the polluter pays principle and defines this interpretation as follows: ‘the efficiency interpretation reflects the idea that pollution costs should be internalized with the aim of achieving an efficient allocation of resources, irrespective of distributive issues.’\(^{41}\) Nash considers this interpretation as the ‘weak’ form of the polluter pays principle, requiring only that the Government should not subsidize polluters’ pollution costs.\(^{42}\) Woerdman considers the equity interpretation as an extension of the basic form of the principle. This equity interpretation sees to a fair distribution of costs.\(^{43}\) Nash considers this interpretation as ‘the strong approach’.\(^{44}\) Bleeker states that ‘the polluter pays principle is a manifestation of the principle of equity or "fairness" principle (…) as it holds the polluter accountable for the pollution he has created in order to avoid passing on costs to third parties who did not contribute to the creation of the pollution.’\(^{45}\) The notion of a fair distribution of costs is also applicable to pollution contributed to by multiple polluters. The equity interpretation of the polluter pays principle aims at an apportionment of costs according to each polluter’s contribution to the aggregate problem.\(^{46}\)

The equity interpretation of the polluter pays principle can be found in the ECJ \textit{Standley} case and in the ECJ \textit{Futura Immobiliare} case. In the \textit{Standley} case, the ECJ stated that the polluter pays principle reflects the principle of proportionality. The \textit{Standley} case concerned the Nitrates Directive, aimed at reducing water pollution from nitrates discharged into water from agricultural sources. Standley argued that placing the burden of reducing the concentration of nitrates in the designated areas solely on the farmers would infringe the polluter pays principle because their activities are known to be only one of several sources of nitrates in the water. The Court provided that farmers do not have to pay for eliminating and preventing pollution to which they do not contribute. Member States should take into account both agricultural and other sources of nitrates when drawing up the action programmes.\(^{47}\)

The \textit{Futura Immobiliare} case concerned a fair distribution of costs between the holders of waste.\(^{48}\) Under Italian law, categories of users of a collective service were determined in accordance with their respective capacities to produce urban waste. The contribution of each of those categories to the overall cost varied according to the volume or nature of the waste they were likely to produce. In the \textit{Futura Immobiliare} case the waste tax served as an instrument to distribute costs between the holders of waste.

In view of the \textit{Standley} and \textit{Futura Immobiliare} cases, an air quality plan might be considered as an instrument to allocate the burdens and costs of observing the limit values. The Dutch National Co-operation Programme on Air Quality illustrates this function of an air quality plan by addressing all sources of air pollution and allocating responsibilities to all levels of government (see Section 3.4). The equity interpretation of the polluter pays principle provides two principles for a fair distribution of burdens. First: all sources of pollution must contribute to the abatement of the aggregate pollution. Second: polluters can only be obliged to contribute to the abatement of pollution in proportion to their contribution to the aggregate problem.

In practice, it may be difficult to apply these principles to an air quality plan. A good example is the situation where the pollution has a widespread, diffuse character (non-point source pollution). In that situation it is impossible to establish a clear causal link between the pollution and the activities of a

\(^{39}\) J.R. Nash, ‘Too much market? Conflict between tradable pollution allowances and the “polluter pays principle”’, 2000 \textit{Harvard Environmental Law Review} 24, no. 2, pp. 473-474.

\(^{40}\) E. Woerdman et al., ‘Emissions Trading and the Polluter-Pays Principle: Do Polluters Pay under grandfathering?’, 2008, \textit{Review of Law and Economics} 4, no. 2, p 573; A. Bleeker, ‘Does the polluter pay? The polluter-pays principle in the case law of the European court of justice’, 2009 \textit{European Energy and Environmental Law Review} 18, no. 6, p. 290.

\(^{41}\) See Woerdman et al., supra note 40, p 573. This interpretation is considered to be economic in nature. See also OECD documents and principle 16 of the Rio Declaration.

\(^{42}\) See Nash, supra note 39, pp. 473-474.

\(^{43}\) See Woerdman et al., supra note 40, p. 574.

\(^{44}\) See Nash, supra note 39, p. 476.

\(^{45}\) See Bleeker, supra note 40, p. 291.

\(^{46}\) See Nash, supra note 39, p. 487;

\(^{47}\) ECI 239/97, ECR I-02603. See Bleeker, supra note 40, p. 293.

\(^{48}\) ECI 16 July 2009 (\textit{Futura Immobiliare e.a.}), C-254/08.
specific, individual polluter. Where it is impossible to identify an individual polluter or a limited group of polluters responsible for the pollution, the question of who can be held responsible for the reduction and remediation of the pollution will arise. This is the reason why the Environmental Liability Directive, for instance, only applies to environmental damage caused by diffuse pollution where it is possible to establish a causal link between the damage and the activities of individual operators.\(^{49}\) Similar problems arise in situations where the pollution is the result of past activities (a so-called legacy). When the source of the pollution no longer operates, and the operator is no longer active, it is practically impossible to hold an individual polluter responsible. In situations where it is practically impossible to hold an individual polluter or a limited group of polluters responsible, the Government – as a proxy of society in general – bears the costs of the remediation of pollution. In those situations taxation might be a more effective instrument of burden sharing. Of course, many other practical issues hamper the application of the polluter pays principle. For instance, where pollution is caused by foreign industry, it might very well be possible to identify the polluters, but national authorities are not competent to impose measures upon foreign polluters.

4.3. Challenges arising from the Industrial Emissions Directive (IED)

If a plan or programme includes measures to reduce industrial pollution, the new Industrial Emissions Directive may apply.\(^{50}\) Under the IED, permit conditions, such as emission limit values, are set on the basis of the best available techniques. Article 11 IED provides that Member States shall take the necessary measures to provide that ‘installations’ are operated in accordance with best available techniques. Article 14 (3) IED provides that ‘BAT conclusions’ shall be the reference for setting the permit conditions. Article 15 (2) IED provides that emission limit values shall be based on the best available techniques. However, permit conditions must also satisfy Article 18 of the IED: ‘Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards’.

Article 18 IED creates a link between the application of best available techniques in permit conditions and compliance with environmental quality standards. Member States are obliged to include stricter conditions than those achievable by the use of the best available techniques in a permit, if additional measures are required to achieve an environmental quality standard.\(^{51}\)

On a national level, it might be difficult to determine in which specific situations environmental quality standards require more stringent permit conditions. As stated above, Member States have discretion in the choice of measures and Article 18 IED explicitly refers to other measures which may be taken to comply with environmental quality standards. Therefore, it may not always be required to include permit conditions beyond the best available techniques, not even in areas where limit values are exceeded. However, the discretion of Member States will be limited in the event of exceedances after the expiry of the deadlines.

The discretion will be limited even more, where, for instance, in a given area there is a risk that in spite of the implementation of other appropriate measures to reduce emissions, air quality standards will still not be attained during the derogation period. Under those specific circumstances, it may be required to impose measures upon operators of (new) installations beyond the best available techniques in order to achieve environmental quality standards.

However, on a national level competent authorities may not always be allowed to include additional measures in an existing permit. The Dutch Council of State, for instance, does not easily accept amendments to permit conditions by the competent authorities. Under Dutch law, a permit is granted on the basis of an application. The competent authorities are not allowed to change an existing permit drastically. Pursuant to the case law of the Council of State, it may be complicated to update existing permits by prescribing additional measures aimed at attaining air quality standards.\(^{52}\) At this moment,

\(^{49}\) Art. 4 (5) Directive 2004/35/CE on Environmental liability with regard to the prevention and remedying of environmental damage.

\(^{50}\) Directive 2010/75/EU of 24 November 2010 on industrial emissions.

\(^{51}\) The same system can be found in Art. 11 (5) of the Water Framework Directive.

\(^{52}\) M.N. Boeve et al., ‘Een nieuwe regeling voor de ambtshalve wijziging van de milieuvergunning in het licht van het richtlijnvoorstel
there is an Act before the Dutch Parliament making it easier for competent authorities to change existing permit conditions. In this context we refer to the obligation under Article 21 (5) IED to reconsider and update permit conditions where this is necessary to comply with a new or revised environmental quality standard in accordance with Article 18 IED. But even if authorities have the competence to change existing permits, then the question arises if they will actually exercise this competence. Many authorities might consider this option as a last resort and prefer to consult with licensees first in order to persuade them to apply for a new permit voluntarily. In practice, reconsidering and updating existing permit conditions might be complex.

4.4. Who is responsible for the costs?

Eurostat provides data on the expenditure in the EU with the purpose of protecting the environment.\(^{53}\) Statistics show a general development of rising environmental protection expenditure over most of the last decade (2002-2009). The expenditure increased to 2.25% of gross domestic product (GDP) in 2009.\(^{54}\)

This percentage confirms, however, the findings of a study on the sectoral costs of environmental policy published in 2007. One of the conclusions of this study was that, in general, environmental expenditures do not represent a large component of the overall costs. In the study some concern was expressed about forthcoming challenges, like the review of the IPPC Directive.\(^{55}\) European sectors argue for a ‘level European playing field’ in which all companies in a given market must follow the same rules and are given an equal ability to compete. From an industry perspective, the obligation to take measures beyond the best available techniques in order to achieve stringent air quality standards might be considered as threatening the level playing field.\(^{56}\) The above concerns give rise to the following question: who is responsible for the costs of implementing measures beyond the best available techniques? The polluter pays principle seems to provide an easy answer: the polluter is responsible! However, in cases of multiple party causation this easy answer might not be enough. Therefore, we discussed in Section 4.2 the equity interpretation of the polluter pays principle, ensuring a fair distribution of costs among multiple polluters. In the Netherlands not only the polluter pays principle but also the principle of égalité devant les charges publiques applies to the issue of responsibility for the costs.

The principle of égalité devant les charges publiques ensures a fair distribution of public burdens following from lawful activities pursued by public authorities in the common good. According to the principle of égalité financial compensation should be provided for those who have shouldered a disproportionally large burden caused by lawful activities pursued in the common good.\(^{57}\) An unequal distribution of public burdens might lead to a breach of the principle of égalité. In case of a breach of the principle of égalité the Dutch public authorities are liable for damages due to having acted lawfully. Here the Government serves as a proxy for the general public, benefiting from activities pursued by the Government in the common good. Financial compensation results in an equal distribution of burdens between those who benefit from the activities and those who suffer disproportionately large damage and losses caused by the same activities. The principle of égalité applies to situations where damage is caused by public works or lawful legal instruments like individual decisions and regulations.\(^{58}\)

Under Dutch law, measures to combat pollution are considered to be a public burden imposed upon polluters. Articles 15.20 and 15.21 of the Dutch Environmental Management Act (\textit{Wet milieubeheer, Wm}) codify a right to compensation in case an individual has to bear a burden that he ‘cannot reasonably be expected to bear’. Article 15.20 Wm also covers an amendment to permit conditions on behalf of the
public authorities. However, in general, compensation will not be accorded to the polluter. There are strict conditions that have to be fulfilled, referring to the abnormality and specialty of the burden.

First of all, it is required that a public burden goes beyond that which a citizen must accept in the ordinary course of events (an abnormal burden).

Secondly, the public burden must have fallen upon a specific and limited category of persons (a special burden). The public burden must be disproportionate compared to the burden imposed upon persons in similar circumstances (the reference group). A reference group is defined on the basis of certain characteristics which gave rise to the Government intervention. For example, with regard to environmental measures a reference group is defined on the basis of the nature and extent of the burden. Indeed, the Government imposes environmental measures on the basis of the nature and extent of the pollution caused by installations. Thus, the reference group consists of a group of polluters causing pollution of a comparable nature and extent. The principle of égalité devant les charges publiques requires an equal burden to be imposed upon polluters within a reference group. In cases where an individual polluter within a reference group shoulders an unequal burden, compared to the burden imposed upon other polluters within that reference group, a reasonable and objective justification must be given. Within a reference group no distinction can be made without a reasonable and objective justification.

Thirdly, if the claimant acted with awareness of the risk of sustaining the loss, no compensation will be provided. Often a combination of the above criteria will be the reason that a judge accepts a breach of égalité.

To which results the application of the three criteria will lead can never be predicted. However, in general, polluters will not have a right to compensation for the costs of environmental measures. The principle of égalité is applied against the background of the polluter pays principle.

Permit conditions based upon the application of the best available techniques are most likely to be considered as a normal burden imposed upon all IPPC installations in a European sector. In this context, the reference group will consist of all companies in a specific sector on a European level. Because all companies in a specific sector must apply the best available techniques, the usual conditions in a permit will not constitute an abnormal and special burden for companies in that specific sector. Similarly, stricter conditions in a permit than those achievable by the use of the best available techniques will not constitute an abnormal and special burden if those conditions are included in all permits within a specific European business sector.

However, if a restricted group of companies in a sector is confronted with permit conditions beyond the best available techniques, while other companies in the same sector have to comply with less stringent conditions, the imposed burden might be qualified as abnormal and special, unless a reasonable and objective justification is given. For instance, imposing stricter measures could be justified by the nature of the polluting activities, or the particular vulnerability of the environment (natural reserves or special protection areas). In areas where persistent exceedances of environmental quality standards occur, including more stringent conditions in a permit might be justified with reference to Article 18 IED.

However, if only a few companies have to comply with stricter conditions than other companies within in a specific European business sector and no reasonable and objective justification is given, liability in damages based on a breach of égalité might become an issue.

5. Concluding remarks

Programmatic and integrated approaches can be a flexible tool to attain environmental quality standards. These quality standards can differ as to their legal background and their (legal) interpretation is not always clear. The discussed programmatic and integrated approaches on the European and national level show that these approaches can be used to create more flexibility in the choice of measures to attain limit values. Such approaches leave room to weigh environmental, spatial and economic interests, while
attaining the environmental objectives. However, attaining environmental quality standards can also become more complex:

- Problems can arise regarding the effectiveness and implementation of the (compensatory) measures.
- In practice, the allocation of measures to various sources of pollution and to different levels of government can be a challenge. The equity interpretation of the polluter pays principle requires a fair distribution of burdens. ECJ case law provides basic starting points: all sources of pollution must contribute to the abatement of the aggregate pollution and polluters can only be obliged to contribute to the abatement of pollution in proportion to their contribution to the aggregate problem.
- Moreover, other directives can place restrictions on the freedom to choose measures. We have looked especially at the IED which creates a link between the attainment of environmental quality standards and permit conditions for installations.

In the Netherlands the principle of égalité devant les charges publiques applies. In principle, polluters will not have a right to compensation for the costs of environmental measures. The principle of égalité is applied against the background of the polluter pays principle. Permit conditions based upon the application of the best available techniques will most likely not constitute an abnormal and special burden. However, if a restricted group of companies in a sector is confronted with permit conditions that go beyond the best available techniques, while other companies in the same sector will have to comply with less stringent conditions liability in damages based on a breach of égalité might become an issue.