

Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (EIA Directive)



Interpretation of definitions of certain project categories of annex I and II of the EIA Directive

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NB: the references to project categories in the table of contents do not always reflect the full wording of the project category

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0 INTRODUCTION

The EIA¹ Directive (Directive 85/337/EEC as amended by Directives 97/11/EC and 2003/35/EC)² requires that projects likely to have significant effects on the environment by virtue *inter alia* of their nature, size or location are made subject to an assessment of their environmental effects [Article 2(1)].

These projects are defined in Article 4 and listed in Annex I and Annex II of the EIA Directive. An environmental impact assessment is always required for projects included in Annex I. Projects of the categories listed in Annex II shall be made subject to an assessment when Member States determine that they are likely to have significant effects on the environment. This determination may be carried out through a case-by-case examination, by setting thresholds or criteria or by a combination of these methods, taking account of the relevant selection criteria in Annex III to the Directive.

Article 1(2) of the EIA Directive states that for the purposes of the Directive ‘project’ means:

- *the execution of construction works or of other installations or schemes,*
- *other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources.*

However, with very few exceptions the EIA Directive does not generally provide definitions or other descriptions of the project categories listed in the Annexes³. Certain definitions contained in other directives or international agreements are explicitly referred to in the Annexes of the EIA Directive, and they are dealt with in section 2 of this guidance document

Experience gathered in the application of the EIA Directive shows that, in practice, it can prove problematic to decide if individual projects fall within its scope. Not only have Member States interpreted certain project categories in different ways (especially those listed in Annex II) but uncertainties in the interpretation of certain project types also frequently arise amongst competent authorities.

This issue was highlighted in the ‘5 Years Report’ of 2003 on the application and effectiveness of the EIA Directive⁴ (hereafter ‘the 5 Years Report’). It has also emerged from other studies carried out on behalf of the European Commission and is further demonstrated by the number of queries directed to the Commission on the subject. The 5 Years Report revealed several weaknesses in the application of the Directive and suggested a number of related initiatives. One such initiative is the preparation of guidance to assist Member States in the implementation of the Directive.

This document aims to reduce the uncertainty surrounding the scope of the EIA Directive and the meaning of certain project definitions in the EIA Directive so as to ensure that those projects likely to have significant effects on the environment do not fall outside the scope of the Directive due to issues of interpretation. The objective of this guidance is two-fold.

¹ Environmental Impact Assessment.

² Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, OJ L 175, 5. 7. 1985, p. 40, as amended by Council Directive 97/11/EC of 3 March 1997, OJ L 73, 14. 3. 1997, p. 5, and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003, OJ L 156, 25. 6. 2003, p. 17.

³ Power stations (Annex I(2)) are one of the few exceptions.

⁴ COM(2003) 334 final.

Firstly, the document aims to improve understanding of what can be reasonably considered to be covered by certain project categories that have proved particularly difficult to interpret in practice.

Secondly, the document is intended to provide an overview of existing useful sources of information at EU level, including rulings of the European Court of Justice (ECJ), definitions provided in other directives and relevant guidance documents.

It should be stressed that this guidance document does not address the issue of how the screening of Annex II projects should be carried out. It aims to help in deciding whether specific projects fall within the scope of the EIA Directive, but not (for Annex II projects) whether they should undergo an EIA⁵.

This document was prepared by the Environment Directorate-General of the European Commission in collaboration with experts in EIA and SEA⁶ from EU Member States and the European Economic Area. The first draft of this guidance document was produced by a working group (see Appendix III).

This document represents the views of the Commission services and is not of a binding nature. The present version is not meant to be definitive. The document (finalised in January 2008) may be revised in the future on the basis of further experience in the implementation of the EIA Directive and to reflect any future case-law. It must be emphasised that it ultimately rests with the ECJ to interpret a Directive.

The structure of the document is as follows:

Section 1 describes the general approach followed in this guidance document, including a discussion of the sources of information used and their relevance to the EIA Directive. It also illustrates key principles guiding the interpretation of all the project categories covered by the EIA Directive.

Section 2 goes on to provide, for a number of project categories, definitions and interpretations, focusing on those project categories identified by Member State experts and the Commission as particularly problematic to interpret in practice.

Appendix I summarises the information contained in adopted BREFs⁷ that may be relevant to the interpretation of project categories in the Annexes of the EIA Directive.

Appendix II provides a glossary.

Appendix III presents the members of the working group of experts who provided the first draft guidance document.

⁵ Commission guidance on screening is available on the Commission's environmental assessment homepage: <http://ec.europa.eu/environment/eia/eia-support.htm>.

⁶ Strategic Environmental Assessment.

⁷ Best Available Techniques Reference Documents, developed under Article 16(2) of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, OJ L 257, 10.10.1996, p. 26. See section 1.1.

1 APPROACH TO THE INTERPRETATION OF ANNEX I AND II OF THE EIA DIRECTIVE

1.1 Available sources of information

Rulings by the ECJ are the only source of definitive interpretations of European law. The EIA Directive has on a number of occasions been the subject of cases brought before the ECJ, although only a few ECJ cases actually address the question of the definition, description or scope of individual project categories listed in Annex I and II⁸. Nevertheless, ECJ rulings contain some key general principles that can usefully guide the interpretation of these project categories as well as the concept of 'project' itself. These principles are reviewed in section 1.2. Additional information derived from ECJ case-law is given in section 2 for specific project categories.

In some cases, the text of the EIA Directive explicitly refers to other directives and international agreements. When this is the case, these are binding sources of definitions to be used when interpreting project categories in Annex I and II.

In addition, given the wide range of sectors covered by the EIA Directive, many other directives and guidance documents at EU level deal with activities or contain definitions of terms included in Annex I and II. Definitions taken from these sources are not necessarily fully applicable for the purposes of the EIA Directive. The purpose and context of the different directives must be carefully considered as different acts of legislation may have different objectives which could in turn influence the scope and meaning of the project classifications and definitions that they contain. Thus, a certain project classification in one directive may not necessarily prescribe precisely how the same project type is to be interpreted in the context of another directive⁹. As stated by the ECJ (see for example case C-227/01, *Commission v Spain*), Community law is to be interpreted by reference to the purpose and general scheme of the rules of which it forms part.

In practice, however, sectoral legislation and other guidance documents can often provide useful reference information, especially, but not only, where more technical terms are concerned¹⁰. This is the case, for example, for the numerous project types included in both the EIA and the IPPC Directive¹¹, for which Best Available Techniques Reference Documents (BREFs) have been developed.

BREFs have been and continue to be developed under Article 17(2) of the IPPC Directive, under which the Commission is required to organise an exchange of information between Member States and the industries concerned on the best available techniques to prevent or, where not practicable, reduce emissions and the overall environmental impact of certain

⁸ The ECJ rulings in the following cases were investigated: C-396/92, C-431/92, C-313/93, C-133/94, C-72/95, C-301/95, C-81/96, C-392/96, C-150/97, C-435/97, C-287/98, C-474/99, C-230/00, C-366/00, C-227/01, C-319/01, C-348/01, C-87/02, C-117/02, C-127/02, C-201/02, C-83/03, C-290/03, C-508/03, C-98/04, C-332/04, C-486/04 and C-255/05. Only the cases relevant to this document are mentioned in the text.

⁹ See C-486/04, *Commission v Italy*, paragraphs 43 and 44.

¹⁰ The ECJ, in case C-127/02, *the Waddenzee case*, used the definition of 'project' contained in the EIA Directive in a case related to the Habitats Directive. The approach taken in this paper is consistent with that taken by the Court in this case.

¹¹ Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, OJ L 24, 29.01.2008, p.8.

industrial activities. At the time of writing¹², 31 BREFs had already been formally adopted by the Commission. A further BREF (on energy efficiency) is in the later stages of development. Furthermore, some of the adopted BREFs have already entered their first review while others will be reviewed in the coming years.

BREFs are developed with the purpose to determine the best available techniques for categories of industrial activities falling within the scope of the IPPC Directive; they are not set to interpret the definitions of activities. However, they contain glossaries and general explanations of certain technical terms and industrial processes. As many IPPC activities are also included in the Annexes of the EIA Directive¹³, definitions or explanations contained in BREFs can be relevant to both Directives. However, caution must be exercised when applying information derived from BREFs to projects covered by the Annexes of the EIA Directive (EIA projects), especially where there are discrepancies between the project descriptions and thresholds in the two Directives.

For the purpose of this document, only BREFs formally adopted by the Commission were considered. These documents, along with other BREFs still at the draft or review stage, can be downloaded from the European IPPC Bureau website¹⁴.

Of the BREFs that have been formally adopted by the Commission, this document mainly refers to those that can facilitate the interpretation of EIA project categories.

A table in Annex I relates each BREF to the relevant EIA project category and indicates the type of information that can be found in the original document, to which the reader is invited to refer. For ease of reference, however, the most relevant contents of the BREFs are given in section 2, under each EIA project category.

1.2 Key principles derived from European Court of Justice case-law¹⁵

The purpose of the EIA Directive

In rulings related to the EIA Directive, the Court has consistently emphasised the fundamental purpose of the Directive as expressed in Article 2(1), i.e. those projects *'likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects'*.

Wide scope and broad purpose

A second fundamental principle to be borne in mind when interpreting project categories in the Annexes of the EIA Directive is that *'the Directive has a wide scope and a broad*

¹² January 2008.

¹³ See, for example, the December 1998 report 'Interrelationship between IPPC, EIA, SEVESO Directives and EMAS Regulation', which contains a tabular comparison between EIA and IPPC project categories (<http://europa.eu.int/comm/environment/eia/eia-studies-and-reports/impel-full-text.pdf>).

¹⁴ <http://eippcb.jrc.es/pages/FAbout.htm>.

¹⁵ It should be noted that some of the rulings referred to in this document relate to Directive 85/337/EEC before amendments, while others relate to Directive 85/337/EEC as amended by Directive 97/11/EC. However, it is considered that the principles underlying these rulings and their conclusions are still applicable and useful for interpreting the Directive as amended.

purpose'. This has been consistently held by the European Court of Justice (for example in case C-72/95, *Kraaijeveld and others*, paragraph 31; case C-227/01, *Commission v Spain*, paragraph 46).

Uniform interpretation, different language versions

In case C-72/95, *Kraaijeveld and others*, referring to previous case-law the Court held that the interpretation of a provision of Community law involves a comparison of the language versions. Where these versions diverge, the need for a uniform interpretation requires that the provision in question be interpreted by reference to the purpose and general scheme of the rules of which it forms part (paragraph 28).¹⁶ In this case, the Court concluded that the expression '*canalization and flood-relief works*' in point 10(e) of Annex II to Directive 85/337/EEC (before amendment by Directive 97/11/EC) must be interpreted as including works for retaining water and preventing floods, and consequently dyke work along navigable waterways (paragraph 35).

This issue is again referred to in the Court's ruling in case C-227/01, *Commission v Spain*, where the Court stated that it was not necessary in the context of those proceedings to give a ruling on whether all the language versions of point 7 of Annex I to Directive 85/337 (regarding 'lines' for long-distance railway traffic) used a term equivalent to the term tracks ('vías' in the Spanish-language version). Neither was it considered necessary to give a ruling on the compatibility with the Directive of the Spanish legislation adopted to implement that provision inasmuch as it used the term lines ('líneas'). However, it was clear from the Court's case-law that where different language versions of a provision diverged, the need for a uniform interpretation of Community law required that the provision be interpreted by reference to the purpose and general scheme of the rules of which it forms part (paragraph 45)

The Court has also held that the need for uniform application and the principle of equality require autonomous uniform meanings for expressions in EC law (case C-287/98, *Linster and Others*, paragraph 43), in this context the scope and meaning of project categories in Annex I and II of the Directive.

Exclusion of salami-slicing (project splitting)

ECJ case-law has addressed the issue of 'salami-slicing' i.e. the practice of splitting projects into sub-projects so that each of these fall below screening thresholds or criteria and therefore avoid the obligation to undergo an EIA.

In case C-227/01, *Commission v Spain*, the Court confirmed that a long-distance project cannot be split up into successive shorter sections in order to exclude both the project as a whole and the sections resulting from that division from the requirements of the Directive (paragraph 53). If that were possible, the effectiveness of the Directive could be seriously compromised, since the authorities concerned would need only to split up a long-distance project into successive shorter sections in order to exclude it from the requirements of the Directive (paragraph 53).

¹⁶ It should be noted that this principle is general to ECJ practice and not specific to the EIA Directive.

1.3 The concept of ‘project’

‘Project’ is defined in Article 1(2) of the EIA Directive as:

‘- the execution of construction works or of other installations or schemes,
- other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources.’

The jurisprudence of the European Court of Justice provides a broad interpretation of the concept of ‘project’.¹⁷ However, in relation to the concept of ‘project’ and in particular of what constitutes an ‘*intervention in the natural surroundings and landscape*’, the Court of Justice was not convinced in case C-392/96, *Commission v Ireland*, that sheep farming as practised in Ireland (which, in this specific case, involved hill-grazing on an open terrain) constituted a project within the meaning of Article 1(2) of the EIA Directive.

The term ‘installation’ is not defined in the EIA Directive. A definition of this term is provided in the IPPC Directive, but this definition¹⁸ is not considered to be appropriate for the purposes of the EIA Directive.

Even though mobile installations are not mentioned explicitly in the EIA Directive, the scope of the Directive also covers these as well as temporary installations¹⁹. When mobile and/or temporary installations have the characteristics (and associated impacts) of project categories included in Annex I and II of the EIA Directive, they must be subject to its requirements.²⁰ Furthermore, when a mobile installation is moved elsewhere, the need for a new EIA has to be considered.

1.4 Relationship between the EIA and SEA Directives

According to a study carried out on behalf of DG Environment²¹, overlaps between the SEA Directive and the EIA Directive are clearly possible, although experience in the application of the SEA Directive is still too limited to enable robust conclusions to be reached.

The potential for overlaps exists where the ‘object’ being assessed falls under both the definition of a ‘project’ set out in the EIA Directive and the definition of ‘plans and programmes’ under the SEA Directive.

Overlaps between the EIA and SEA Directives are likely to occur where, for example, large projects are made up of sub-projects, or are of such a scale as to have more than local

¹⁷ Case C-72/95, *Kraaijeveld and others*.

¹⁸ ‘Installation means a stationary technical unit where one or more activities listed in Annex I [of Directive 2008/1/EC] are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution’. Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control.

¹⁹ Moreover, Annex II(13), second indent, explicitly includes Annex I projects undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than two years.

²⁰ It is clear that even mobile installations will be considered for the purposes of the EIA Directive, in relation to a specific site.

²¹ Imperial College London Consultants (August 2005) ‘The relationship between the EIA and SEA Directives’, available on: http://ec.europa.eu/environment/eia/final_report_0508.pdf.

significance. The determination of whether the proposal is a project or a plan or programme therefore has significant implications as to whether it is subject to EIA or SEA or both.

It should be noted that Article 11 of the SEA Directive expressly states that assessment under the SEA Directive is without prejudice to any requirements under the EIA Directive and any other Community law requirements. Therefore, in order to comply with the law, Member States must ensure they meet the requirements of both Directives when they both apply.

The above-mentioned study provides examples of possible ways to do this, including EIA and SEA procedures applying in parallel, or joint procedures specially devised to meet the requirements of both Directives simultaneously.

2. INDIVIDUAL PROJECT DEFINITIONS

2.1 Introduction

This section focuses on certain project categories identified as particularly difficult to interpret by Member State experts and by the Commission. The interpretations provided for the project categories are based on the purpose of the Directive, the experience gathered in its application and the interpretations by the European Court of Justice over time.

The information in this section is intended to help gain a better understanding of the project definitions. As indicated in the text, most of this information derives from ECJ case-law, EU directives, international conventions and guidance documents produced by the European Commission. It is clearly noted under each project category when these definitions are explicitly referred to in the text of the EIA Directive.²² In the case of other definitions, the reader is advised to consider carefully whether they can be applied as such to the field of application of the EIA Directive. The objectives of the different pieces of legislation should be borne in mind, in the light of the considerations in section 1.1 above.

It should also be noted that the definitions provided in this section are not intended to constitute a comprehensive glossary of all terms contained in the EIA Directive and long technical descriptions of industrial processes are deliberately avoided. The reader is referred to the potentially useful sources of definitions available outside the EIA field, as indicated in the text.

This section follows the order of the Annexes of the EIA Directive, but does not cover all project categories. Nonetheless, the information given may also be useful to gain a better understanding of the project categories that are not included.

²² For example, Annex I(7)(a) of the EIA Directive refers to the definition of ‘airport’ contained in the 1944 Chicago Convention setting up the International Civil Aviation Organisation.

2.2 PROJECTS LISTED IN ANNEX I

Annex I (1)

Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day

Information on terms and processes included in this project definition (namely ‘refineries’, ‘crude oil’ and ‘natural gas’) can be found in the BREF on Mineral Oil and Gas Refineries²³:

Refineries are industrial sites that manage huge amounts of raw materials and products and they are also intensive consumers of energy and water.

The purpose of refining is to convert natural raw material such as crude oil and natural gas into useful saleable products.

Crude oil and natural gas are mixtures of many different hydrocarbons and small amounts of impurities. In particular crude oil is a mixture of hydrocarbon compounds (90-95%) of different chemical composition and molecular structures with some impurities.

Source: Reference Document on Best Available Techniques for Mineral Oil and Gas Refineries (February 2003)

Annex I (2)

- Thermal power stations and other combustion installations with a heat output of 300 megawatts or more

The European Court of Justice’s ruling in case C-431/92, *Commission v Germany*, must be borne in mind when interpreting this project category.

Annex I, point 2, of the Directive, under which projects for thermal power stations with a heat output of 300 megawatts or more must undergo an assessment, must be interpreted as requiring such projects to be assessed irrespective of whether they are separate constructions, are added to a pre-existing construction, or have close functional links with a pre-existing construction. Even where such a project has links with an existing construction, it cannot therefore come under ‘modifications to development projects included in Annex I’, mentioned in point 13 of Annex II (point 12 prior to amendments by Directive 97/11), for which only assessment is provided.

The principle expressed in this ruling was incorporated in the text of the EIA Directive by the 2003/35/EC amendments, which introduced a new Annex I(22) project category, i.e. ‘*Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex*’.

It may be useful to refer to Directive 2001/80/EC (‘Large Combustion Plants Directive’, LCP²⁴), which contains the following definition:

²³ Reference Document on Best Available Techniques for Mineral Oil and Gas Refineries, Feb 2003.

²⁴ Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants, OJ L 309, 27.11.2001, p. 1.

combustion plant means any technical apparatus in which fuels are oxidised in order to use the heat thus generated.

Information relevant for this project category may also be found in the Reference Document on Best Available Techniques for Large Combustion Plants (July 2006). However, it should be noted that the exemption of certain types of combustion plants from the scope of the LCP Directive (Article 2(7)) does not apply for the EIA Directive.

Annex I (4)

- Integrated works for the initial smelting of cast-iron and steel;

Information on terms and production processes included in this project category can be found in BREFs:

Cast iron is a ferrous alloy with a minimum carbon content of 1.8%, but normally above 2%. Silicon, manganese, sulphur and phosphorus are also present in various amounts.

Steel is a ferrous alloy with a carbon content generally lower than 2%. The (mass) content of iron is bigger than that of any other element; the alloy also usually contains other elements.

Source: Reference Document on Best Available Techniques in the Smitheries and Foundries Industry (May 2005)

Integrated works are large industrial complexes and they are characterised by networks of interdependent material and energy flows between the various production units (these include sinter plants, pelletisation plants, coke oven plants, blast furnaces and basic oxygen steel-making plants with subsequent casting).

Source: Best Available Techniques Reference Document on the Production of Iron and Steel (December 2001)

- Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes.

Information on installations for the production of non-ferrous metals can be found in the BREF²⁵ on Non Ferrous Metals Industries:

Non-ferrous metals are produced from a variety of primary and secondary raw materials.

Primary raw materials are derived from ores that are mined and then further treated before they are metallurgically processed to produce crude metal. The treatment of ores is normally carried out close to the mines.

Secondary raw materials are indigenous scrap metal, skimmings, flue or filter dusts, drosses and residues and may also undergo some pre-treatment to remove coating materials.

Source: Reference Document on Best Available Techniques in the Non Ferrous Metals Industries (December 2001)

²⁵

Reference Document on Best Available Techniques in the Non Ferrous Metals Industries, Dec 2001.

Annex I (6)

Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are:

- (i) for the production of basic organic chemicals;*
- (ii) for the production of basic inorganic chemicals;*
- (iii) for the production of phosphorous-, nitrogen- or potassium-based fertilizers (simple or compound fertilizers);*
- (iv) for the production of basic plant health products and of biocides;*
- (v) for the production of basic pharmaceutical products using a chemical or biological process;*
- (vi) for the production of explosives*

Chemical installations are regulated by the EIA, IPPC, and Seveso Directives. It is important to be aware of the differences that exist between the project classification systems, scope and thresholds in each of the Directives. While the EIA Directive covers projects in a number of different sectors, the IPPC Directive has its focus on pollution control and sustainable use of natural resources in relation to industrial installations. The Seveso Directive focuses on the control of dangerous substances within a site. The EIA Directive, however, is designed to permit an overall environmental evaluation of a production plant or process, taking into account the emissions and natural resource management focus of the IPPC Directive, but also bearing in mind the potential adverse effects that might result from a catastrophic event arising from the handling or processing of dangerous substances. Guidance developed for other directives, in particular for the IPPC Directive, provides a useful reference point when interpreting the scope of this project category, but must be adapted as necessary²⁶. Relevant technical information may also be found in BREFs²⁷.

The project category 'integrated chemical installations' is divided into 6 sub-categories, which are the same as those listed in Annex I(4) of the IPPC Directive. The list of basic organic and inorganic chemicals in the IPPC Directive's Annex I could be used as a non-exhaustive list for the purposes of the EIA Directive as well:

Basic organic chemicals include: (a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic); (b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins; (c) sulphurous hydrocarbons; (d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates; (e) phosphorus-containing hydrocarbons; (f) halogenic hydrocarbons; (g) organometallic compounds; (h) basic plastic materials (polymers, synthetic fibres and cellulose-based fibres); (i) synthetic rubbers; (j) dyes and pigments; (k) surface-active agents and surfactants.

²⁶ In particular, the reader may find it useful to refer to the Guidance on Annex I section 4, with which much of the text in this section is in line. http://www.ec.europa.eu/environment/ippc/general_guidance.htm#5.

²⁷ Reference Document on Best Available Techniques in Large Volume Inorganic Chemicals – Solids and Others, Aug 2007; Reference Document on Best Available techniques in the Large Volume Organic Chemical Industry, Feb 2003; Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers, Aug 2007; Reference Document on Best Available Techniques for the Production of Speciality Inorganic Chemicals, Aug 2007; Reference Document on Best Available Techniques in the production of Polymers, Aug 2007; Reference Document on Best Available Techniques for the Manufacture of Organic Fine Chemicals, Aug 2006.

Basic inorganic chemicals include: (a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride; (b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids; (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide; (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate; (e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide.

Source: Annex I(4) of Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control.

'Integrated', 'juxtaposed and functionally linked'

The first guidance on 'integrated', 'juxtaposed and functionally linked' was provided by ECJ case-law (see case C-133/94, *Commission v Belgium*), where the European Court of Justice ruled that '*whether a chemical installation is integrated does not depend upon its processing capacity or on the type of chemical substance processed in it but on the existence of interlinked production units constituting in terms of their operation a single production unit*'. It should be noted that this definition applied before Annex I(6) was amended by Directive 97/11/EC²⁸.

Therefore, the basis for 'integration' would be that various units are present and a linkage between various parts of a chemical plant exists. The functional linkage will be primarily via a process pathway, i.e. the various units of the installation serve a common purpose by producing intermediates or input material (precursors, auxiliary agents etc.) for other units. The various elements of the plant will therefore contribute to producing a finished product (or products), although it is possible that part of the intermediates or input materials produced in the plant will also be placed on the market. Additionally, there may be infrastructural linkage (for energy purposes etc.), but this alone does not constitute a functional linkage.

The term 'juxtaposed' commonly means 'placed side by side' or 'placed next to another'. However, given the broad purpose of the Directive, there does not appear to be a requirement for any particular unit to be placed *immediately* next to another, since precursors may be produced on a different part of the site, and transferred by pipeline, conveyor or other forms of transfer to a finishing or process area. Such obviously directly associated activities have a functional connection with the other activities carried out on that site and could have environmental effects. The term 'juxtaposed' should therefore be broadly interpreted as 'several units present *on the same site*'.

'manufacture on an industrial scale'

Annex I(6) contains no quantitative capacity thresholds but only a reference to 'manufacture on an industrial scale'. The scale of chemical manufacture can vary from a few grams of a highly specialised product to many tonnes of a bulk chemical product, yet both scales may correspond to 'industrial scale' for that particular activity. 'Production on an industrial scale' is covered by guidance issued by the Commission for IPPC chemical activities.²⁹

²⁸ Annex I(6) of Directive 85/337/EEC prior to amendments referred to '*Integrated chemical installations*'.

²⁹ http://ec.europa.eu/environment/ippc/general_guidance.htm#5.

‘using chemical conversion processes’

Annex I(6) makes reference to manufacture on an industrial scale using ‘chemical conversion processes’. ‘Chemical conversion processes’ imply that transformation by one or several chemical reactions takes place during the production process. This also holds for a biotechnological or biological process which is mostly associated with a chemical conversion (e.g. fermentation). An activity involving only physical processing (for instance simple blending or mixing of substances which do not chemically react, dewatering, dilution, repackaging of acids/bases) would not be covered.

Use of the term ‘basic’:

The term ‘basic’ should be interpreted in a wide sense. It cannot only mean those chemicals requiring further processing, as some of the chemicals listed explicitly in section 4 of Annex I of the IPPC Directive could themselves be final (but still basic) chemical products (for instance synthetic rubbers, dyes and pigments, polymers and synthetic fibres) which can undergo further processing but not in the sense of chemical production. This would not cover final products that cannot be considered to be chemical products. For instance, the production of tyres from rubber with other ingredients involves some form of chemical processing without producing a ‘basic chemical product’. On the other hand, the production of a mixture of chemicals could still be considered as the production of ‘basic’ chemicals. For instance, biodiesel composed largely of a mixture of esters would fall under the term ‘basic organic chemicals’ since this relates to the production of some forms of esters.

Annex I (7)

(a) Construction of lines for long-distance railway traffic and of airports with a basic runway length of 2 100 m or more;

The ruling by the European Court of Justice in case C-227/01, *Commission v Spain*, must be considered when interpreting the scope of this project category with respect to ‘lines for long-distance railway traffic’.

In this case, the European Court of Justice concluded that a project concerning the laying of a supplementary 13.2 km long railway track, a 7.64 km section of which covered a new route, and which was part of a 251 km long railway line, falls within Annex I, point 7.

Annex I, point 7, must therefore be understood to include the doubling of an existing track which is not to be considered as a mere modification of an existing project.

The Court decided that the fact that the project only related to a short section of a long-distance route was not relevant. As the new track would obviously create significant new nuisances, there is no need to prove the existence of concrete negative effects — their likelihood is sufficient to decide that the project falls within Annex I.

(See also section 1.1.3).

As regards ‘airports’ the EIA Directive provides a clear definition, its footnote (1) indicating that for the purposes of the Directive, airport means airports ‘which comply with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organisation (Annex 14)’. According to that convention, the term aerodrome (airport) is ‘*a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft*’.

(b) Construction of motorways and express roads

A clear definition is provided in the EIA Directive for ‘express roads’, its footnote (2) indicating that for the purposes of that Directive, ‘express road’ means a road that complies with the definition in the European Agreement on Main International Traffic Arteries of 15 November 1975. According to that agreement, ‘*an express road is a road reserved for motor traffic accessible only from interchanges or controlled junctions and on which, in particular, stopping and parking are prohibited on the running carriageway(s)*’.

Although not explicitly mentioned by the EIA Directive, it may be useful to refer to the European Agreement on Main International Traffic Arteries for the definition of ‘motorways’. According to this agreement, ‘motorway’ means a road specially designed and built for motor traffic, which does not serve properties bordering on it, and which:

- (i) is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means;
- (ii) does not cross at level with any road, railway or tramway track, or footpath; and
- (iii) is specially sign-posted as a motorway.

Annex I (9)

Waste disposal installations for the incineration, chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9, or landfill of hazardous waste (i.e. waste to which Directive 91/689/EEC applies)

When deciding whether individual projects fall within this project category, reference can be made to definitions provided in the waste legislation. It is important to stress that, unless these definitions are explicitly referred to in the text of the EIA Directive (such as in the case of the terms ‘chemical treatment’ and ‘hazardous waste’), these definitions cannot be taken to be directly applicable for the purposes of the EIA Directive. The general objective of the EIA Directive, that projects likely to have significant effects on the environment should be made subject to an assessment of their effects, must be taken as a guiding principle to this effect.

Nevertheless, waste legislation is a useful reference point when dealing with this project category. A more detailed discussion of Annex I(9) is provided below.

The Waste Framework Directive³⁰ defines waste as ‘*any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard.*’ A broad interpretation of the term ‘waste’ should be adopted, in the light of the relevant ECJ jurisprudence.

The same Directive also defines ‘disposal’ as ‘*any of the operations provided for in Annex II A*’. Annex II, A, of the Waste Framework Directive is intended ‘to list disposal operations as they occur in practice’. It lists 15 such disposal operations. However, Annex I(9) does not apply to all 15 waste disposal operations. It applies only to waste disposal installations for:

- (a) the incineration of hazardous waste;
- (b) hazardous waste chemical treatment as defined in D9 of Annex IIA to the Waste Framework Directive (as amended); and
- (c) the landfill of hazardous waste.

It must be stressed that for the purposes of the EIA Directive, the term ‘disposal’ has to be interpreted to include ‘recovery’. This was confirmed by the European Court of Justice in case C-486/04, *Commission v Italy*, where the Court ruled that ‘*it must be held that the concept of waste disposal for the purpose of Directive 85/337 is an independent concept which must be given a meaning which fully satisfies the objective pursued by that measure [...]. Accordingly, that concept, which is not equivalent to that of waste disposal for the purpose of Directive 75/442, must be construed in the wider sense as covering all operations leading either to waste disposal, in the strict sense of the term, or to waste recovery.*’ (Paragraph 44). As a consequence, installations for the incineration, chemical treatment as defined in D9 of Annex IIA to the Waste Framework Directive as amended, and landfill of hazardous waste are included in this project category even when they result in waste recovery.

The Waste Framework Directive uses the term ‘incineration’ but does not define it. However, Article 3(4) of the Waste Incineration Directive³¹ defines ‘incineration plant’ as ‘*any stationary or mobile technical unit and equipment dedicated to the thermal treatment of*

³⁰ Council Directive 75/442/EEC of 15 July 1975 on waste, OJ L 194, 25.7.1975, p. 39 as amended, replaced by consolidated Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste, OJ L 114, 27.4.2006, p. 9.

³¹ Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste, OJ L 332, 28.12.2000, p. 91.

wastes with or without recovery of the combustion heat generated. This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated’.

As regards ‘chemical treatment’, the EIA Directive explicitly refers to the definition contained in Annex IIA of Directive 75/442/EEC under heading D9, i.e.: ‘Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination, etc.)’.

The Waste Framework Directive (as amended) uses the term ‘landfill’ but does not define it. However, landfill is defined in Article 2(g) of Directive 99/31/EC as ‘a waste disposal site for the deposit of the waste onto or into land (i.e. underground), including:

- internal waste disposal sites (i.e. landfill where a producer of waste is carrying out its own waste disposal at the place of production), and
- a permanent site (i.e. more than one year) which is used for temporary storage of waste, but excluding:
 - facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere, and
 - storage of waste prior to recovery or
 - treatment for a period less than three years as a general rule, or storage of waste prior to disposal for a period less than one year’.

In defining hazardous waste, the EIA Directive explicitly refers to Directive 91/689/EEC³². Article 1(4) of the latter defines the term ‘hazardous waste’ as follows:

- ‘- waste featuring in a list to be drawn up in accordance with the procedure laid down in Article 18 of Directive 75/442/EEC on the basis of Annexes I and II to this Directive, not later than six months before the date of implementation of this Directive. These wastes must have one or more of the properties listed in Annex III. The list shall take into account the origin and composition of the waste and, where necessary, limit values of concentration. This list shall be periodically reviewed and if necessary by the same procedure,
- any other waste which is considered by a Member state to display any of the properties listed in Annex III. Such cases shall be notified to the Commission and reviewed in accordance with the procedure laid down in Article 18 of Directive 75/442/EEC with a view to adaptation of the list.’

The waste list was established by Decision 2000/532/EC³³, last amended by Decision 2001/573/EC³⁴.

Information relevant for this project category may also be found in the Reference Document on Best Available Techniques for Waste Incineration (August 2006) and the Reference Document on Best Available Techniques for the Waste Treatments Industries (August 2006).

³² Council Directive 91/689/EEC of 12 December 1991 on hazardous waste, OJ L 377, 31.12.1991, p. 20.

³³ Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (notified under document number C(2000) 1147).

³⁴ Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.

Annex I (10)

Waste disposal installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9 of non-hazardous waste with a capacity exceeding 100 tonnes per day

The Waste Framework Directive defines disposal as ‘any of the operations provided for in Annex II A’, which is intended ‘to list disposal operations as they occur in practice’. Annex IIA lists 15 such disposal operations. However, Annex I(10) does not apply to all 15 waste disposal operations. It applies only to waste disposal installations for:

- (a) the incineration of non-hazardous waste with a capacity exceeding 100 tonnes per day; and
- (b) non-hazardous waste chemical treatment as defined in D9 of Annex IIA to the Waste Framework Directive (as amended) with a capacity exceeding 100 tonnes per day.

It must be stressed that for the purposes of the EIA Directive, the term ‘disposal’ has to be interpreted to include ‘recovery’. This was confirmed by the European Court of Justice in case C-486/04, *Commission v Italy*. The Court ruled that ‘it must be held that the concept of waste disposal for the purpose of Directive 85/337 is an independent concept which must be given a meaning which fully satisfies the objective pursued by that measure [...]. Accordingly, that concept, which is not equivalent to that of waste disposal for the purpose of Directive 75/442, must be construed in the wider sense as covering all operations leading either to waste disposal, in the strict sense of the term, or to waste recovery.’ (Paragraph 44). As a consequence, installations for the incineration or chemical treatment as defined in D9 of Annex IIA to the Waste Framework Directive of non-hazardous waste with a capacity exceeding 100 tonnes per day are included in this project category even when they result in waste recovery.

In case C-486/04, the Court held that Italy failed to fulfil its obligations under the EIA Directive by adopting legislation allowing projects for the recovery of hazardous waste and non-hazardous waste with a capacity exceeding 100 tonnes per day to avoid the environmental impact assessment procedure.

On account of the same legislation, Italy was also condemned by the Court of Justice in the judgment of 5 July 2007 in case C-255/05, where no EIA was carried out for adding a ‘third line’ to an existing incinerator.

For definitions of waste, chemical treatment and incineration plants, see Annex I(9).

Information relevant for this project category may also be found in the Reference Document on Best Available Techniques for Waste Incineration (August 2006) and the Reference Document on Best Available Techniques for the Waste Treatments Industries (August 2006).

Annex I (11)

Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.

When dealing with this project category, it may be useful to refer to the Water Framework Directive³⁵, which contains in its Article 2(2) a definition of ‘groundwater’:
‘ground water means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil’.

Annex I (12)

- (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year;*
- (b) In all other cases, works for the transfer of water resources between river basins where the multiannual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5 % of this flow.*

In both cases transfers of piped drinking water are excluded.

When dealing with this project category, it may be useful to refer to the Water Framework Directive³⁶, which contains in its Article 2(13) a definition of ‘river basin’:
‘river basin means the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta’.

Annex I (13)

Waste water treatment plants with a capacity exceeding 150 000 population equivalent as defined in Article 2 point (6) of Directive 91/271/EEC

Annex I(13) of the EIA Directive explicitly refers to the Urban Waste Water Treatment Directive³⁷ as regards the definition of the threshold set by ‘population equivalents’ for waste water treatment plants. According to Article 2(6) of the latter Directive, ‘population equivalent’ means *‘the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day’.*

³⁵ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ L 327, 22.12.2000, p. 1.

³⁶ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ L 327, 22.12.2000, p. 1.

³⁷ Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, OJ L 135, 30.5.1991, p. 40.

Annex I (17)

Installations for the intensive rearing of poultry or pigs with more than:

- (a) 85 000 places for broilers, 60 000 places for hens;*
- (b) 3 000 places for production pigs (over 30 kg); or*
- (c) 900 places for sows*

Information on intensive livestock installations, including definitions of terms included in this project category, may be found in the BREF on Intensive Rearing of Poultry and Pigs³⁸. However, it should be noted that the threshold for such activities differs between the IPPC and EIA Directives.

Broiler meat is produced by growing meat-type breeds of chicken (which in reality are hybrid varieties of combinations of many different breeds).

Sow is the technical term for the female pig from the beginning of the first service period, or from the moment of the first gestation. This includes replacement sows (gilts), i.e. sows that replace sows in the breeding herd to maintain the required genetic material. The rearing of sows is meant to include mating, gestating and farrowing sows.

Source: Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (July 2003)

Annex I (18)

Industrial plants for

- (a) the production of pulp from timber or similar fibrous materials;*

Industrial plants for the

- (b) production of paper and board with a production capacity exceeding 200 tonnes per day.*

Information on the production of pulp, paper and board (including definitions of these terms) can be found in BREFs. However, it should be noted that the threshold for such activities differs between the IPPC and EIA Directives.

Pulp for papermaking may be produced from virgin fibre by chemical or mechanical means or may be produced by the re-pulping of recovered paper (RCF). In the pulping process, the raw cellulose-bearing material is broken down into its individual fibres. Wood is the main raw material but straw, hemp, grass, cotton and other cellulose-bearing material can be used. Pulp produced in different ways have different properties, which make them suited to particular products. Most pulp is produced for the subsequent manufacture of paper or paperboard. Some is destined for other uses such as thick fibreboard or products manufactured from dissolved cellulose.

Paper is essentially a sheet of cellulose fibres with a number of added chemicals that affect the properties and quality of the sheet.

The two terms 'paper' and 'board' generally refer to the weight of the product sheet (grammage). According to the basic weight the following distinction can be made:

- paper ranges up to about 150 g/m²
- a heavier sheet (between 150 and 250 g/m²) is regarded as board (paperboard)

³⁸ Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs, July 2003.

- cardboard is above 250 g/m²

Source: Reference Document on Best Available Techniques in the Pulp and Paper industry (December 2001).

The Commission has also produced guidance on the definition of ‘board’. In the context of IPPC, ‘board’ is considered to mean cardboard³⁹.

Annex I (22)

Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex.

This project category was introduced by the 2003/35/EC amendments. Please see below for an overview of ECJ jurisprudence on changes and extensions of projects under the EIA Directive.

Directive 85/337/EEC did not explicitly cover modifications of existing projects, with the exception of *‘Modifications to development projects included in Annex I and projects in Annex I undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than one year’* (Annex II(12)).

Directive 97/11/EC amended Directive 85/337/EEC so as to include modifications of existing Annex I and Annex II projects in Annex II(13): *‘any change or extension of projects listed in Annex I or Annex II, already authorised, executed or in the process of being executed, which may have adverse effects on the environment’*.

Directive 2003/35/EC, which amended Directive 85/337/EEC, among others, and came into effect on 25 June 2005, introduced a new Annex I(22) category, including changes or extensions of projects listed in Annex I where such a change or extension in itself meets the thresholds, if any, set out in Annex I. Such project modifications therefore need to undergo an EIA according to Article 4(1) of the Directive. Changes or extensions of existing projects not included in Annex I(22) fall within Annex II(13).

The evolution over time of the wording of the EIA Directive concerning project modifications reflects ECJ case-law on this subject. On a number of occasions, the Court has dealt with the issue of whether a project should be interpreted as a new project or a modification of an existing one, and how the project then relates to the requirements of Articles 4(1) and 4(2) of the Directive.

In case C-431/92, *Commission v Germany* (the *Großkrotzenburg* case), the Court concluded that the project in question, the construction of a *thermal power station* with a heat output of 500 megawatts which had links with an existing construction, could not fall under the category of modifications to development projects included in Annex I mentioned in paragraph 12 of Annex II (before amendments by Directive 97/11/EC), for which optional assessment is provided. The court held that Annex I(2), under which projects for thermal power stations with a heat output of 300 megawatts or more must undergo an assessment,

³⁹ http://www.ec.europa.eu/environment/ippc/general_guidance.htm#13.

must be interpreted as requiring such projects to be assessed irrespective of whether they are separate constructions, are added to a pre-existing construction, or even have close functional links with a pre-existing construction (paragraphs 34-36).

In case C-72/95, *Kraaijeveld and others*, the Court found that the expression *canalization and flood-relief works* in point 10(e) of Annex II to Directive 85/337/EEC (before amendments by Directive 97/11/EC) should be interpreted as including not only construction of a new dyke but also modification of an existing dyke involving its relocation, reinforcement or widening, replacement of a dyke by constructing a new dyke in situ, whether or not the new dyke is stronger or wider than the old one, or a combination of such works (paragraph 42).

In case C-227/01, *Commission v Spain*, the Court concluded that point 7 of Annex I of the Directive (regarding *lines for long-distance railway traffic*) must be understood to include the doubling of an already existing railway track (paragraph 48). The Court referred to the Directive's wide scope and broad purpose and to the Directive's fundamental objective that, before consent is granted, 'projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location shall be made subject to a mandatory assessment with regard to their effects' (paragraph 47). It further stated, in paragraph 49 of the ruling: *A project of that kind can have a significant effect on the environment within the meaning of that Directive, since it is likely to have lasting effects on, for example, flora and fauna and the composition of soil or even on the landscape and produce significant noise effects, inter alia, so that it must be included in the scope of the Directive. The objective of Directive 85/337 would be seriously undermined if that type of project for the construction of new railway track, even parallel to existing track, could be excluded from the obligation to carry out an assessment of its effects on the environment. Accordingly, a project of that sort cannot be considered a mere modification to an earlier project within the meaning of point 12 of Annex II to the Directive.*

In case 255/05, *Commission v Italy*, the Court concluded that, by not making the project to implement a 'third line' of an existing incinerator subject to the environmental impact assessment procedure before consent was given for its construction, Italy failed to fulfil its obligations under the EIA Directive. In this case, the Court followed the Commission's views, stating that this new project, extending the existing installation, is to be regarded as an installation covered by point 10 of Annex I of the EIA Directive.

2.3 PROJECTS LISTED IN ANNEX II

Annex II (1) Agriculture, silviculture and aquaculture

(b) Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes;

The decision as to which specific agricultural practices and which types of areas fall within this project category is bound to vary between Member States, given the variety of land uses and agricultural practices in different parts of Europe. Some countries have included lists of relevant agricultural practices and habitats in national guidance documents in order to clarify how this category should be interpreted.

In relation to the term ‘intensive’, this project category is considered to include all practices used to significantly improve the quality of land so as to enhance or ‘intensify’ its agricultural productivity.

The term ‘uncultivated land’ is considered to include all areas that are not agriculturally managed at the time of assessment. However, land areas (fallow land, permanent pastures or meadows) that are temporarily taken out of production but are still counted as Utilised Agricultural Areas⁴⁰ shall not be considered as ‘uncultivated land’.

The definition of what constitutes semi-natural areas will vary from one Member State to the next, given that it relates to the adjudged value of different areas which occur throughout the EU. In this context, the term ‘value’ will certainly include the nature conservation value of an area, but will also include, where relevant, other valued environmental factors. For example, the concept of semi-natural areas may be associated with their landscape and/or archaeological value.

The term ‘semi-natural’ indicates that even areas where there has been some degree of human intervention, which prevents an area from being ‘natural’, will fall within this category, regardless of the moment in time when the human intervention took place. In many Member States, the term ‘semi-natural’ is likely to be applicable to large parts of the country area, although the extent of management will vary.

The definition of which areas should be considered ‘semi-natural’ may, in practice, depend upon a wider evaluation of the role of habitats and areas or features of high biodiversity interest in the wider countryside (such as ponds, small wetlands, ancient hedgerows, patterns of tree cover) by the competent authority or authorities responsible for nature conservation designations or biodiversity in the Member States. Other potentially relevant environmental factors may have to be considered by other authorities — those responsible, for example, for landscape designations or protection of archaeology. There is therefore some margin for discretion, but the main emphasis should be on identifying those areas which reflect natural conditions and have some intrinsic nature conservation or other environmental value which would be lost by agricultural management proposals employed to permit intensification of agricultural practices.

⁴⁰ These areas are eligible for receiving direct payments in line with Council Regulation N° 1782/2003 which in its article 5 defines that Member States need to ensure that these areas are maintained in good agricultural and environmental condition and shall ensure the maintenance of the area under permanent pasture.

One key indicator for potential habitat types that may fall within the concept of ‘semi-natural areas’ of high conservation value will be the habitat types and the habitats of species that are identified under the Habitats⁴¹ and the Birds⁴² Directives. Other designations, for example in relation to landscape features, will also be relevant.

There has been one ECJ ruling related to this project category. This was case C-392/96, *Commission v Ireland*, in which the Commission argued that sheep grazing would fall within the term ‘intensive agricultural purposes’, but the Court was not convinced that sheep grazing as practiced in Ireland constituted a project within the meaning of Article 1(2) of the EIA Directive. It should be noted that this case related to the EIA Directive before the 1997 amendments, which introduced the category ‘intensive livestock installations (projects not included in Annex I)’ in Annex II(1)(e).

(e) Intensive livestock installations (projects not included in Annex I);

This project category can be considered to include installations for the concentrated rearing of livestock either in purpose-built units or in areas dedicated to this activity, either indoor or outdoor.

Only activities that constitute a ‘project’ within the meaning of the EIA Directive will fall within this project category. The ruling by the European Court of Justice in C-392/96, *Commission v Ireland*, may be relevant here, although this case related to different project categories, i.e. Annex II(1)(b) and (d) of Directive 85/337/EEC prior to amendments (‘*Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes*’; and ‘*Initial afforestation where this may lead to adverse ecological changes and land reclamation for the purposes of conversion to another type of land use*’). In paragraphs 80 and 81 of the ruling, the Court referred to sheep grazing, considered to be a ‘development which may have adverse environmental consequences’. However, the Court further stated that ‘the Commission has not demonstrated that sheep farming as practised in Ireland constitute a project’. As the case involved hill-grazing on open terrain, however, it should not be assumed that the creation of confined open-air feedlots also falls outside the scope of the category.

As Annex II(1)(e) does not refer to any specific animal species, its scope should not be limited purely to those animals listed in Annex I(17), i.e. pigs and poultry. Directive 85/337/EEC prior to amendments included in its Annex II only ‘poultry-rearing installations’ (Annex II(1)(e)) and ‘pig-rearing installations’ (Annex II(1)(f)). After the 97/11/EC amendments, however, Annex II(1)(e) no longer refers to specific species, so in view of the wide scope and broad purpose of the Directive⁴³ the rearing of additional animal species may need to be included in this category⁴⁴. The type of species will vary depending on the actual activities carried out in each Member State⁴⁵.

⁴¹ Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Flora and Fauna, OJ L 206, 22.7.1992, p. 7.

⁴² Council Directive 79/409/EEC on the conservation of wild birds, OJ L 103, 25.4.1979, p. 1.

⁴³ Consistently noted by the European Court of Justice, for example in C-72/95, *Kraaijeveld and Others*, paragraph 31.

⁴⁴ In particular, the general objective of the Directive as expressed in Article 2(1) should be borne in mind, i.e. that ‘*projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to [...] an assessment with regard to their effects*’.

⁴⁵ By way of example, national EIA legislations in several Member States explicitly include the intensive rearing of calves and cattle. In at least one Member State, this project category is considered to cover the rearing of rabbits, ducks, geese and horses, amongst other species.

The reader may also wish to refer to the BREF on the Intensive Rearing of Poultry and Pigs⁴⁶, which contains information on these types of installation.

(f) Intensive fish farming;

Fish farming should be considered ‘intensive’ when it leads to stocking densities well in excess of the levels which would be experienced in natural conditions.

Typically, this practice will involve the input of food, additives and medicines and the use of other husbandry techniques. The water may also be aerated to increase the productivity of the fish or to maintain conditions such that increased stocking densities and waste product treatment can be managed satisfactorily.

It should be noted that since the wording of the Directive is not specific in this respect, this category should be taken to include the farming of fish both in fresh water and at sea.

Doubts have arisen in practice as to the relationship between the term ‘aquaculture’ and ‘fish farming’.

Aquaculture can be considered to cover ‘intensive fish farming’, but not vice versa: an example of an activity that would not be included in this project category but falls under the definition of ‘aquaculture’ is the cultivation of aquatic plants for human consumption, e.g. seaweed or watercress.

This is in line with the definition provided in Council Regulation No 1421/2004 of 19 July 2004⁴⁷ which provides a definition of aquaculture, i.e. ‘*the rearing or culture of aquatic organisms using techniques designed to increase the production of the organisms in question beyond the natural capacity of the environment or culture stage, up to and including harvesting*’.

Annex II (4) Production and processing of metals

(a) Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting;

Information on terms and production processes included in this project category can be found in BREFs:

Steel is a ferrous alloy with a carbon content generally lower than 2%. The (mass) content of iron is bigger than that of any other element; the alloy also usually contains other elements.

Four routes are currently used for the production of steel: the classic blast furnace/basic-oxygen furnace route, direct melting of scrap (electric arc furnace), smelting reduction and direct reduction.

Source: Reference Document on Best Available Techniques in the Smitheries and Foundries Industry (May 2005).

⁴⁶ Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs, July 2003.

⁴⁷ Council Regulation No 1421/2004 of 19 July 2004 amending Regulation No 2792/1999 laying down the detailed rules and arrangements regarding Community structural assistance in the fisheries sector. This Regulation mentions ‘intensive fish farming’, but does not define it.

Pig iron is the 'liquid iron' obtained as a result of the primary reduction of oxide ores.

Continuous casting is a casting method whereby the steel is cast in a continuous strand. It is an alternative to discontinuous processes such as ingot casting.

Source: Best Available Techniques Reference Document on the Production of Iron and Steel (December 2001).

(b) Installations for the processing of ferrous metals:

(i) hot-rolling mills;

(ii) smitheries with hammers;

(iii) application of protective fused metal coats;

Information on the processing of ferrous metals, including hot rolling and the application of protective fused metal coats can be found in the BREF on the Ferrous Metals Processing Industry:⁴⁸

Hot rolling is a manufacturing method used in the ferrous metal processing sector. In hot rolling the size, shape and metallurgical properties of steel are changed by repeatedly compressing the hot metal (temperature ranging from 1050 to 1300 °C) between electrically powered rollers. Products obtained from hot rolling are usually classified in two basic types according to their shape: flat and long products. Hot rolling mills usually comprise the following process steps: conditioning of the input (scarfing, grinding); heating to rolling temperature; descaling; rolling (roughing including width reduction, rolling to final dimension and properties) and finishing (trimming, slitting, cutting).

The continuous hot dip coating includes examples of 'application of protective fused metal coats'. In particular, in the hot dip coating process, steel sheet or wire is continuously passed through molten metal.

An alloying reaction between the two metals takes place, leading to a good bond between coating and substrate.

Metals suitable for the use in hot dip coating are those which have a melting point low enough to avoid any thermal changes in the steel product; for example, aluminium, lead, tin and zinc.

Source: Reference Document on Best Available Techniques in the Ferrous Metals Processing Industry (December 2001)

(c) Ferrous metal foundries;

Definitions and information on foundries and ferrous materials can be found in BREFs.

Foundries melt metals, alloys and reshape them into products at or near their finished shape through the pouring and solidification of the molten metal or alloy into a mould. Typically ferrous foundries largely use lost moulds (i.e. sand moulding) Foundries casting in lost moulds, often buy wooden, metal or plastic patterns (for their mould design) and operate an in-house pattern maintenance and repair shop. Moulds, cores and lost models are generally produced as part of the foundry process.

Ferrous materials are those materials of which iron is the major constituent, i.e. the content of Fe (%w/w) is higher than that of any other element

Source: Reference Document on Best Available Techniques in the Smitheries and Foundries Industry (May 2005).

⁴⁸ Reference Document on Best Available Techniques in the Ferrous Metals Processing Industry, Dec 2001.

(d) Installations for the smelting, including the alloyage, of non-ferrous metals, excluding precious metals, including recovered products (refining, foundry casting, etc.);

Technical information which may be relevant to this project category (including information on alloyage) can be found in BREFs. (The reader is also referred to the section above on Annex I(4), second indent.)

This activity could involve smelting, re-melting, alloying and refining installations for non-ferrous metals as well as non-ferrous metals foundries. The production of ferro-alloys, which are mainly used as master alloys in the iron and steel industry, is considered part of non-ferrous metals industry. Their alloying elements, i.e. refractory metals, chromium, silicon, manganese and nickel are all non ferrous metal.

Source: Reference Document on Best Available Techniques in the Non Ferrous Metals Industries (December 2001)

(e) Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process;

Information which may be relevant to this project category can be found in BREFs.

The surface treatments of plastics and metals are mostly water-based and encompass e.g. plating, electroplating, immersion coating, autocatalytic plating, anodising, and phosphatising, including various pre- and after treatment techniques.

Source: Reference Document on Best Available Techniques for the Surface Treatment of Metals and Plastics (August 2006)

Information relevant for this project category may also be found in the Reference Document on Best Available Techniques for Surface Treatment using Organic Solvents (August 2007).

(k) Installations for the roasting and sintering of metallic ores

Technical information which may be relevant to this project category (including information on sintering) can be found in BREFs.

The sintering process is used to increase the size of the raw material or the chemical composition so that it is suitable for further processing.

The main binding mechanism in ore sintering is achieved by bringing the ore up to a temperature where the gangue minerals start to melt, whereby individual particles are fused together in a matrix of molten slag. In some cases recrystallisation, e.g. formation of new crystals across former grain boundaries will play some role in the sintering process. The sinter is usually crushed and classified and the fine materials are returned to the sintering process, sometimes the returned material is 2 – 4 times greater than the sinter produced. The feed particles are then sent to the smelter.

Source: Reference Document on Best Available Techniques in the Non Ferrous Metals Industries (December 2001)

Annex II (5) Mineral industry

(b) Installations for the manufacture of cement;

Information on cement and its manufacturing process may be found in BREFs.

Cement is a finely ground, non-metallic, inorganic powder which, when mixed with water, forms a paste that sets and hardens. Cement is a basic material for building and civil engineering construction. The cement manufacturing process involves the initial mining, grinding and homogenisation of raw materials, then calcination of calcium carbonate, followed by burning the resulting calcium oxide together with silica, alumina, and ferrous oxide at high temperatures to form clinker. The clinker is then ground or milled together with gypsum and other constituents to produce cement.

Naturally occurring calcareous deposits such as limestone, marl or chalk provide the source for calcium carbonate. Silica, iron oxide and alumina are found in various ores and minerals, such as sand, shale, clay and iron ore. Power station ash, blast furnace slag, and other process residues can also be used as partial replacements for the natural raw materials.

Source: Reference Document on Best Available Techniques for Cement and Lime manufacturing industries (December 2001)

(d) Installations for the manufacture of glass including glass fibre;

(e) Installations for smelting mineral substances including the production of mineral fibres;

Descriptions of activities covered by Annex II(5)(d) and (e) are included in the glass industry BREF⁴⁹, which covers manufacturing of the following eight types of products: container glass, flat glass, continuous-filament glass fibre, domestic glass, special glass (including water glass), mineral wool (with two sub-sectors, glass wool and stone wool), ceramic fibre and frits.

Information relevant for this project category may also be found in the Ceramics BREF⁵⁰.

Annex II (6) Chemical industry (Projects not included in Annex I)

(a) Treatment of intermediate products and production of chemicals;

(b) Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides;

The wording of Annex II(6) makes it clear that it covers all of the chemical industry not specified in Annex I(6) (i.e. all chemical plants not considered 'integrated'). Besides the production of traded products (such as basic chemicals, pesticides, pharmaceutical products, paints and varnishes), the treatment of intermediates⁵¹ should also be considered for EIA.

Given that (b) addresses (final) products not necessarily produced by chemical conversion processes the EIA Directive expands its scope to the chemical industry in a wide sense. Therefore, plants that solely formulate chemical products or which produce other final (not chemical) products (i.e. elastomers such as tyres, conveyor belts, rubber gloves) from chemical precursors may also be covered.

⁴⁹ Reference Document on Best Available Techniques in the Glass Manufacturing Industry, Dec 2001.

⁵⁰ Reference Document on Best Available Techniques in the Ceramic Manufacturing Industry, Aug 2007.

⁵¹ Regulation (EC) No 1907/2006 concerning Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Reference may be made to BREFs and the REACH documentation for a definition of ‘intermediates’. According to REACH: ‘*Intermediate: means a substance that is manufactured for and consumed in or used for chemical processing in order to be transformed into another substance (hereinafter referred to as “synthesis”)*’. The BREFs⁵² indicate clearly that ‘intermediates’ are prepared for the rest of the chemical industry to use and that they have limited use in their own right, being a stage between basic chemicals (sulphuric acid, ammonia, chlorine, caustic soda, soda ash, ethylene, etc) and fertilisers, pesticides, pharmaceuticals, disinfectants, soaps, detergents, cement, glass, plastics, paints, fibres, dyes and rubber (all products).

Annex II (7) Food industry

It should be noted that projects listed under this heading in Annex II of the EIA Directive may generally result in products both intended and not intended for human consumption.

(f) Installations for the slaughter of animals

Information on ‘slaughter’ activities is contained in BREFs.

The ‘slaughter’ activity is considered to end with the making of standard cuts for large animals (such as sheep, cattle and pigs) and the production of clean whole saleable carcasses for poultry. Slaughterhouses are divided in 2 types:

- 1) slaughterhouses of large animals (such as sheep, cattle and pigs). In this case the ‘slaughter’ activity is considered to end with the making of standard cuts.
- 2) slaughterhouses of poultry. In this case the ‘slaughter’ activity is considered with the production of a clean whole saleable carcass.

Source: Reference Document on Best Available Techniques in the Slaughterhouses and Animal By-products Industries (May 2005)

(h) Fish-meal and fish-oil factories

Information on the fish-meal process is contained in BREFs.

In principle, the fish-meal process is the removal of oil and water from the raw material and the separation of the material into 3 fractions, i.e. oil, meal and water. The water fraction is disposed of, normally to sea. The process is characterised by the continuous processing of very large quantities of raw material. Production normally takes place 24 hours a day.

Source: Reference Document on Best Available Techniques in the Slaughterhouses and Animal By-products Industries (May 2005)

Information relevant for this project category may also be found in the Reference Document on Best Available Techniques in the Food, Drink and Milk Industries (August 2006).

⁵² Reference Document on Best Available Techniques in Large Volume Inorganic Chemicals — Solids and Others, Aug 2007; Reference Document on Best Available Techniques in the Large Volume Organic Chemical Industry, Feb 2003.

Annex II (8) Textile, leather, wood and paper industries

(a) *Industrial plants for the production of paper and board (projects not included in Annex I);*

Information on the production of paper and board (including definitions of these terms) can be found in BREFs.

Paper is essentially a sheet of cellulose fibres with a number of added chemicals that affect the properties and quality of the sheet.

The two terms of paper and board generally refer to the weight of the product sheet (grammage). According to the basic weight the following distinction can be made:

- paper ranges up to about 150 g/m²
- a heavier sheet (between 150 and 250 g/m²) is regarded as board (paperboard)
- cardboard is above 250 g/m²

Source: Reference Document on Best Available Techniques in the Pulp and Paper Industry (December 2001)

(b) *Plants for the pretreatment (operations such as washing, bleaching, mercerization) or dyeing of fibres or textiles;*

Information that may be relevant to this project category can be found in the BREF on the Textiles Industry⁵³, which contains a description of the following activities: fibre preparation; pre-treatment; dyeing, printing; finishing.

(c) *Plants for the tanning of hides and skins;*

Information that may be relevant to this project category (including the definitions of 'tanning', 'hides' and 'skins') can be found in BREFs.

Tanning: in this process the collagen fibre is stabilised by the tanning agents so that the hide or skin is no longer susceptible to putrefaction or rotting.

The tannery operation consists of converting the raw hide or skin, a highly putrescible material, into leather, a stable material, which can be used in the manufacture of a wide range of products. The whole process involves a sequence of chemical reactions and mechanical processes. Amongst these, tanning is the fundamental stage, which gives leather its stability and essential character.

Hide: the pelt of a large animal such as a cow and horse

Skin: the pelt of a small animal, such as a calf (calf skin), pig (pigskin), sheep (sheepskin), etc

Source: Reference Document on Best Available Techniques for Tanning of Hides and Skins (February 2003)

⁵³

Reference Document on Best Available Techniques for the Textiles Industry, July 2003.

Annex II (10) Infrastructure projects

(a) Industrial estate development projects

This project type is interpreted by Member States very differently due to each Member State's practice and legal provisions in the planning and developing of industrial estates. The 5 Years Report established that Member States have not explicitly identified specific types of projects covered by this project category. Many Member States have preferred to specify the project size (an area measured in hectares) to be used for industrial estate development projects.

In order to apply the EIA Directive effectively and to ensure that all projects that warrant EIA under this category are clearly identified, certain guiding principles might be helpful. First, according to the rulings of ECJ⁵⁴, the wording of the EIA Directive indicates that its scope is wide and its purpose very broad. This interpretation should be taken into account when determining whether projects come under Annex II(10)(a). Other factors to be considered when deciding whether a project falls within this category are the project's scale, its size, the nature of the activity and the sensitivity of the environmental settings. The categorical exclusion of certain projects from this category may not be compliant with the EIA Directive.

Information received from Member States shows that there is no real consensus within Member States on the use of terms 'industrial' and 'estate'. For example, few Member States use the term 'industrial or business parks' when defining this project category. These 'parks' can be considered to have the following characteristics: they are areas developed by a builder and operator which have the required infrastructure for joint industrial or business utilisation by several companies, are characterised by spatial proximity and form an operational or functional unit. Therefore, providing a comprehensive list of project types that might be relevant under this particular heading is almost impossible. In general, this category could include any type of projects that are intended for high-tech companies, manufacturing, trading, and distribution/transport companies.

However, summarising information provided by Member States⁵⁵ and also found in UNEP⁵⁶ and World Bank guidance documents⁵⁷, some common characteristics emerge which could be used for describing this project category. An industrial estate development project could be understood as specific area (land), which is zoned (developed) for industrial or for joint industrial and business purposes and where the necessary infrastructure is provided.

The term 'infrastructure' is widely interpreted and may include roads, power, and other utility services provided to facilitate the growth of industries.

It is common practice for industrial estate development projects to be intended for simultaneous use by several companies that are in close proximity. These companies may be provided with infrastructure for joint industrial or business utilisation.

Industrial estate development projects constitute an area where potential overlaps between the EIA and SEA Directives, as referred to in section 1.4, can occur more frequently than in other areas. These projects are included in Annex II(10)(a) of the EIA Directive but plans or

⁵⁴ Stated in ECJ case C-72/95, *Kraaijeveld and others*, and in subsequent cases.

⁵⁵ Two Member States provided further clarification of the description of this project category in their national EIA systems.

⁵⁶ United Nations Environmental Programme.

⁵⁷ UNEP. Production and Consumption Branch, 2001 and World Bank. Pollution Prevention and Abatement Handbook, July 1998.

programmes for industrial estates will come under the SEA Directive if they conform to the criteria contained in the latter.

(b) Urban development projects, including the construction of shopping centres and car parks

The EIA Directive provides two examples of what could be considered to fall within this category, i.e. shopping centres and car parks, which however do not constitute an exhaustive list of the activities covered.

The 5 Years Report⁵⁸ pointed to concerns regarding the interpretation of this project category, already expressed by Member States in the two previous reviews of the operation of the EIA Directive.

Information on existing practices in Member States shows that interpretations differ regarding the scope of this category.

Several countries have explicitly included a number of project types under the ‘urban development projects’ category.

Based on the 5 Years Report and additional information subsequently provided during the preparation of this document, it can be noted that Member States have in several cases interpreted this category in a broad sense, with housing developments in particular being frequently included in the ‘urban development projects’ category⁵⁹, as are sports stadia⁶⁰. In one Member State, this category also includes leisure centres and multiplex cinemas.

In interpreting the scope of Annex II(10)(b), the ‘wide scope and broad purpose’ of the EIA Directive⁶¹ should be born in mind. Consideration should also be given to the general objective of the Directive as expressed in Article 2(1), i.e. that ‘*projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to [...] an assessment with regard to their effects*’. Finally, it should be noted that ‘urban development projects’ are also listed under the wide ‘Infrastructure projects’ heading.

The ruling of the European Court of Justice in case C-332/04, *Commission v Spain*, should also be taken into account. In that case, the Court concluded that a project for a cinema complex to be constructed in an urban area fell under Annex II, point 10(b).

On the basis of these considerations, it would be advisable to interpret the scope of this project category as follows:

1. Projects with similar characteristics to car parks and shopping centres should be considered to fall in Annex II(10)(b). This could be the case of bus garages for example, which are not explicitly mentioned in the EIA Directive, but have similar characteristics to car parks.
2. Construction projects such as housing developments, hospitals, universities, sports stadia, cinemas and theatres should also be assumed to fall within this category. The underlying

⁵⁸ COM(2003) 334 final

⁵⁹ In 7 out of the 12 Member States that responded to this point of the questionnaire which formed the basis for the 5 Years Report.

⁶⁰ 5 out of the 12 Member States that responded to this point of the questionnaire which formed the basis for the 5 Years Report.

⁶¹ Stated in C-72/95, *Kraaijeveld and others*, and consistently stressed in subsequent ECJ rulings.

principle is that all these project categories are of an urban nature and that they may cause similar types of environmental impacts⁶².

3. Projects to which the terms ‘urban’ and ‘infrastructure’ can relate, such as the construction of sewerage and water supply networks, should also be included in this category.

Member States may decide in their national EIA systems that some of the above mentioned projects (for example, sports stadia or water supply networks⁶³) fall within other Annex II project categories. Compliance with the Directive will be ensured, irrespective of which Annex II category is considered applicable, provided that such projects do not escape from the scope of application of the Directive.

In relation to project location, the 5 Years Report points out that ‘based upon the broad interpretation of the Directive required by the ECJ, an urban development project should be seen as a project that is urban in nature regardless of its location’. This general criterion should be taken into account for projects located outside urban areas, which should therefore be deemed to fall within Annex II(10)(b)⁶⁴.

Finally, urban development projects constitute an area where potential overlaps between the EIA and SEA Directives, as referred to in section 1.4, can occur more frequently than in other areas.

These projects are included in Annex II(10)(b) of the EIA Directive, but plans or programmes for urban development will come within the scope of the SEA Directive if they conform to the criteria contained in the latter.

(f) Inland-waterway construction not included in Annex I, canalization and flood-relief works;

The ruling by the European Court of Justice in case C-72/95, *Kraaijeveld and others*, must be taken into account when interpreting this project category.

In case C-72/95, the Court stated that ‘canalization and flood-relief works’ must be interpreted as including works for retaining water and preventing floods, and consequently dyke work along navigable waterways. The expression ‘canalization and flood-relief works’ is also to be interpreted as including not only construction of a new dyke but also modification of an existing dyke involving its relocation, reinforcement or widening, replacement of a dyke by constructing a new dyke in situ, whether or not the new dyke is stronger or wider than the old one, or a combination of such works.

(l) Groundwater abstraction and artificial groundwater recharge schemes not included in Annex I;

(m) Works for the transfer of water resources between river basins not included in Annex I.

⁶² Including noise and traffic-related disruption during the construction phase, traffic generation during the operational phase, land take, impairment of soil function due to sealing and visual impact.

⁶³ In at least one Member State sewerage and water supply networks are considered to fall within Annex II(10)(j) ‘Installations of long-distance aqueducts’.

⁶⁴ On the other hand, projects located within, or close to, already urbanised areas must also be considered to fall within this project category, as the ECJ confirmed in its judgment in case C-332/04, *Commission v Spain*, paragraph 87.

When dealing with this project category, it may be useful to refer to Directive 2000/60/EC⁶⁵ (the ‘Water Framework Directive’, WFD), which contains the following definitions:

‘ground water means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil’ (Art 2(2));

‘river basin means the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta’ (Article 2(38)).

Where the production of artificial snow or ice involves the extraction and transfer of water, such activities should be screened to judge if they are to be regarded as projects under the categories in Annex II 10(l) or (m). Furthermore, ski-runs are covered by Annex II(12)(a), although this category is not included in this guidance.

Furthermore, Annex VI of the WFD concerning the measures to be included within the Programmes of Measures of the river basin districts, pursuant to Article 11 of the WFD, refers to the measures required by the EIA Directive.

Annex II (11) Other projects

(b) Installations for the disposal of waste (projects not included in Annex I);

Directive 75/442/EEC⁶⁶ (the ‘Waste Framework Directive’) as amended by Directive 91/156/EEC⁶⁷ defines ‘waste’ as *‘any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard.’* A broad interpretation of the term ‘waste’ should be adopted in the light of the relevant ECJ jurisprudence.

It must be stressed that for the purposes of the EIA Directive, the term ‘disposal’ has to be interpreted to include ‘recovery’ too. This was confirmed by the European Court of Justice in case C-486/04, *Commission v Italy*. The Court ruled that *‘it must be held that the concept of waste disposal for the purpose of Directive 85/337 is an independent concept which must be given a meaning which fully satisfies the objective pursued by that measure [...]. Accordingly, that concept, which is not equivalent to that of waste disposal for the purpose of Directive 75/442, must be construed in the wider sense as covering all operations leading either to waste disposal, in the strict sense of the term, or to waste recovery’* (paragraph 44).

(See also Annex I(9) and Annex I(10).)

⁶⁵ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

⁶⁶ Council Directive of 15 July 1975 on waste (75/442/EEC).

⁶⁷ Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

Annex II (12) Tourism and leisure

(e) Theme parks

The project category 'Theme parks' is among those for which information is difficult to find. Most Member States have transposed this project category as defined in the EIA Directive without specifying the project further (e.g. project size and purpose).

As noted already, the wording of the EIA Directive indicates that its scope is wide and its purpose very broad⁶⁸. Consequently, parks differing in purpose, size, location, extent of soil sealing and expected number of visitors might be considered to fall within this project category.

When deciding on whether a particular project falls under Annex II(12)(e) it would be appropriate to consider the following:

1) The theme or objective of the park is not defined by the EIA Directive. Parks falling within this project category could be developed, for example, for recreational, educational or informative purposes. However, it should be noted that the project category 'theme park' is listed in Annex II(12) under the heading 'Tourism and leisure'. For example, a park that has a specific theme or attraction or several attractions, like an amusement park, should be considered a theme park. Areas planned for a leisure attraction based on or related to a particular subject should also be covered by this project category. For example, aquaparks and zoos⁶⁹ should be considered to fall under this project category.

2) Sports stadia would in principle be covered by Annex II(10)(b) 'urban development projects'. However, certain Member States may decide in their national EIA systems that sports stadia fall within the 'theme parks' category. Compliance with the Directive will be ensured, irrespective of which Annex II category is considered applicable, provided that such projects do not escape from the scope of application of the Directive.

3) Annex II(12)(e) does not include golf courses, which fall outside of the scope of the EIA Directive. However, it is worth noting that golf courses are subject to national EIA legislation in several Member States.

⁶⁸ Stated in ECJ case C-72/95, *Kraaijeveld and others*, and in case C-227/01, *Commission v Spain*.

⁶⁹ Article 2 of the Zoos Directive (Council Directive 1999/22/EC of 29 March 1999 relating to the keeping of wild animals in zoos, OJ L 94, 9.4.1999, p. 24) defines 'zoos' as 'all permanent establishments where animals of wild species are kept for exhibition to the public for 7 or more days a year, with the exception of circuses, pet shops and establishments which Member States exempt from the requirements of this Directive on the grounds that they do not exhibit a significant number of animals or species to the public and that the exemption will not jeopardise the objectives of this Directive.'

Annex II (13)

- *Any change or extension of projects listed in Annex I or Annex II, already authorized, executed or in the process of being executed, which may have significant adverse effects on the environment;*

Directive 85/337/EEC did not explicitly cover modifications of existing projects, with the exception of '*Modifications to development projects included in Annex I and projects in Annex I undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than one year*' (Annex II(12)).

Directive 97/11/EC amended Directive 85/337/EEC so as to include modifications of existing Annex I and Annex II projects in Annex II(13): '*any change or extension of projects listed in Annex I or Annex II, already authorised, executed or in the process of being executed, which may have adverse effects on the environment*'.

Directive 2003/35/EC, which amended Directive 85/337/EEC, among others, and came into effect on 25 June 2005, introduced a new Annex I(22) category including changes or extensions of projects listed in Annex I where such a change or extension in itself meets the thresholds, if any, set out in Annex I. These project modifications therefore need to undergo an EIA according to Article 4(1) of the Directive. Changes or extensions of existing projects not included in Annex I(22) fall within Annex II(13).

The evolution over time of the wording of the EIA Directive concerning project modifications reflects ECJ case-law on this subject. On a number of occasions, the Court has dealt with the issue of whether a project should be interpreted as a new project or modification of an existing one, and how the project is then covered by the requirements of Articles 4(1) and 4(2) of the Directive.

In case C-431/92, *Commission v Germany* (the *Großkrotzenburg* case), the Court concluded that the project in question, the construction of a thermal power station with a heat output of 500 megawatts which had links with an existing construction, could not fall within the category of modifications to development projects included in Annex I mentioned in paragraph 12 of Annex II (before amendments by Directive 97/11/EC), for which optional assessment is provided. The court held that Annex I(2), under which projects for thermal power stations with a heat output of 300 megawatts or more must undergo an assessment, must be interpreted as requiring such projects to be assessed irrespective of whether they are separate constructions, are added to a pre-existing construction, or even have close functional links with a pre-existing construction (paragraphs 34-36).

In case C-72/95, *Kraaijeveld and others*, the Court found that the expression *canalization and flood-relief works* in point 10(e) of Annex II to Directive 85/337/EEC (before amendments by Directive 97/11/EC) should be interpreted as including not only construction of a new dyke but also modification of an existing dyke involving its relocation, reinforcement or widening, replacement of a dyke by constructing a new dyke in situ, whether or not the new dyke is stronger or wider than the old one, or a combination of such works (paragraph 42).

In the case C-227/01, *Commission v Spain*, the Court concluded that point 7 of Annex I of the Directive (regarding lines for *long-distance* railway traffic) must be understood to include the doubling of an already existing railway track (paragraph 48). The Court referred to the Directive's wide scope and broad purpose and to the Directive's fundamental objective that, before consent is granted, 'projects likely to have significant effects on the environment by virtue, *inter alia*, of their nature, size or location shall be made subject to a mandatory assessment with regard to their effects' (paragraph 47). It further stated, in paragraph 49 of the ruling: *A project of that kind can have a significant effect on the environment within the meaning of that Directive, since it is likely to have lasting effects on, for example, flora and fauna and the composition of soil or even on the landscape and produce significant noise effects, inter alia, so that it must be included in the scope of the Directive. The objective of Directive 85/337 would be seriously undermined if that type of project for the construction of new railway track, even parallel to existing track, could be excluded from the obligation to carry out an assessment of its effects on the environment. Accordingly, a project of that sort cannot be considered a mere modification to an earlier project within the meaning of point 12 of Annex II to the Directive.*

APPENDIX I: INFORMATION RELEVANT TO EIA PROJECT CATEGORIES CONTAINED IN ADOPTED BREFS⁷⁰

For further information on the relevance of BREFs in this context the reader is referred to section 1 of the main text.

Please note that the ‘Type of information’ column only refers to those terms contained in Annexes I and II of the EIA Directive that are defined, or explained, in BREFs. In addition, all BREFs contain detailed information on production processes, which could be useful when trying to interpret the scope of specific project categories. It should be noted that the thresholds in the IPPC Directive and the associated BREFs may differ from those in the EIA Directive.

For more information on BREFs and updated versions, see <http://www.eippcb.jrc.es/pages/FActivities.htm>.

BREF	EIA project categories	Type of information
Reference Document on Best Available Techniques for Mineral Oil and Gas Refineries (February 2003)	<i>Annex I(1)</i> <i>Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day</i>	Definition of refineries, crude oil and natural gas.
Reference Document on Best Available Techniques in the Pulp and Paper industry (December 2001)	<i>Annex I(18) Industrial plants for the:</i> <i>(a) production of pulp from timber or similar fibrous materials;</i> <i>(b) production of paper and board with a production capacity exceeding 200 tonnes per day.</i> <i>Annex II(8) Textile, leather, wood and paper industries</i> <i>(a) Industrial plants for the production of paper and board (projects not included in Annex I);</i>	Definition of paper, board and pulp.
Reference Document on Best Available Techniques in the Cement and Lime Manufacturing industries (December 2001)	<i>Annex II(5) Mineral industry</i> <i>(b) Installations for the manufacture of cement;</i>	Definition of cement and cement manufacturing.
Best Available Techniques Reference Document on the Production of Iron and Steel (December 2001) Reference Document on Best Available Techniques in the Smitheries and Foundries Industry (May 2005)	<i>Annex I(4) (first indent)</i> <i>Integrated works for the initial smelting of cast-iron and steel;</i> <i>Annex II(4) Production and processing of metals</i> <i>(a) Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting;</i>	Definition of integrated works, pig iron, continuous casting, cast iron and steel

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Updated January 2008.

BREF	EIA project categories	Type of information
Reference Document on Best Available Techniques in the Ferrous Metals Processing Industry (December 2001)	<i>Annex II(4) Production and processing of metals:</i> <i>(b) Installations for the processing of ferrous metals:</i> <i>(i) hot-rolling mills;</i> <i>(iii) application of protective fused metal coats.</i>	Definition of hot rolling; example of application of protective fused metal coats
Reference Document on Best Available Techniques in the Non Ferrous Metals Industries (December 2001)	<i>Annex I(4) (second indent)</i> <i>Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes.</i> <i>Annex II(4) Production and processing of metals</i> <i>(d) Installations for the smelting, including the alloyage, of non-ferrous metals, excluding precious metals, including recovered products (refining, foundry casting, etc.);</i> <i>(k) Installations for the roasting and sintering of metallic ores.</i>	Definition of non-ferrous metals and sintering
Reference Document on Best Available Techniques in the Glass Manufacturing Industry (December 2001)	<i>Annex II(5) Mineral industry</i> <i>(d) Installations for the manufacture of glass including glass fibre;</i> <i>(e) Installations for smelting mineral substances including the production of mineral fibres;</i>	Lists the product sectors that fall within these project categories
Reference Document on Best Available Techniques for the Tanning of Hides and Skins (February 2003)	<i>Annex II(8) Textile, leather, wood and paper industries</i> <i>(c) Plants for the tanning of hides and skins</i>	Definition of the tanning process and of hide and skin
Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (July 2003)	<i>Annex I(17)</i> <i>Installations for the intensive rearing of poultry or pigs with more than:</i> <i>(a) 85 000 places for broilers, 60 000 places for hens;</i> <i>(b) 3 000 places for production pigs (over 30 kg);</i> <i>or</i> <i>(c) 900 places for sows.</i> <i>Annex II(1) Agriculture, silviculture and aquaculture</i> <i>(e) Intensive livestock installations (projects not included in Annex I)</i>	Defines sows and pigs and provides some information that can help in interpreting the concept of 'intensive' livestock farming.
Reference Document on Best Available Techniques for the Textiles Industry (July 2003)	<i>Annex II(8) Textile, leather, wood and paper industries</i> <i>(b) Plants for the pretreatment (operations such as washing, bleaching, mercerization) or dyeing of fibres or textiles;</i>	The BREF clarifies what activities are included in the definition.
Reference Document on Best Available Techniques in the Smitheries and Foundries Industry (May 2005)	<i>Annex I(4) (first indent)</i> <i>Integrated works for the initial smelting of cast-iron and steel;</i> <i>Annex II(4) Production and processing of metals</i> <i>(a) Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting;</i> <i>(c) Ferrous metal foundries</i>	Definition of cast iron, steel, foundries and ferrous materials

BREF	EIA project categories	Type of information
Reference Document on Best Available Techniques in the Slaughterhouses and Animal By-products Industries (May 2005) ⁷¹	<i>Annex II(7) Food industry (f) Installations for the slaughter of animals; (h) Fish-meal and fish-oil factories</i>	Definition of slaughterhouses and fish-meal production process
Reference Document on Best Available Techniques in the Large Volume Organic Chemical Industry (February 2003)	<i>Annex I(6) Chemical installations Annex II(6) Chemical industry</i>	
Reference Document on Best Available Techniques for Large Combustion Plants (July 2006)	<i>Annex I(2) Thermal power stations and other combustion installations</i>	
Reference Document on Best Available Techniques for the Manufacture of Large-Volume Inorganic Chemicals — Ammonia, Acid and Fertilisers (August 2007)	<i>Annex I(6) Chemical installations</i>	
Reference Document on Best Available Techniques for the Manufacture of Large-Volume Inorganic Chemicals — Solids and Others Industry (August 2007)	<i>Annex I(6) Chemical installations Annex II(6) Chemical industry</i>	
Reference Document on Best Available Techniques in the Food, Drink and Milk Industries (August 2006)	<i>Annex II(7) Food industry (h) Fish-meal and fish-oil factories</i>	
Reference Document on Best Available Techniques in the Ceramic Manufacturing Industry (August 2007)	<i>Annex II(5) Mineral industry (d) Installations for the manufacture of glass including glass fibre; (e) Installations for smelting mineral substances including the production of mineral fibres</i>	
Reference Document on Best Available Techniques for the Surface Treatment of Metals and Plastics (August 2006)	<i>Annex II(4) Production and processing of metals (e) Installations for surface treatment of metals and plastic materials using and electrolytic or chemical process</i>	
Reference Document on Best Available Techniques on Surface Treatment using Organic Solvents (August 2007)	<i>Annex II(4) Production and processing of metals (e) Installations for surface treatment of metals and plastic materials using and electrolytic or chemical process</i>	

⁷¹ This BREF may also be relevant to other EIA project categories, namely Annex II(7)(a) and (b) and Annex II(11).

BREF	EIA project categories	Type of information
Reference Document on Best Available Techniques for Waste Incineration (August 2006)	<i>Annex I(9) Waste disposal installations for the incineration, chemical treatment or landfill of hazardous waste</i> <i>Annex I(10) Waste disposal installations for the incineration or chemical treatment of non-hazardous waste</i>	
Reference Document on Best Available Techniques for the Waste Treatments Industries (August 2006)	<i>Annex I(9) Waste disposal installations for the incineration, chemical treatment or landfill of hazardous waste</i> <i>Annex I(10) Waste disposal installations for the incineration or chemical treatment of non-hazardous waste</i>	
Reference Document on Best Available Techniques for the Production of Speciality Inorganic Chemicals (August 2007)	<i>Annex I(6) Chemical installations</i>	
Reference Document on Best Available Techniques for the Manufacture of Organic Fine Chemicals (August 2006)	<i>Annex I(6) Chemical installations</i>	
Reference Document on Best Available Techniques in the Production of Polymers (August 2007)	<i>Annex I(6) Chemical installations</i>	

APPENDIX II: GLOSSARY

BREF	Best Available Techniques Reference Document
ECJ	European Court of Justice
EIA	Environmental Impact Assessment
IPPC	Integrated Pollution Prevention Control
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SEA	Strategic Environmental Impact Assessment
UNEP	United Nations Environmental Protection Agency
WFD	Water Framework Directive

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