Current developments and the future of Environmental Impact Assessments in Europe

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supervised by
Dipl.-Ing. Dr. Klaus Rapp

Cécilia Maronnier

9721171

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Affidavit

I, **CÉCILIA MARONNIER**, hereby declare

1. that I am the sole author of the present Master's Thesis, "CURRENT DEVELOPMENTS AND THE FUTURE OF ENVIRONMENTAL IMPACT ASSESSMENTS IN EUROPE", 93 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
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Abstract

Environmental Impact Assessments (EIAs) were first introduced into European legislation in 1985 through the EIA Directive (85/337/EEC), a directive focusing on the impact of certain public and private projects on the environment. Since then EIA use has spread internationally and has been recognised as an essential component within the environmental area: this decision-making tool is instrumental within sustainable development as well as in stakeholder consultation and participation. After more than twenty-five years of application, the European Union has developed a comprehensive and sophisticated legal framework on Environmental Impact Assessments that has already gone through several reviews. The last review process on the EIA Directive launched in 2010 questioned the effectiveness of this mechanism: the implementation of this complex instrument had led to diverging practices in Member States which in turn affected the overall quality and effectiveness of the EIA process. This Paper aims to introduce the main issues related to the implementation of the current EIA Directive and to suggest modifications based on the viewpoints of the various stakeholders involved in EIA procedures and the practices developed within EU Member States. The EIA and its likely future trends are also brought into consideration through perspectives related to international/regional environmental good governance, transboundary EIA procedures and the link between human rights and the environment.

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1 Introduction

The question of the effectiveness and benefits of impact assessment instruments such as the Environmental Impact Assessment or the Strategic Impact Assessment has arisen and become more pressing with the widespread international use of these instruments.

The Environmental Impact Assessment (EIA) is defined by the International Association for International Assessment (IAIA) as *"The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made"* (IAIA, 1996). Earlier in 1991, the UNECE (United Nations Economic Commission for Europe) had defined it as *"a national procedure for evaluating the likely impact of a proposed activity on the environment"* in the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (UNECE, 1991). The evolution of this definition illustrates the increasingly complex and holistic character of this tool.

This concept was normalised at the European Union (EU) level with the adoption of the Council Directive 85/337/EEC on the effects of certain public and private projects on the environment on 27 June 1985 (hereinafter referred to as the EIA Directive or the Directive). Since then, the European Union (EU) has developed a comprehensive and sophisticated legal framework on Environmental Impact Assessments, which has already been reviewed on several occasions.

After more than 25 years of implementation, lessons learned and the development of sound procedures in this area, the EU and its Member States are also facing the issues of effectiveness, practical application and the benefits and costs of these complex mechanisms. The development of other policies and regulations in related areas of the environment such as energy or climate change has considerably reinforced the complexity and multi-facetted character of the initially developed environmental impact assessment tool. In addition, the use and application of EIA is significant considering that these procedures involve different stakeholders with diverse interests and wide ranging projects that may be subject to an EIA. The

developed legal framework, its procedures and practice hold important implications.

In this context, the European Commission has identified the EIA Directive as a potential instrument for a future simplification exercise. The Directive should reflect the experience gathered through its implementation, the recent changes in the European law and policy as well as the rulings of the European Court of Justice. In July 2009 the Commission published a report on the application and effectiveness of the EIA Directive. In June 2010 it began broad public consultation on the EIA that concluded in a large conference in November 2010 to mark the 25 years anniversary of the Directive. The findings and conclusions of the public consultation serve for the on going review process of the Directive. At the occasion of the Conference in Leuven (Belgium), the Commission provided some early insights about the direction that the amended Directive may take. European Commissioner for the Environment Mr Janez Potocnik announced that three principles would guide any changes (European Commission, 2011a):

- The current level of environmental protection provided by the EIA Directive must not be weakened. Should there be a risk, the Commission will not hesitate to withdraw the proposal.
- The main weakness of the Directive is that it is too procedural. The quality process of the EIA should be reinforced.
- The screening[1] and the EIA process should be streamlined and harmonised with closely related EU policy areas.

Recalling these principles is important when considering the risk and outcomes that any simplification exercise undertaken of a legislative text especially in the environmental area, may follow from changes to its content. In addition, one should not forget that this review process takes place in the context of an economical and financial crisis, which is rather conducive to cost reduction. In this context, streamlined procedures may also be interpreted in the sense of simplification and reduction of financial burden.

It should also be noted that this instrument was enacted in the form of a directive. Directives lay down certain goals that should be achieved by the Member States but leave them free to decide how to reach these goals. Directives also include

[1] Screening refers to the process of determining whether a project require an EIA.

deadlines for the harmonisation and/or adoption of the relevant national legislation. In accordance with the case-law of the European Court of Justice *"the transposition of a directive into national legislation should ensure the full application of the directive in a sufficiently clear and precise manner"* and *"with unquestionable binding force"* (ECJ/European Court of Justice, 2010). Therefore, by its nature this instrument leads to various forms of implementation by the Member States and the development of different practices aiming to reach the same goal, as illustrated by the various sets of national regulations enacted regarding the EIA. On the one hand, the variety of practices may have contributed to improve the instrument itself by the introduction of more stringent obligations than the ones it contains and through the exchange of good practices, experiences and lessons learned between Member States and Stakeholders. On the other hand, the lack of harmonised practices may also lead to difficulties at the national level and/or in a transboundary context.

This paper aims to identify the current issues related to the implementation of the EIA Directive and discuss possible implications arising from its changes. It is based on the following research questions:

1. What are the problems related to the implementation of the current Directive?
2. What could be modified in the current Directive to improve the effectiveness[2] of the EIA and facilitate its use considering the viewpoints from the various stakeholders?
3. Which are the possible scenarios regarding the change of the Directive and their implications?

The development of the EIA concept, including its emergence at the European level and implementation in the EU Member States will be presented in the second Chapter. The third Chapter will focus on the procedural aspects of the directive, with a particular emphasis on the areas where some changes could be introduced to facilitate its application. The links between the EIA Directive with other EU regulations and policies will be presented in the fourth Chapter while the fifth Chapter will be dedicated to the implementation of the relevant international Conventions ratified or to be ratified by the EU**.** The last Chapter will provide an overview of the future developments and expectations in this domain.

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[2] In the context of this Paper both procedural and substantive aspects of effectiveness will be addressed.

2 Development of the EIA concept

2.1 Historical background

The first EIA related legislation was adopted in the United States in 1969 in the context of awareness raising and increasing concern about the environmental degradation engendered by fast development and growing industrial activities. The US National Environmental Policy Act (NEPA), a major law in the environmental area, was the first legislation to require EIAs. It is perceived as the '*Magna Charta'* in environmental law, which has inspired number of countries and served as a model for EIA for international institutions such as the World Bank (CEQ, 1997). Since then, about 100 countries have adopted EIA related legal frameworks and/or policies.

NEPA is composed of two Titles. Title I establishes the principles of a national policy on the protection and restoration of environmental quality and refers to the EIA, which clearly appears as a policy and decision making tool: Section 102 of NEPA requires the Federal Agencies *"to use a systematic and interdisciplinary approach which will insure the integrated use of the natural and social sciences, and the environmental design arts in planning and in decision making which may have an impact on man's environment"* (Caldwell, 1998). Title II set up the Council on Environmental Quality (CEQ) to review environmental programmes and progress and oversee the implementation of EIAs.

The text of the NEPA is rather generally formulated and requires guidelines and interpretation for its practical implementation. Therefore, the CEQ was also responsible for the issuing of guidelines for the interpretation of the Act. In 1978, these guidelines were changed into enforceable regulations through presidential Executive Order in order to remedy to the limitations engendered by the guidelines hardly followed by the federal agencies since they were deemed as not mandatory.

The Courts also played an important role in the interpretation of the NEPA through the development of case-law. Court decisions from a large number of lawsuits initiated in the 1970's appear more pro-environment than the decisions handed down more recently. This situation inspired a lot of cautiousness in other countries when implementing EIA systems and considering possibilities of lodging lawsuits

(Glasson et al., 2012).

In this regard, it is interesting to draw some general parallels with the European system, bearing in mind that the political and legal frameworks are different. The EIA introduced by the Council Directive 85/337/EEC on the effects of certain public and private projects on the environment was also influenced by the American example. The European Commission provided guidelines to facilitate the implementation of the Directive by Members States and the rather generally formulated text has been subject to numerous decisions by the European Court of Justice, which has largely contributed to its interpretation.

The EIA concept has also steadily developed at the international level. In 1987, the United Nations issued the Goals and Principles of Environmental Impact Assessment. The World Bank followed in 1989 when it adopted its Environmental Assessment Directive whose implementation has been to screen funded projects for their potential domestic, transboundary and global environmental impacts. In 1991, the United Nations Economic Commission for Europe adopted the most comprehensive international agreement on EIA, the Convention on Environmental Impact Assessment in a Transboundary Context (UNEP, 2008).

Other international agreements implemented at the regional level also focus on and/or mention EIA, such as the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (”Aarhus Convention”) and the Protocol on Environmental Protection to the Antarctic Treaty (“1991 Madrid Protocol”).

In addition, the EIA has been embedded in some key international multilateral agreements: Principle 17 of the Rio Declaration of the 1992 United Nations Conference on Environment and Development states that *“Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.”* Impact assessment is also referred to in Articles 204 to 206 of the 1982 United Nations Convention on the Law of the Sea. Article 4(f) of the 1992 United Nations Framework Convention on Climate Change also encourages the use of impact assessments in relation to the effects of climate change. The IAE concept itself reflects certain principles

recognised as international customary law such as the obligation not to harm in transfrontier situations.

Furthermore, EIA has also become a widespread practice by international institutions that also promote and/or require its use for internationally and bilaterally funded projects, especially in the development area. As mentioned above, the World Bank introduced the EIA at an early stage in its procedures and regularly updates them. These guidelines together with the social and environmental performance standards developed by the International Finance Corporation (IFC), part of the World Bank group, have served as a basis for the Equator principles launched in 2003. More than 70 private financial institutions have now committed to these principles, requiring the provision of appropriate EIAs from loan applicants for major projects (above US$10 million) (Morgan, 2012).

Other examples with similar EIA requirements are regional banks such as the European Bank for Reconstruction and Development (EBRD) and the Asian Development Bank, which have also produced their own guidelines in this area. The use of EIA for projects that may be subject to funding is also required by bilateral donors, especially national development agencies. For example, US environmental regulations (Title 22 of the Code of Federal Regulations 216 or so called 'Regulation 216') intended to implement the requirements of NEPA as they affect the external aid programme and require that all projects funded by the U.S. Agency for International Development (USAID) are subject to an EIA. This federal Regulation was actually developed as a result of a settlement in a law suit brought against the Agency in 1975 concerning the lethal exposure of beneficiaries to the pesticide malathion. Therefore, through this procedure *"unintended impacts of USAID-funded activities should be identified and mitigation measures proposed at the design stage prior to the irreversible obligation of USAID funds"* (USAID, 2005).

The United Nations Environmental Programme also published an Environmental Impact Assessment Training Resource Manual translated in various languages, which has been widely used and updated and contributed to promote the implementation of EIAs worldwide (UNEP, 2002).

According to a search recently conducted through the UN legislative database ECOLEX on the use of Environmental Impact Assessment in legislation worldwide, it was found that 191 states of the 193 UN Member States have a reference to EIA in

national legislation or signed an international legal agreement referring to the use of EIA. This certainly reflects the widespread recognition and use of this instrument as well as its embedment in national and international law (Morgan, 2012).

2.2 The development of the EIA Directive

In 1973, the European Communities adopted the First Environmental Action Programme, which focused on the need to implement procedures to evaluate the environmental effects of certain activities at the earliest possible stage in all the technical planning and decision-making processes. This Action Programme and the ones that followed in 1977 and 1983 inspired the Council Directive 85/337/EEC on the effects of certain public and private projects on the environment adopted on 27 June 1985. This was the first European Community wide instrument to provide details on the nature and scope of environmental assessment, its application and the rights to participate in this process.

As is the case in many legislations in the world, these environmental provisions have also been largely inspired by the US experience as described above. However, it should be noted that the European legislation applies to projects from both public and private developers, whereas the American legislation only applies to federal agencies. In addition, the technical tools such as the use of lists of projects and impacts for the assessments also differ in the two systems.

Concerns about environmental deterioration and the effects of transboundary pollution at the European level and the need for enhanced protection of the environment were not the only reasons to establish a uniform system of EIA. Another important reason was the growing disparity between environmental standards applied in the Member States that in turn, could lead to competitive distortion within the community. States could gain benefit and certain advantage by tolerating developments not permitted by others, who applied stricter procedures to guarantee environmental protection[3].

[3] The Council Directive 85/337/EEC states*: "Whereas the disparities between the laws in force in the various Member States with regard to the assessment of the environmental effects of public and private projects may create unfavourable competitive conditions and thereby directly affect the functioning of the common market"*.

Despite its innovative character, the initial text of the Directive remained rather general in its formulation, being the fruit of negotiation and compromise between the Member States. As the Treaty of Rome (1957) lacked any explicit legal reference to the environment, the Directive was adopted on the basis of Article 235 that allowed the Council to take appropriate measures to attain the objectives of the Community[4].

The specific legal basis for environmental protection was only introduced later with the Single Act (1986), which included diverse initiatives to promote integration in the sphere of the environment. Nowadays, these legal provisions are contained under Title XX *"Environment"* of the treaty of the Functioning of the EU (2009) and are referred to in the modified version of the Directive. In this context, the European Court of Justice (ECJ) has been playing an important role with regard to the interpretation of the provisions (as detailed further below under Section 2.4) and their implementation by the Member States.

It should be noted that the composition of the Directive is a tool by itself for the implementation of adequate EIA legislation. The current codified Directive is composed of 16 articles that mainly refer to the definition of terminology, procedures and obligations for the Member States and four Annexes, which provide a list of areas, impacts and projects.

Article 2(1) of the Directive requires that before development consent is given an environmental impact assessment be conducted for certain public or private projects likely to have significant environmental effects by virtue, *inter alia*, of their nature, size or location. The projects are defined in the Annexes. An assessment is obligatory for the projects listed in Annexe I as they are considered as having significant effects on the environment. For the projects listed in Annexe II, it is up to the Member States to decide whether they should be subject to an EIA depending on various criteria such as size, location or potential impact. The process of determining whether a project listed in Annex II should undergo an EIA is called screening.

Since its adoption, the Directive has been amended three times (COWI, 2009a):

- In 1997 (Directive 97/11/EC) in order to be aligned with the Espoo Convention

[4] Article 235 of the Treaty of Rome: *"If action by the Community should prove necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and this Treaty has not provided the necessary powers, the Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, take the appropriate measures."*

on EIA in a Transboundary Context. This amendment was also based on the results of two five-year reviews of the application of the Directive as foreseen in Article 11 of the Directive (Article 12 of the codified Directive). A range of inconsistencies in the procedures developed by the Member States, including on project coverage and criteria, alternatives, public participation were identified, as well as the complaint raised by the Member States with regard to the lack of definition and ambiguity of key terms of the Directive. The amendment aimed at reducing the disparities in the implementation of the main procedural aspects and reflecting the case-law developed by the European Court of Justice.

• In 2003 (Directive 2003/35/EC) to ensure harmonisation with the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, signed by the Community in 1998. Consequently most of the modifications referred to the definitions and procedures related to public participation, access and information. The 2003 review report highlighted disparities and weaknesses in the various procedures such as screening, scoping or quality control, but did not require further amendments to the Directive as the majority of the findings were mainly relating to the poor implementation of the Directive by Member States.

• In 2009 (Directive 2009/31/EC) to modify Annexes I and II by adding projects related to the transport, capture and storage of carbon dioxide. The Review conducted in 2009 emphasised the benefits of the Directive, especially regarding environmental considerations taken into account at an early stage of the decision-making process and the public participation and involvement in this process. Nevertheless, stubborn issues as mentioned such as disparities in the screening procedures, alternatives, the lack of quality control and monitoring remain of concerns. The need for better harmonisation with other directives and international regulations or policies such as climate change were also highlighted.

On this basis, a further amendment to the Directive is being prepared by the Commission. It has been prepared following a series of consultations with Member States and other actors and is expected to be published in September 2012.[5] This draft will then be subject to further consultation and comment, especially by Member

[5] At the occasion of the IAIA Conference on Energy Future, the Role of Impact Assessment held in May 2012 in Porto, a representative of the European Commission announced that the draft initially expected in June 2012 would be issued in September 2012.

States, before a final version is endorsed by the European Council and Parliament. Therefore, a final version of the Directive is not to expect before 2014 and the implementation by the Member States into their national legislation, before 2016 (Fothergill, 2012).

In view of its future amendment the Directive has also been codified under the document 2011/92/EU in December 2011, i.e. the amended and consolidated texts have all been brought together in one single document, without any substantial changes. The codification aims to simplify the legislative acts, to reach better clarity and to reduce the amount of the *acquis communautaire* (European Commission, 2012a).

In addition, it should be mentioned that the seventh Environmental Action Programme (EAP) is also being prepared by the Commission. It is foreseen to be issued at the same time as the revised version of the Directive. The EAP are strategic documents that already served as a basis for the initial EIA Directive of 1985. The new Plan, taking stock of the achievements of the sixth EAP is expected to provide a coherent overarching framework for initiatives in the environmental policy and set out priority objectives until 2020, in line with the Europe 2020 Strategy. One of the priorities of the plan should be the "*strengthening and better implementation of the existing environment policy and legislation"* considering the "*uneven implementation record of environmental legislation"* (European Commission, 2011b). This focus is particularly interesting considering the disparities still encountered in the implementation of the EIA directive by the Member States, although a certain level of divergence in the implementation is inevitably linked to its legal nature itself. Some of these variations are highlighted in the following Section through a succinct presentation of the EIA systems (Table 1) put in place in three different European countries.

2.3 The implementation of the Directive by the Member States, examples of Austria, France and the United Kingdom

The expression *"divergent practice in a converging system"* has been used to describe and question the inconsistencies in the implementation of the EIA Directive (Glasson et al., 2012). As mentioned previously this recurrent issue has been the

focus of previous reviews of the Directive, with various attempts to tackle it.

The choice of these three countries is motivated by their differences in the state, institutional and legal systems that have largely influenced the legislation put in place, including the transposition, implementation and interpretation of EU directives.

2.3.1 Introduction and development of EIA systems

Austria

Austria transposed the 1985 Directive through the adoption of the "*Bundesgesetz über die Prüfung der Umweltverträglichkeit (UVP-G 1993)"* in 1993. This Federal Environmental Impact Assessment Act entered into force one year before Austria entered the European Communities in 1995. The Law was amended in 2000 (following the review of the Directive in 1997) under 'UVP-G 2000', and in 2003 to review the legal status of NGOs to take part in the EIA procedure with reference to the Aarhus Convention (Rapp, 2012). In addition, it was amended in 2009 following a treaty violation procedure initiated by the European Commission for non-conform transposition of the 1985 Directive as EIAs were not requested for certain projects on naturally protected areas. Another amendment took place in 2011 to transpose the latest modification of the EU Directive on projects related to the transport, capture and storage of carbon dioxide. These were the main amendments addressed in about twelve changes, both procedural and substantive, to the Law since its initial adoption in 1993 (BMLFUW/*Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft*, 2012).

More recently, the European Commission initiated another treaty violation procedure against Austria regarding the inappropriate transposition of Art. 10a on public participation of the Directive (Article 11 of the codified Directive). Especially criticised was the lack of legal remedies for the public regarding negative screening decisions, i.e. that no EIA is required for the project that was subject to the screening procedure. Consequently, another amendment has been drafted and communicated for comments and opinions in May/June 2012 (a reviewed draft was again issued). Following some criticism from the NGOs both on the content, the too short time

provided for reviewing the draft[6] and the vigorous debates in the Parliament, the amendment was adopted in July 2012 and promulgated in August 2012.

France

France is recognised as among the first to adopt environmental protection legislation. The IEA concept was introduced in national legislation in 1976 through the *"Loi de protection de la nature"* and its related decree of application in 1977, a decade before the adoption of the EU Directive. For this reason the pertaining EIA provisions in place were considered compliant with the European legislation and were not reviewed before 1993 to be harmonised with the amendments of the Directive (Braye et al., 2009). France also made use of its developed model to influence the content of the European Directive (Glasson and Bellanger, 2003). Before its modification in 1993, the EIA procedure was rather seen as a simple information report to comply with the administrative requirements (Actu-environnement, 2012).

Dispositions related to public information were added in 2002 and 2006 through another law and its decree of application. In addition, the law was amended in 2005 to ensure the application of the EU Directive and introduced the opinion given by the national authorities on EIA. Several decrees were also adopted in 2003 and 2009 (introduction of the '*autorité environmentale*') in relation to the implementation of the EU Directive (Ministère du développement durable, 2011). Following two letters of formal notice in 2005 and 2006 as well as a reasoned opinion from the European Commission in 2009 - which is the last step before referring the case to the ECJ - for non-compliance of the French legislation with the EIA Directive, the legislative provisions were amended through a law adopted in 2010 and its decree of application at the end of 2011. This reform not only aims to harmonise the provisions with the European law but also to simplify the EIA procedure, co-ordinate the procedure with the public enquiry system and increase the effectiveness of EIA, especially through monitoring and follow-up (Ministère de l'Écologie, du Développement durable, des Transports et du Logement, 2012).

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[6] The NGO Ökobüro, which coordinates other Austrian Environmental NGOs has issued a position paper on the draft amendment. The too limited timeframe offered for comments on the draft amendment was severely criticized. In general the proposed changes were welcomed, especially regarding the extended legal remedies on negative screening decisions and measures facilitating public information. Criticism remained on the high level of thresholds and on other issues such as the lack of meaningful alternatives (Ökobüro, 2012).

Particularly criticised with regard to the conformity with the Directive were the previous provisions referring to a financial threshold (1,9 Million Euros), to determine the need for an EIA. These provisions excluded a number of projects from Annex I, (France being the only EU country having introduced such financial criteria). In addition there was an unclear procedural system, which had generated a large number of exceptions, although the requirement for an EIA was supposed to be the rule. This amendment has introduced 'positive lists'[7] describing the projects that should be subject to an EIA or a decision on case-by-case basis. It also cancelled the financial thresholds and the previous 'negative list'[8] that referred to exceptions to EIAs. Furthermore, the information to the public has been improved and an administrative police introduced to ensure the control and monitoring of the EIA measures. These new provisions apply as of June 2012.

United Kingdom

In the United Kingdom the 1985 Directive was implemented under the Section 2.2 of the European Communities Act 1972, through more than 40 diverse secondary regulations. This complex framework is due to the fact that projects depending on their nature and location are subject to different regulations. Different regulations apply to England and the Developed Administrations of Wales, Scotland and Northern Ireland (Glasson et al., 2012). Similarly to France, the UK has been quite active in the preparations of the EIA Directive. Although it did not have a mandatory EIA system, a form of environmental evaluation was already in use and could be requested by the local authorities for project authorisations (Glasson and Bellanger, 2003). The UK wanted to ensure that the Directive would reflect its needs for flexibility and discretion whereas other Member States such as France would rather have a more rigorous EIA system as their own.

The central form in which the Directive is implemented in the UK is the Town and Country Planning (EIA) Regulations 2011 in England, previously the Town and Country Planning

[7] A negative list, also called exclusion list is defined as *"a list of thresholds and criteria for specified categories of projects defining those projects for which EIA is not required because they are considered to be unlikely to have significant effects on the environment. An exclusive list may be over-ridden by other requirements e.g. that EIA is required for projects in certain locations"* (European Commission, 2001a).

[8] A positive list, also called mandatory list is defined as *"a list of thresholds and criteria for specified categories of projects defining those projects for which EIA is always required because they are considered to be likely to have significant effects on the environment"* (European Commission, 2001a).

(AEE) Regulations 1988. They remain the main regulations for discussion in relation to EIA procedures and their improvement. The Local Planning Authority (LPA) plays a central role in the EIAs procedures as they usually act as a filter for the schemes proposed by developers. The UK regulations also include a system of positive lists with thresholds and a case-by-case analysis. The two lists of projects contained in all relevant regulations, called Schedule 1 and 2 are very similar to Annexes I and II of the Directive. For Schedule 1 projects, EIAs are mandatory. Projects above certain thresholds and meeting the required criteria in Schedule 2 will be subject to screening for EIA. If they are located, or partly located, in an environmentally sensitive location, they will most likely require an EIA (Mayer et al., 2009).

Interestingly in 2011, the UK modified the legal provisions related to the EIA. This was done to include the 2009 amendment of the EU Directive on projects related to the transport, capture and storage of carbon dioxide and also to simplify the screening procedure. Other issues were tackled through this amendment. These included the application of thresholds that encompassed the whole project, not just specific to changes or extensions, and include the original development plan. In addition, several national and ECJ rulings were also incorporated: *inter alia* the multi-stage consents and the obligation to make public the reasons for a decision not to make a project subject to an EIA,[9] as well as the inclusion of demolition works under the scope of the EIA Directive[10] (IEMA, 2011). The UK is also one of the few countries that have issued guidance to facilitate the application of the EIA procedure.[11]

[9] According to the preliminary ruling in the so-called Mellor Case (ECJ, 30 April 2009, Case C-75/08) reasons for a negative EIA screening decision have to be made available to the public, upon request (ECJ, 2010).

[10] In March 2011, in the Case C-50/09 Commission v. Ireland, the ECJ ruled that the exclusion of demolition works from the scope of the EIA Directive was a failure to comply with the obligations under that Directive (ECJ, 2011). The British Court of Appeal brought a similar decision the same year in the ruling "Save Britain's Heritage" v. Secretary of State by stating: "works of demolition are capable of being a project under the Directive and may require assessment" (IEMA, 2011).

[11] The first key document that was published by the Government is DETR (Department for Environment, Transport and the Regions) Circular 02/99: Environmental Impact Assessment and its associated guidance (DETR, 2000). The Guidance on the Environmental Impact Assessment (EIA) Regulations 2011 for England is the latest version (DCLG, 2011).

2.3.2 Influence of national institutional and legal frameworks on the implementation of the EIA Directive

The Table 1 below illustrates the variety of the EIA systems developed in line with each countries response to the same EU Directive. These systems are based on the respective national institutional and legal characteristics, which have influenced the implementation of the Directive.

The quite different ways the EIA was historically introduced and developed in the UK and France is very illustrative in this regard. In France, the EIA was enforced by the Central Government as an additional legal requirement, whereas in the UK it was developed and introduced by practitioners i.e. rather a bottom up approach, based on a consensual practice (Glasson and Bellanger, 2003).

Consequently, the EIA itself has been perceived differently too. As recently reported by an EIA French practitioner "*the EIA is too often perceived as a simple report, whereas it is a process*" (Actu-environnement, 2012). Practitioners continue to perceive it as an informative document about the project development or an additional administrative burden instead of a strategic or decision-making tool as it is rather considered in the UK.

The institutional system of the country may also influence the implementation of the Directive. Obviously in the UK, a large set of existing national regulations did not facilitate the transposition of the Directive. In spite some differences in the regulations, a rather similar system has been established by the devolved administrations. In a federal country such as Austria, the *Landesregierung* or provincial government is the competent authority with regard to the EIA, the second instance authority being the *Umweltsenat*, equivalent to an administrative Court for environment but at the federal/central level. Considering the possible additional legal requirements in the environmental area specific to each province/Land, the implementation of the EIA may also vary depending on the location the procedure is conducted.[12] Disparities can also be found in a non-federal country such as France,

[12] EIA practitioners in Austria have indicated that the various regional (*Länder)* requirements and practices had an influence on the way EIA were conducted and their duration. Certain regions, such as Salzburg, are reputed for having very high environmental standards protection (Dreier, 2012), (Schabhüttl, 2012).

due to the central role played by the competent authority in the implementation of the procedure. The proper application of the EIA procedure very much depends on the capacities, i.e. the human and financial resources, of the competent authority. For example, in France the competent authority is determined in accordance with the nature, size and location of the project. Therefore, the competent authority can be an authority at the municipal level, at the decentralised level (so called *Préfet*) or at the ministerial level. Considering their limited resources, the competent authority of certain smaller municipalities may not be in the position to conduct the same quality control over an EIA as in other locations. In practice, this may lead to disparities regarding the implementation of the EIA procedure (Monamy, 2012). Nevertheless, a certain level of harmonisation will usually be brought through court decisions at the first or last instance level, should the proceedings reach that level and/or be subject to legal remedy.

The role played by national courts has also been very influential the EIA practice developed. The difference in legal traditions and systems has led to variations in EIA practices. For example the UK is based on common law. Once transposed in the national system, the Directive is subject to judicial review. The Common Law system requires a strict interpretation of legal norms *"of the letter of the law"*, based on the strict text, while continental law systems (used in most of the EU countries) refer to the *"spirit of the law"* or the intention of the legislator for interpretation. This particularity had led to considerable variations in the implementation of the Directive. Until the developed case-law of the ECJ in the 1990s that clearly indicated the use of this latest method to interpret the Directive with regard to its implementation, the UK courts had exercised a *"minimalist approach"* based on the strict interpretation of the Directive. The UK Courts introduced to a certain extent this wider approach to interpretation. An example of the consequences of this change of case law was an increase of projects to be subject to screening procedure (Weston, 2011). Case-law in the UK is considered as an essential element to improve the EIA quality, which has also influenced the recent legal amendments (Glasson et al., 2012).

In this context the European institutions, in particular the Commission and the ECJ, have been key drivers for the harmonisation of the implementation of the Directive by the Member States.

Table 1: EIA systems in selected countries

Country	EIA Legislation	EIA Authority	EIA procedure		Screening Tools		
			National/Sectoral/Regional	Types	Lists	Thresholds	Case-by-case analysis
Austria	National	Federal Ministry for Environment (*Bundesministerium für Land-und Fortswirtschaft, Umwelt und Wasserwirtschaft*) and in some cases Federal Ministry for Transport, Innovation and Technology and provincial governments.	National/regional Special provisions for (1) federal roads and high speed railroads projects and (2) water management projects	EIA and Simplified EIA	3 lists-table	Annexe I Columns 1-3	Annexe I Column 3 and under special provisions
France[13]	National	Sectoral/ Ministerial, regional (decentralized authority), municipal	Integrated as part of each sectoral licensing procedure.	Full EIA ~~and Notice d'Impact sur l'Environnement~~ (cancelled)	~~3~~ 2 Positive lists ~~+ 1 negative list~~ (cancelled)	Lists 1 and 2 (technical thresholds) ~~and 3 (financial Thresholds~~ - cancelled)	List 1 for projects below thresholds and list 2
UK	Separate (albeit very similar) regulations for England ~~& Wales~~, Northern Ireland and Wales	Local Planning Authority Most of the projects come under the land use planning consent systems for the UK. Where projects are not caught by planning legislation, other legislation exists covered by other consent systems.	The main local planning authorities act as the competent authorities, but other bodies have this responsibility under some of the other consent systems	One type of EIA Procedure	Two Lists: Schedule I and II (equivalent to Annexes I and II)	Exclusive thresholds and/or criteria are set for Annex II projects	Yes

This table is adapted from the original table and information provided by the (IMP)3 study (Mayer et al.,2009). It has been reviewed according to latest national legislation.

[13] The crossed out elements refer to the previous legislation and the ones added in blue to the new provisions and/or modifications made to the initial table.

2.4 The role played by the European Commission and the European Court of Justice to ensure the implementation of the EIA Directive

It is the responsibility of each Member State to implement EU law, including directives, in their national legal systems. The role of the European Commission is to ensure that EU law is correctly applied and implemented. Should a Member State fail to comply with EU law (through omission or action), the Commission is empowered to act in order to remedy to the infringement and if required, refer the case to the ECJ (European Commission, 2012b). Through the Lisbon Treaty, the means available to the Commission with regard to non-compliance with ECJ decisions have been reinforced. In this case, according to Article 260 of the Treaty on the Functioning of the European Union (TFEU), the Commission may decide a second referral to the ECJ. This referral has to include a proposal for a penalty and/or lump sum payment. A similar proposal can also be made by the Commission during the first referral to the Court to sanction a Member State for the lack of notification of the measures undertaken to transpose a Directive. In other words faster and heavier financial penalties could be expected to be applied for their deterrent effect (Keller, 2011).[14]

With a view to prevent further infringement procedures at an earlier stage and save expenses linked to these procedures, an interesting tool was introduced in 2008: the EU Pilot project. The idea is to provide answers and solutions to issues that arise from the application of EU law and which require clarifications from a Member State. Nowadays as a rule, this communication takes place when an infringement proceeding is envisaged but before the Commission starts the infringement procedure. Should the Commission not be satisfied with the answers provided by the Member State, it may take the first measures towards an infringement procedure (European Commission, 2012b).

Fifteen countries including Austria and the UK, have volunteered in 2008 to take part in the Project. Following the success of the initiative, France joined it in September 2011. Interestingly, most of the requests brought through this procedure after it was

[14] According to the statistics provided by the Report from the *Sénat*, about 18 % of the EU infringement procedures are linked to environment and within this area 11 % to environmental impact assessments (Keller, 2011).

introduced were related to the environment.[15] For example in Austria between March 2011 and March 2012, at least five Pilot procedures were started by the Commission covering a variety of projects (Hotel, airport building turned into commercial/industrial area, hydroelectric power plant etc.) to enquire *inter alia* whether an EIA had taken place and if not based on which grounds (BMLFUW, 2012). In some instances as in a case related to the inappropriate transposition of Article 10a (Article 11 of the codified Directive) on public participation of the Directive, the Pilot procedure has led to infringement proceedings that have influenced the recent amendment in the Austrian EIA legislation.

The Commission has been very active, especially through the use of preventive tools or sanctions with a deterrent effect for long-term prevention, to ensure appropriate transposition of the Directive and harmonised implementation of the Directive. This illustrates very much its expressed intention to focus on the implementation of current environmental norms instead of creating new ones. This trend and objective have been clearly reflected in the seventh Plan on Environment setting the goals for the coming decade.

In this context the ECJ has been playing a pivotal role with regard the interpretation of the Directive. The generally formulated provisions and the compromises they reflect as agreed by Member States have required guidance and interpretation to ensure their harmonised application. Since its adoption the Directive has been subject to numerous decisions, which have clarified various technical and procedural aspects such as terminology, thresholds and criteria, screening, transboundary effects and more recently public participation. In this regard, the European Commission has recently published a helpful guide on the main rulings of the ECJ concerning wide-ranging aspects of environmental impact assessment of projects, which aims at facilitating the implementation of the Directive (ECJ, 2010).

The dozens of preliminary rulings[16] that have been addressed to the ECJ on the EIA Directive are also an indicator of the difficulties encountered by Member States in its application. As a comparison, the Strategic Environmental Assessment - SEA

[15] According to the first evaluation on the Pilot project conducted in 2009, environment is the area subject to most procedures: 29% of the on-going complaints, 46% of the requests for information and 46% of the investigations conducted by the Commission on its own initiative.
[16] National Courts may request a preliminary ruling to the ECJ for the interpretation of EU law, including Directives. The ECJ's decision is then applicable to all Member States.

Directive 2001/42/EC has so far been subject to few judgements on preliminary rulings.[17]

Considering that amendments to the Directive itself were based on the ECJ case-law and that some Member States have also modified their EIA legislation in accordance with recent rulings of the ECJ and/or infringement proceedings started by the Commission, the ECJ role has undoubtedly been crucial to enhance the implementation of the EIA Directive and reach a certain level of harmonisation among the Member States' legislation.

As demonstrated earlier in this section, national characteristics such as institutional and legal frameworks, but also history as well as political or social factors have fundamentally influenced the implementation of the EIA Directive and the development of an appropriate system. These factors may also prevent the realisation of a harmonised system and engender strong divergence in its practice. In this regard, the 'guardian' role of the Commission and its more recent preventive approach as well as the case-law delivered by the ECJ have enormously contributed to facilitating the implementation of the EIA Directive. In its 28th annual report on monitoring the application of EU law, the Commission recorded the situation as satisfactory in terms of compliance of the Member States with the EIA. The principles of environmental assessment have been integrated into the national EIA systems (European Commission, 2011c).

Although the objectives of the Directive are generally achieved, reference is also made to the review process of the EIA Directive and the need for improvement in certain areas. This includes the screening system foreseen by the Directive, which has initiated most of the infringement procedures against the Member States, due to bad transposition of the Directive.

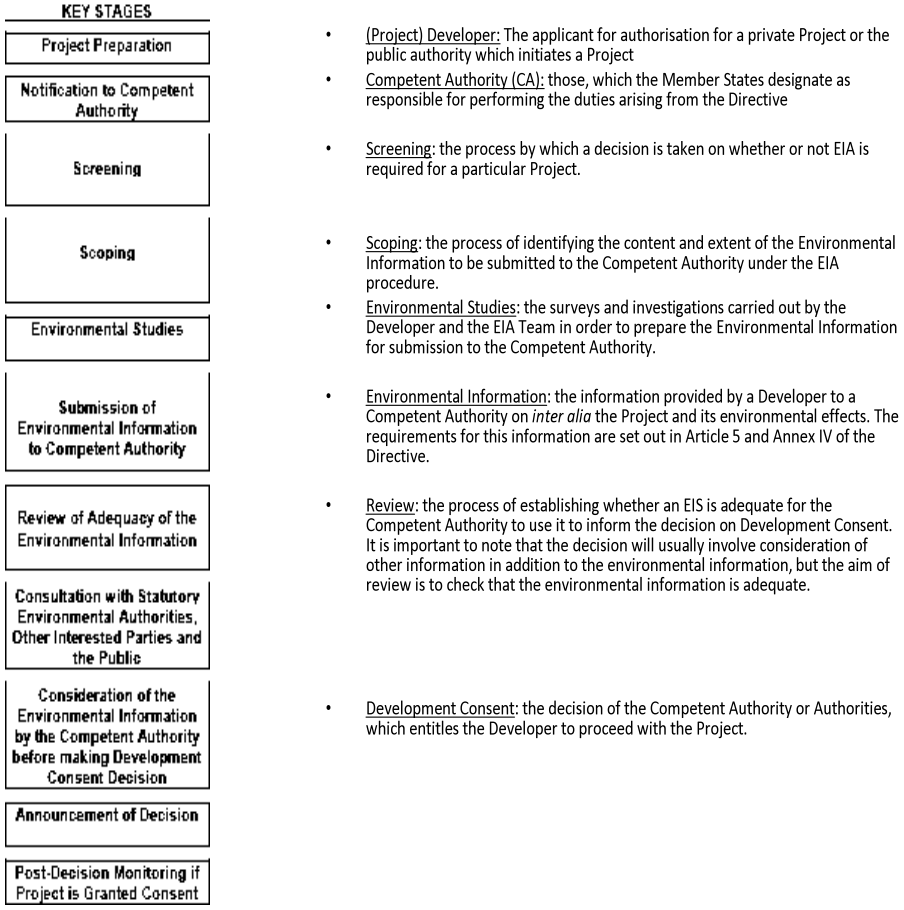
3 Issues related to procedural aspects of the directive

The main procedural challenges affecting the implementation of the EIA Directive and the effectiveness of the EIA process are presented under this Section. They are

[17] The first major decision on preliminary ruling was delivered in 2010 regarding the interpretation of the SEA Directive and the definition of "plans and programmes", Cases C-105/09 and C-110/09.

highlighted and defined in Figure 1 below, which provides an overview of the EIA procedure under the EU Directive.

Figure 1: The EIA process (adapted from European Commission (2001a))



3.1 The screening procedure

The screening procedure is one of the most determinant steps. It is through this procedure that the decision is taken whether a project requires an EIA or not. Article 4 of the EIA Directive refers to the screening process. All projects listed in Annex I of the Directive have to be subject to an EIA, whereas the projects listed in Annex II will be subject to a screening procedure. For this purpose the Member States may choose to apply a case-by-case examination or setting criteria and thresholds or the application of both methods. For any chosen method the criteria listed in Annex III shall be used. The countries remain free to choose the threshold values for these projects.

Member States benefit from a great deal of discretion with regard to the application of this procedure. Considering the large amount of diverging practices developed in this area and, the general character of relevant provisions of the Directive, the need for guidance became quickly apparent. The Commission issued its first set of guidelines in 2001, together with guidance on the scoping procedure and the Environmental Impact Statement (European Commission, 2001a) (European Commission, 2001b) (European Commission, 2001c).

Nevertheless, the screening procedure has continued to initiate most of the infringement procedures against Member States in recent years. Indeed, in its last three annual reports[18] on monitoring the application of EU law the Commission stated that: "*The majority of the infringement cases concern bad (incomplete or incorrect) transposition of the Directive's provisions or failure of the Member States to apply the screening mechanism".* This clearly indicates that the implementation of the Directive in the screening area has been problematic and requires some changes to improve the situation. In this regard, the Commission published in 2008 additional guidance on the Interpretation of definitions of certain project categories of Annex I and II of the EIA Directive. The Guidelines took into account the case-law developed by the ECJ in this area and was further complemented by the more recent publication on the ECJ case-law related to the EIA directive (ECJ, 2010). This highlights the need for uniform interpretation and clarity in the screening procedure, to which the ECJ has already contributed considerably. A number of important rulings have established principles such as:

- The screening methodology adopted by a Member State must not undermine the objective of the Directive, viz. that projects likely to have significant effects on the environment (in accordance with the Directive) should be subject to an EIA (case WWF and Others C-435/97). Therefore, projects cannot be screened out simply because they are not directly mentioned in the Directive (Case C-72/95, Kraaijeveld and Others) or because of their size, as smaller scale projects as these also may have significant effects on the environment should they be in a sensitive location (Case C-392/96, Commission v. Ireland).

- The splitting of larger projects into smaller ones that would not be

[18] The same formulation was used in the last annual reports covering the years 2008, 2009 and 2010 (European Commission, 2009b), (European Commission, 2010), (European Commission, 2011c).

subject to an EIA should not circumvent the purpose of the Directive (Case C-392/96, Commission v. Ireland). The cumulative size of projects should also be considered as, when taken collectively, these may significantly impact the environment (C-142/07, Ecologistas en Acción-CODA). These principles refer to the practice of 'salami slicing', i.e. reducing large projects to smaller parts to avoid that they would reach the threshold for an EIA. This practice has developed in a number of countries to avoid the application of an EIA, and has been often criticised, particularly so in the context of infrastructure projects such as highways or large road projects (Justice and Environment, 2010). This also reflects that the issue of cumulative impacts is not well encompassed in the provisions of the Directive, which should be improved in this regard.

In spite of the issuance of intensive guidance and clarifications from EU institutions, the legislative screening provisions and practices applied by Member States are still very inconsistent. A good indicator and consequence of this situation is the large variation in the numbers of EIAs conducted by Member States. As shown in Table 2, figures differ considerably. It should be noted that the results provided by this study have been subject to criticism especially regarding the figures presented for the UK. Practitioners evaluate that twice the number of EIAs were conducted every year for the indicated period (IEMA, 2011), questioning the criteria used for the mentioned study. In this regard it is also interesting to note that annual French statistics refer to an average of 5000 EIAs conducted every year, which is about 20 % more than the indicated figures (Braye, 2009). The variation in numbers of conducted EIAs is certainly an indicator of the diverging practices in screening but not of the quality of the procedures. In addition, other factors such as developed practices, administration, local/national environmental diversity etc. are also explaining these figures.

The selected examples of thresholds in the energy sector presented in Table 2 for Austria, France and the UK also very much reflects the disparities in thresholds that may be encountered between Members States. In Austria, the level of thresholds has been criticised as too high by the NGOs. They believe that as it stands this system exempts a number of projects that would not be subject to a full EIA procedure.[19] On the other hand, the same criteria have been criticised by other

[19] The environmental NGO Ökobüro has criticised the latest amendment to the EIA law in Austria, indicating that thresholds were still too high in comparison to other EU Member States. Especially the

stakeholders as too low, which encourages project developers to limit the projects capacity just below the thresholds in order to avoid a full EIA (Wurm, 2012).

The issue of screening has been clearly recognised by the Commission as a priority to deal with during the review process of the Directive. However, so far no method has been distinctly recognised as more efficient than any other. Both a threshold/criteria system and a case-by–case analysis have advantages and disadvantages,[20] and there is no indication in which direction the amendment to the screening procedure may go. Several methods have been suggested in various studies and subject to surveys in the Member States in order to identify the best ways to tackle the screening issue. In this context on the basis of the conducted (IMP)3 study – IMProving the IMPlementation of Environmental IMPact Assessment (Mayer et al., 2005) Pinho et al. have presented several scenarios and recommendations to the European Commission and Member States.

Interestingly for a short-term improvement of the screening procedure, without resorting to a risky legislative change, additional guidance in the form of publications, specialised training for stakeholders and exchange of good practices is also recommended and included in the various policy options. This recommendation on guidance is interesting for Member States or practitioners who could rapidly implement it without any additional procedures at the European level.

The five suggested options vary greatly, ranging from the zero option with no modifications to the status quo to a drastic change of the EIA directive through the introduction of a new screening procedure. The latter would be based on an enlargement of the current Annex I with a so-called traffic light approach and suppression of Annex II. This means that in some cases under specific criteria or inclusive thresholds, the EIA is mandatory (red). Below certain thresholds or exclusive thresholds projects are excluded from EIA (green) and, with indicative thresholds an EIA may be required (amber). It should be noted that from a certain level of modification to the EIA Directive, all options include a harmonisation with the

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threshold of 15 MW for hydropower plants was evaluated as too high as it may exclude some projects from the EIA requirements. A threshold of 5 or 10 MW was recommended in this regard (Ökobüro, 2012).

[20] While the threshold system is rather simple and quick to use and provides consistency between locations and project, it also leaves less room for common sense and good judgement and set rigid rules on a variable environment. The case-by-case system provides this flexibility, but is complex, slow and costly and may be influenced by decision-makers for various interests (Glasson et al., 2012).

SEA Directive considering the possible overlaps between both directives (developed further under Section 4.1).

Pinho et al. (2010) present the advantages and disadvantages of all options without favouring any particular option. The choice is left to the stakeholders, the Member States and the European Institutions. However, an important point should be underlined: should there be a willingness to introduce a change in the procedure, this should be done without further delay. The implementation and application of new provisions at the national level will require some time and most likely new guidance and interpretation. Therefore the introduction of a new system should be cautiously considered, especially when most practitioners do consider the current system as rather satisfactory.[21]

For this reason, and considering the experience and consequences of the current system, some moderate rather than radical changes to the Directive should be favoured. Thresholds and criteria should be better defined to avoid the current level of disparities in the Member States, but a certain level of flexibility should also be granted to encompass the variety of national and /or local specificities. Bearing in mind the burden that procedural requirements may represent, other possibilities should also be considered. In its latest Report on the Application and Effectiveness of the EIA Directive, the Commission referred to the possibility of a simplified procedure (European Commission, 2009a). Simplified EIA procedures already exist in a number of Members States e.g. Austria as *vereinfachtes Verfahren* or in France under the *notice d'impact* before the latest legislative change (see Table 1). Therefore, the introduction of such a system at the Directive level would not necessarily mean radical changes in some Member States but rather ensure more harmonised practices. Furthermore, a scenario that would combine both clearer thresholds and enhanced criteria for screening as well as a simplified EIA procedure may prove more satisfying to the requests of two main stakeholders in the current procedure, i.e. the project developers and the NGOs. A simplified procedure adhering to the requirements of public participation would allow more flexibility and reduce the financial and administrative burden on smaller scale projects for which a full EIA can be rather costly. Harmonised screening procedures would provide clarity and less disparity between the Member States. Established thresholds could also be

[21] This was found in the results of the (IMP) 3 study (Mayer et al., 2009).

subject to regular reviews in line with the state of the art of the technology. On the other hand other qualitative aspects will have to be considered to improve the effectiveness of the entire EIA procedure.

Table 2: Comparison of EIA elements[22]

Examples of thresholds			
	Austria[23]	**France**[24]	**UK**[25]
Hydropower stations	From 15 MW mandatory EIA	From 0,5MW mandatory EIA, if below case-by-case analysis	(Schedule 2, screening) Installations for hydroelectric energy production; The installation is designed to produce more than 0.5 megawatts (applicable threshold or criteria)
Power Lines above ground	Mandatory from 220 Kilovolts and length from15 km Screening and simplified procedure: if in protected areas (A or B category), from 110 Kilovolts and 20 km length	From 63 Kilovolts or more and a length of 15 km or more mandatory EIA, if below case-by-case analysis	(a) A voltage of 220 kilovolts or more and (b) a length of more than 15 km (Schedule 1) An electric line installed above ground with a voltage of 132 kilovolts or more and if not included in schedule 1 (schedule 2)

Timeframes			
	Austria	**France**	**UK**
Screening	6 weeks	35 days (upon reception of complete request), if timeframe not respected EIA automatically requested	3 weeks
Scoping	3 months (maximum)	-	5 weeks (subject to extension upon approval from project developer)
Consent decision by competent authorities	6 to 9 months depending on projects (list 2/3 or 1)	2 or 3 months depending on case	16 weeks

[22] This limited selection aims to illustrate differences in EIA systems.

[23] The various steps of the EIA procedure belong to one concentrated procedure in Austria. Information extracted from *Bundesgesetz über die Prüfung der Umweltverträglichkeit (Umweltverträglichkeits- prüfungsgesetz* 2000 – UVP-G 2000).

[24] *Décret no 2011-2019 du 29 décembre 2011 portant réforme des études d'impact des projets de travaux, d'ouvrages ou d'aménagements.*

[25] Town and Country Planning (EIA) Regulations 2011 in England and the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000

Number of EIAs conducted			
	Austria	**France**	**UK**
2005	30	n/a	435
2006	30	3800	346
2007	30	3600	310
2008	n/a	4200	243
Annual average number of EIAs for 2005-2008[26]	23	3867	334
Annual average number of EIAs per million population for 2005-2008[27]	3	59	5

3.2 The quality of the EIA

In this section several aspects of the procedure are considered which play an important role with regard to the overall outcomes and general quality of the EIA. These also have implications in terms of costs and efficiency.

3.2.1 Scoping

Glasson et al. (2012) define scoping as *"the process of deciding, from all a project's possible impacts and from all the alternatives that could be addressed, which are the significant ones"* and that should undergo further assessment. This definition encompasses all steps that could be associated to the scoping process. The European Commission provides a more specific definition by describing scoping as *"the process of identifying the content and extent of the Environmental Information to be submitted to the Competent Authority under the EIA procedure"* (European Commission, 2001b).

The scoping process is referred to in article 5(2) of the EIA Directive, which provides

[26] Statistics from GHK (2010)
[27] Statistics from Glasson et al. (2012), adapted from GHK (2010)

two possibilities with regard to scoping: it may be undertaken by the national authorities at the request of the developers only or, this opinion may be given irrespectively of whether the project developers so requests. Most Member States have implemented the first option, introducing a non-mandatory scoping procedure. Others have implemented a mandatory scoping procedure. Two main scoping practices have been applied by EU Member States: either (i) the project developer presents a scoping report to the environmental authority (or other qualified authority) for opinion and consultation or, (ii) the project developers requests the consenting authority to issue a scoping opinion. Sometimes both methods may be combined.

In the UK where scoping is not mandatory a study showed that project developers requested scoping opinions in 50% of the EIA projects examined by the Local Planning Authority and, in two third of the cases, the project developer provided a scoping report along with the scoping request (DCLG, 2006). According to the same study, the scoping stage is one of the key elements to ensure qualitative EIAs. Effective scoping may (i) contribute to reducing financial and human resource burden for both the project developer and consenting authority; (ii) may help shorten the length of Environmental Impact Statements (EIS)[28] by focusing on the important and relevant aspects and, (iii) reducing the amount of additional information that could be requested later on.

However, scoping is also criticised by practitioners, as consenting authorities tend to request more and more information at this early stage of the procedure. The level of information produced is getting closer to the level of an EIS and scoping opinions remain general instead of being tailored to the projects (IEMA, 2011). In addition, the amount of additional information to provide later on during the review of the EIS is often not reduced (Dreier, 2012).

The tendency to enlarge assessments to topics of no particular relevance for the EIA, instead of focussing on issues likely to have significant effect, is described by IEMA (2011) as ineffective scoping. Three main factors that act in synergy seem to contribute to ineffective scoping: (i) risk aversion in the sense that a wider assessment that includes less relevant issues, serves as a guarantee that nothing

[28] See definition in footnote 28.

has been forgotten and ensures that less risks are taken, (ii) poor planning, i.e. that general formats are applied to all cases instead of tailoring them to each project to ensure adequate planning with the relevant stakeholders and, (iii) commercial reality. The latter applies to project developers trying to maintain costs at a lower level and seeking early project implementation. It also applies to environmental experts involved in the EIA process whose interest is that their services are requested. And more limited assessments may require less expertise. Thus, better cooperation and enhanced collaboration among stakeholders are also necessary to guarantee the benefits of scoping.

The scoping procedure is an excellent opportunity to involve public participation at an early stage of the EIA process and successfully engage them in decision-making. Interestingly, new EU Member States that have transposed the EIA Directive more recently seem to have quickly recognised this important benefit of scoping and included it as a requirement in their legislation.[29] However, some practitioners have indicated cautiousness regarding regulatory scoping with public participation. Indeed, in some cases experience has shown that public participation at a too early stage could be counter-productive. The projects and its impacts may not be properly explained and understood at this very early stage, leading to more confusion and frustration. Adequate planning is particularly recommended in this context. The risk of a rigid requirement is that a one 'size fits all' procedure may be put in place leaving no flexibility for particular circumstances or local specificities (IEMA, 2011). Although one may argue that once project developers and the public are aware of this requirement, preparation and planning process as well as public approaches may differ from the current and/or encountered practice. Indeed, guidance and explanation of the procedure and its purpose may also influence the practice that has been developed in some cases.

Therefore, a modification of the EIA Directive in the sense of obligatory scoping with public participation should be encouraged to enhance the quality of the overall process. Yet, additional measures such as practical guidance and training should accompany the scoping procedure to guarantee its effectiveness and maximise its

[29] Ten of the twelve new Member States have required scoping with public participation in their legislation. In addition, they indicate that such provisions were in compliance with Article 6 of the Directive requiring *"early and effective opportunities for the public to participate in the environmental decision-making process"* (COWI, 2009a).

benefits. Some flexibility should remain with regard to the timeframe and the choice of the scoping method so that national and/or local practice is taken into account.

Nevertheless, scoping is not the only factor impacting the quality of the EIA process. All factors are actually intrinsically connected through the process. The quality of the Environmental Impact Statement[30] and professionalism of experts/practitioners involved are all contributing factors.

3.2.2 Environmental Impact Statement (EIS) and quality of expertise

Reference to EIS is made in Article 5(3) of the Directive that states the minimum information that should be provided by the project developer in connection with Annex IV of the Directive. This includes: a description of the project and the mitigations measures envisaged with regard to adverse effects on the environment; the necessary data related to assessment of the environmental effects that the project may have; the alternatives studied by the developer and their justification as well as a non technical summary of the statement. This report will be reviewed by the competent authority, which may always request additional information.

The Commission has also published some guidance regarding the EIS and its quality review, which includes checklists (European Commission, 2001c). Member States have introduced two methods for the EIS review: (i) as a mandatory stage in the EIA procedure, i.e. the statement is first appraised by the competent authorities or an independent body on their behalf and if necessary additional information will be required before the consent procedure starts (this request may be subject to an appeal by the project developer); (ii) as a non mandatory step during which the Competent Authority will undertake a less formal review and may request additional information before proceeding with the consent procedure. Consultants may also be involved in an informal review process undertaken by the project developer.

EIS have been subject to studies in a number of countries. A developing trend appears to be the increasing length of the statements as a result of the amount of information being requested, despite scoping or due to ineffective scoping as

[30] In most EIA regimes EIS is defined as the Environmental Information provided by the Developer to the Competent Authority, i.e. a document or documents containing the Environmental Information required under Article 5 of the EIA Directive (European Commission, 2001c).

previously mentioned (IEMA, 2011). With this increased amount of information not always relevant for the concerned project, the quantity seems favoured at the detriment of the quality (Schabhüttl, 2012). In a study on the quality of EIS conducted in Estonia, about 30% of the EIS samples were evaluated as unsatisfactory. It was found that the weakest sections of the reports were about the project description and the presentation of alternatives, which are also one of current issues discussed in relation to the amendment of the Directive (see below). Similar studies conducted for Spain and Portugal identified the same shortcomings in EIS (Peterson, 2010). In general, the quality of the reports and the data they contained is recognised as a problem.

Two solutions proposed are to create a pool of experts or introduce an accreditation system for EIA consultants, together with the introduction of a formal review procedure conducted by independent experts (based on the practice already developed in some Members States) (COWI, 2009). This idea is supported by practitioners/project developers as a means to ensure a certain quality level (Bellina, 2012) (Schabhüttl, 2012). However, the creation of a pool of experts and/an accreditation system offers both advantages and disadvantages (Wurm, 2012): experts who are not from the region where the project is to be developed may lack the knowledge of local specificities and environment and not be in the position to provide adequate expertise. On the other hand, the resort to external expertise may be a better way to prevent the adverse influence of vested local interests and guarantee independence. Pragmatism and practical application are expected in this area, where procedures may be lengthy and complex.

Although the introduction of such systems could be beneficial with regard to EIS quality, a number of questions remain open: would accreditation be done at the European or the national level; what would be the criteria? It should also be borne in mind that if such systems were introduced, this may lead to limiting the number of experts which in turn may also lead to longer procedures due to lack of availability or time in certain countries. Instead of positively affecting the overall system, such a move may have unforeseen negative effects. The issue of delays in EIA is recurrent and has direct financial implications on the project developer.

3.2.3 Delays in procedure

Timeframes and possible related delays have implications for most of the stakeholders in the procedure and as such, are a sensitive issue in the EIA procedure. Considering the investment at stake, it is in the project developer's interest to have a speedy procedure that will allow an early commencement of the project. However the time factor affects the different parties in different ways: for example has there been enough time or should there be more time to wait for seasonal changes to assess the impact of a project on specific aspects of the environment such as biodiversity. Experts will also need time to ensure qualitative reports and assessment. Enough time should be allowed for appropriate public participation in this decision making process. It should be noted that this is the only timeframe referred to in the EIA Directive under Article 6(6) as *"reasonable timeframes"* that should be provided to allow *"sufficient time"* for information of the public and effective public participation in the process. Another document also is mentioning timeframe in the EIA context at the EU level: the draft Proposal for a regulation of the European Parliament and of the Council on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC. This draft Regulation is currently being discussed at the Council level. The initial draft suggested a permit granting procedure in two phases and no longer than three years. This has been reviewed to three and a half years during the Council negotiations (Hemetsberger, 2012). It should be noted that this current status is still opened for discussion and may be modified again before adoption. One may ask whether this (draft) Regulation and/or the EIA Directive would require some harmonisation and what could be the possible effects of this Regulation on EIA practice for energy and infrastructure projects in the long term.

Estimates of possible delays in the procedure and related costs vary widely. Obviously it will depend on the type, size and location of the projects and also, on the EIA system put in place. Other factors not directly linked to the procedure will play a role (financial and human resources, professionalism etc.). From the various studies that have been conducted in this area, the following points could be noted (Oosterhuis, 2007):

- The average timeframe for EIAs vary from 18 to 22 months, although this length may be reduced or extended depending on the nature of the project (industry, infrastructure etc.).[31]
- Some studies argue that EIA do not produce major delays in projects implementation, on the contrary effective EIAs may speed up the process.
- Other studies state that delays are caused by EIA procedures and also increase its costs. In addition, attempts to reduce timeframes and possible delays may be counter-productive such as in the area of public participation. Any initially gained time may often be lost to court proceedings that may be initiated later.
- The lack of adequate preparation by project developers and the lack of resources and/or qualifications of the competent authorities[32] are often presented as reasons for possible delays in the procedure (Weston, 2011).

As shown in Table 2 the timeframes vary considerably according to the EIA procedure established in the individual countries. A repeated criticism, as in the case of Austria, is the non-respect of timeframes by the competent authorities, without any sanctions or consequences. In this regard, a system with sanctions or at least the provision of appropriate justification is suggested to encourage a better compliance with the procedural timeframes. Such a procedure could be useful as an incentive to comply with the legal timeframes. However, before its introduction, it would be strongly recommended to enquire about the origin and causes of any delays, [33] otherwise this may lead to counter productive effects: tight administrative deadlines and time pressure may lead to losses in quality and procedural mistakes, with the attendant risk to further extend the length of the procedure. If the current timeframes do not reflect the time needed in practice, adequate changes should be initiated to improve the situation, taking into account the causes of the potential delays.

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[31] In Austria, the Federal Ministry for Environment reported an average of 324 days (about 11 months) from the request for EIA addressed to the Competent Authorities until the first instance decision, for EIAs conducted during the period 2009 early 2012. The general trend is a reduction of this timeframe over the years (BMLFUW, 2012).

[32] This aspect was emphasized by several practitioners as a cause of additional delay in the EIA procedure (Dreier, 2012), (Bellina, 2012).

[33] In Austria, it seems that the authorities did not conduct any studies about the origins and causes of possible delays. As the results of such studies may put at stake the responsibilities of certain stakeholders with regard to delays, this type of studies is not particularly supported (Alge, 2012).

On the basis of the practices developed by Member States other solutions could also be further exploited to avoid unnecessary delays. For examples some Member States have combined the scoping and screening procedure in order to accelerate the EIA procedure. In this case the same observation above applies: streamlining the procedure should not happen at the detriment of important steps such as a proper assessment of the environmental impacts, appropriate public participation in the process or the study and presentation of reasonable alternatives - already considered as a weakness in the Directive.

3.3 The issue of alternatives

Alternatives are one of the persistent issues in EIAs. The first amendment to the Directive made in 1997 strengthened the requirement of alternatives, as the previous formulation left a lot of room for interpretation (the formulation used was a requirement of an outline of the main alternatives *"where appropriate"*). The reference to alternatives is contained in article 5(3) of the Directive as part of the information to include in the Environmental Impact Statement. As mentioned, alternatives remain a weak point in the EIS, evaluated as not being of satisfactory quality. They only contained a very limited number of alternatives, which were also not properly analysed (Peterson, 2010). This situation is not really surprising considering that despite some previous amendments, the provisions contained in the Directive remain general. The alternatives introduced in the EIA are more a formal requirement than real options that have been considered or could be considered further, during the procedure. They have to be presented but do not really affect the project in reality. They may easily be perceived as just an additional procedural requirement to be fulfilled by the project developer. As most of the Member States have transposed this provision almost word by word in their national legislation, the practice developed reflect the limited requirement of the provision. The content of the guidance produced by the Commission on this matter is of limited support as it states: "*The EU Directives do not require developers to consider alternatives in EIA but it is generally considered to be good practice to give some consideration to whether there are any feasible alternatives to a project which ought to be considered."* (European Commission, 2001b).

The limited scope of the provision on alternatives as contained in the EU Directive contrasts with the academic and practitioners view on this instrument: *"Alternatives*

lies at the heart of impact assessment" (Holder, 2012a). This illustrates the fundamental role played by alternatives in EIAs, which should provide the options available with their environmental impacts. Alternatives should not be a justification of the project and its components, but provide an understandable explanation, based on serious analysis of alternatives of the various elements that led to this choice. They should contribute to the decision making process. Furthermore, alternatives may be a good means to ensure public participation in the procedure during the scoping phase and at an early stage of the process. This would be very beneficial to the whole process and may contribute to avoiding further delays through courts proceedings. In this context the current status of alternatives as contained in the Directive is particularly criticised by NGOs (Justice and environment, 2010). These argue that the current interpretation of the Directive with regard to alternatives does not comply with the general goals of the Directive itself, the Espoo Convention and the Aarhus Convention. Accordingly project developers should be required to present all reasonable alternatives, including the least harmful to the environment and the zero-alternative, i.e. no project implementation. These should be subject to proper comparative analysis. The inclusion of the alternatives in the assessment should follow public participation, and the agreed upon choices be opened to possible judicial review.

Although not directly addressed in the Directive, it should be noted that the options of the zero-alternative also called 'no action' or 'business as usual' option and/or the most environmental friendly alternative have been introduced to the legislation of a small number of Member States.[34] These developed practices could serve as a basis for the review of the Directive on this matter (De Moor, 2012). However, such requirements should also be fine-tuned to maintain the possibility to adapt to the individual circumstances of different projects. For example, with regard to the 'zero-alternative', a differentiation could be made between public and private projects, which by definition do not seek the same goals. The zero-alternative could apply in a stricter way to public projects, which as an expression of public policy should encompass the interest of the public and ensure a high level of public participation. This option may be more problematic for private project developers balancing the

[34] The inclusion of the zero-alternative in the EIA is mandatory in the Dutch legislation. However, the obligation to include the best environmental option has been revised on the occasion of the recent legislative amendment in 2010. The presentation of alternatives that are attractive and realistic with regard to the environment remains mandatory (Holder, 2012b). Other Member States such as Belgium, Estonia, Bulgaria, Lithuania or Romania have also requested the zero-alternative option (COWI, 2009a)

costs of planning, the procedure and the underlying risk that the project may not be implemented at all (Alge, 2012). The same distinction between public and private project developers may be relevant for a variety of alternatives such as alternatives locations, process and equipment (the type of technology used to achieve the objective e.g. wind or solar energy for electricity production or, operating conditions - construction work that could take place at a certain time of the year. Requesting an alternate site or location for a private project developer, who has already received a planning decision from the competent authority for a chosen site is not realistic. In this regard, a public project developer has usually more room for manoeuvre. Thus, the criteria applied to alternatives should not be the same as for private project developers (Holder, 2012a).

When considering the alternatives issue and possible solutions, one should consider the central role played by the project developer in the process. Left with too much discretion on the choice and analysis of the alternatives it is likely that the option most favoured will be that incurring less cost. Therefore, stricter legislative requirements and appropriate guidance are necessary to manage the process and ensure the consideration of environmental aspects (De Moore, 2012).

In this context comparison is often made with the presentation of alternatives as required in the Strategic Environmental Assessment,[35] which was introduced by the Strategic Environmental Directive 2001/42/EC. Article 5(1) of the SEA Directive, requires a mandatory and detailed analysis of the alternatives. It also foresees a wider scope of application of alternatives.[36] As indicated by the European Commission in the Guidance for the implementation of the SEA Directive, alternatives play a central role in the SEA process: *"It is essential that the authority or parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted, are presented with an accurate picture of what reasonable alternatives there are and why they not are considered to be the best option."* (European Commission, 2003).

For this reason, the alternatives regime as referred to in the SEA process is often cited as a model for the review of the provisions related to alternatives as contained

[35] SEA is defined as *"a form of environmental assessment intended to identify and assess the likely significant effects of a plan or programme on the environment, the results of which are then taken into account in the decision-making process"* (Sheate et al., 2005)
[36] Alternatives under SEA also include strategies in *inter alia* social, fiscal, economic areas.

in the EIA Directive. As Member States have already implemented the SEA Directive, the alternatives requirement in this sense would already be familiar to them, even though not initially applied in the same framework. However, on this matter opinions diverge. On the one hand it is argued that alternatives should be dealt with at the strategic level instead of at the EIA's level (COWI, 2009a). EIAs would have to follow the scope defined at the strategic level, which indirectly creates a de facto hierarchy between SEA and EIA. On the other hand both tools can be used in a complementary way. Alternatives should be identified, analysed and chosen at the strategic level. These results have to be taken into account at the EIA level, where the focus would be limited to technological alternatives (COWI, 2009b). These two approaches have the advantage of providing a distinction between the SEA and EIA procedures in relation to alternatives and ensure that there are no overlaps. The first option to use the SEA system for the EIA is more problematic as it could lead to more confusion between both regimes where a number of issues already exist. This will be detailed in the following section.

4 Links with other EU legislation and policies

The potential for overlap with other pieces of EU legislation and/or the lack of harmonisation with policies existing is a concern. The principle areas for potential conflict are presented under this section.

4.1 The Strategic Environmental Assessment (SEA) directive

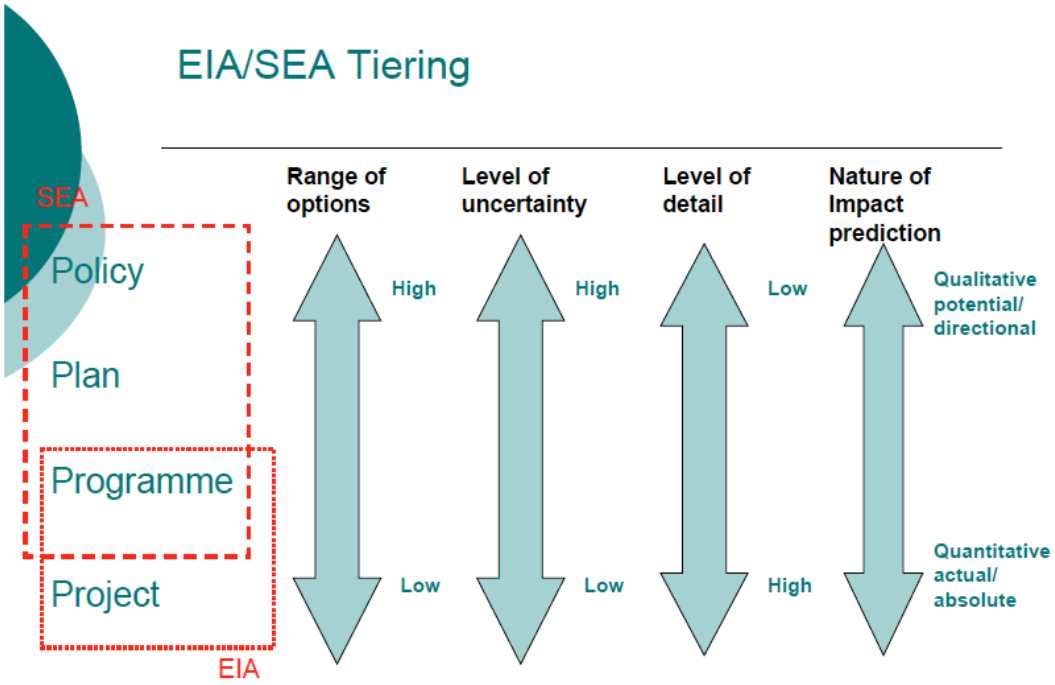
SEA was only introduced at the European level in 2001 through the SEA Directive and became operational in Member States in 2004. The use of the expression Strategic Environmental Assessment had already become widespread in the 1990s (Buckley, 1998). Interestingly the initial discussion and preparation for the EIA Directive also encompassed Policies, Plans and Programmes (PPPs), but the final agreed draft applied only to projects (Glasson et al., 2012).

SEA has been broadly described as *"Environmental Assessment in strategic planning and policymaking"* (Ortolano and Shepherd, 1995) referring to an intrinsic link between EIA and SEA. Indeed, the need for SEA arose from certain limits encountered by EIAs. These included *inter alia* taking into account alternatives and impacts on the environment at an earlier stage of the decision-making process as

mentioned previously and, dealing with the issue of cumulative and/or large-scale effects not adequately addressed at the EIA level. Better contribution to sustainable development together with more public consultation and involvement earlier in the decision-making process, leading to more transparent and qualitative processes, have also been recognised as other benefits of the SEA (Tetlow and Hanusch, 2012). The SEA Directive itself refers to EIA Directive: Article 3(2) requires compulsory SEA for all plans and programmes "[...] *which set the framework for future development consent of projects listed in Annexes I and II of Directive 85/337/EC."* Article 5 states that information obtained from other Community legislation, including the EIA Directive may also be used for the SEA environmental report. In addition, Article 11(1) states that assessments should be carried out with no prejudice to requirements under the EIA Directive or other Community Law. Article 11(2) provides that Member States may establish a coordinated or joint procedure to fulfil the requirements of other relevant community legislation and avoid duplication of assessment.

Over the last ten years SEAs have been developed and increasingly implemented all over the world. In 2003, the UNECE adopted the SEA Protocol to the 1991 Convention on Environmental Impact Assessment in a Transboundary Context. The Protocol, which is comparable to the European SEA Directive, is open for ratification to all UN Member States and entered into force in July 2010. Hence, in comparison to the EIA, the SEA is (still) perceived as a new tool being applied by States in different ways. For this reason and because of similarities with EIAs, the risk of overlap and duplication between both the EIA and the SEA Directives has been recognised. This fact should not be underestimated as these may have a number of unwanted consequences: inappropriate use of financial and human resources, ineffective environmental impact assessments, legal issues and bad implementation of the Directives, which may lead to infringement procedures.

Figure 2: SEA/EIA tiering[37]. Broad trends in the nature of appraisal at different levels in the decision-making hierarchy (Sheate, 2008)



Sheate et al. (2005) in a key study for the European Commission on the relationship between the EIA and the SEA Directives have identified four main areas that could lead to potential overlap and duplication between the two Directives:

- *"Where large projects are made up of sub-projects, or are of such a scale as to have more than local significance;*
- *Project proposals that require the amendments of land-use plans (which will require SEA) before a developer can apply for development consent and undertake EIA;*
- *Plans and programmes which when adopted or modified set binding criteria for the subsequent consent for projects, i.e. if a developer subsequently makes an application which complies with the criteria then the consent has to be given;*
- *Hierarchical linking between SEA and EIA ('tiering').*"

[37] "Tiering means that by preparing a sequence of environmental assessments at different planning levels and linking them, foreclosure may be prevented, postponement of detailed issues may be permitted and assessments can be better scoped. A tiered approach minimise the problem of EIA being only a 'snapshot in time' (Arts et al., 2005).

As illustrated in Figure 2 the main potential for overlap between SEA and EIA are on the programme and project levels.

Overlap may lead to confusion: which Directive should apply in what situation? Should both Directives apply? Possible overlaps also depend on the implementation of the Directives by Member States. Potential risks and solutions will vary with the EIA and SEA systems put in place.

The Sheate study presents case studies of several countries. For example the potential for overlap in Austria is at the local level of small-scale planning proposals that coincide with development projects in the area of housing and other urban development projects. The risk of overlap is increased when the project requires: i) a change of the land plan use and; ii) is pending an EIA procedure. The introduction of a joint or merged procedure is recommended in this case to avoid any overlap. In France the situation is quite different. Some types of EIA have been maintained for certain plans and programmes that undergo EIAs instead of SEAs. As the procedure for this form of EIA does not match the SEA procedural requirements, the implementation of the SEA Directive is most likely not correct in this case and may lead to an infringement procedure. Although a modification of this particular EIA procedure is recommended to follow the SEA requirements, a better implementation of the SEA Directive should also be envisaged as well as clarification between EIA and SEA at the plan and programme level, in order to avoid further confusion. In the case of the UK, a possible issue are urban development projects promoted as master plans, which may be subject to EIA but also to SEA. In these cases the establishment of parallel EIA and SEA procedures, taking account the different aspects of assessments, is recommended to ensure compliance with both Directives and avoid duplication. The recommendations mentioned in these examples are part of the general recommendations that were addressed to Member States and the European Commission in order to prevent overlaps and duplication in the implementation of both Directives. In addition, in the medium and long term, a review of the scope of application and definitions of project, programme and plan in either or both Directives is recommended. It appears that the lack of clear definitions and guidance in this area is a source of confusion as in practice a large-scale project may actually correspond to a plan and vice-versa. Finally, once enough experience has been accumulated in the implementation of both instruments, it is

recommended to consider the consolidation of both Directives to enhance consistency and efficiency in environmental assessments.

This latest recommendation refers to a debate that has been on going over recent years about the possible merging of the two Directives. This option has been presented as an efficient way to avoid overlaps and duplication between both tools and ensure more effectiveness in the procedures. However, merging both Directives at this stage seems quite premature considering that: (i) these instruments have different targets: projects vs. policies, programmes and plans (PPPs); (ii) EIA and SEA are subject of two international instruments at the international level (the interrelated SEA Protocol to the Espoo Convention and the Convention itself); (iii) EIAs have been undertaken and applied over decades while SEAs have been mainly developed over the last ten years: *"SEA is still evolving and has not reached its full potential"* (Tetlow and Hanusch, 2012). More time is needed to improve the implementation of both Directives. Based upon experiences and practices developed by the Member States, the reconciliation of both instruments could be considered, if needed. This should only be envisaged as a long-term approach so as to have plenty of experience on the implementation of both Directives - as recommended by Sheate et al. (2005).

Furthermore, in the context of the current EIA Directive review, other options have been suggested. For example, Matzer (2012) proposes a new approach based on the combination of EIA, joint procedure between EIA and SEA and an enhanced SEA.[38] This approach would encompass all described issues subject to potential overlaps without requiring modifications of the Directives. Nevertheless, in order to reach harmonised application of this methodology, national legislative modifications would be necessary. In this regard, EU guidance may not be sufficient and changes to the Directives would be most likely necessary at some point to ensure a certain level of harmonisation. In addition, mixing the requirements of EIAs and SEAs under one or the other procedure may lead to more confusion in practice, especially when the usual EIA or SEA procedures continue to be applied at the same time.

[38] The term 'enhanced SEA' is used to describe a SEA that would include certain aspects of EIA procedure such as details of the EIS to ensure compliance with the EIA Directive. It is namely based on the idea that enhancing the SEA procedure in line with the EIA Directive is easier and more efficient than other options.

Pinho et al. (2010) have included references to the SEA Directive in some of their suggested scenarios (see Section 3.1 on screening) for the review of the EIA Directive. These options, which vary with the modification of the screening methodology, mainly follow the previous recommendation to clarify and better define the concepts of project and PPPs so that various situations may be addressed in practice in compliance with both Directives. This approach should be preferred in the short and mid term, as Member States will have to adjust their legislations accordingly and improve the procedures. Depending on the practices that will result from these changes, further amendment in the sense of more consolidation between both tools could be considered. It should be noted that some of the suggested options for the review of the EIA Directive also incorporate reference to other EU Directives such as the IPCC (Integrated Pollution Prevention and Control) Directive, with which potential overlaps may also arise.

4.2 The Directive concerning Integrated Pollution Prevention and Control (IPPC)

The Directive on Integrated Pollution Prevention and Control (IPPC Directive) was adopted in 1996 and codified in 2008 under 2008/1/EC. The Directive aims to prevent and/or reduce water, soil and atmospheric pollution as well as waste from industrial and agricultural installations, to ensure a high level of environmental protection. It outlines obligations for industrial and agricultural activities with a high pollution potential and establishes procedures for the authorisation of these activities by providing minimum requirements to be included in all permits, especially with regard to pollutants released and based on Best Available Techniques (BAT). The Directive has been incorporated under Directive 2010/75/EU on industrial emissions, which brings it together with six other Directives in a single Directive on industrial emissions (Europa, 2012a).[39]A list of installations subject to authorisation and capacity production thresholds is provided in Annex I of the IPPC Directive. Although those thresholds somehow differ from the EIA Directive, most categories contained in Annex I are actually covered by Annexes I and II of the EIA Directive.

The link between both the IPPC and the EIA directives is made through mutual references in both texts. Recital 11(1) of the IPPC Directive states that the Directive

[39] The provisions of the IPPC-Directive are applicable until January 2014.

should apply without prejudice to the EIA Directive and its implementation. Article 6(2) of the IPPC Directive allows the use of relevant information provided under the EIA Directive for permit applications under the IPPC Directive. Article 9(2) of the IPPC Directive stipulates that in cases of changes or new installation under the scope of the EIA Directive, the information from the EIA and/or consultation phase should also be taken into account for the permit procedure. These articles aim to avoid duplication and ensure the best use of assessments conducted under the Directives. Similarly, Article 2(2)a of the EIA Directive (Article 2(3) of the codified version) offers the possibility to introduce a single procedure to comply with the requirements of both Directives.

It is worth noting that with regard to this latest provision, only a few Member States[40] have made use of this possibility, which if properly implemented, could greatly contribute to streamline both procedures and avoid duplication. Its limited application may be related to the fact that it was only introduced in 1997 through the amendment to the EIA Directive. By that time Member States had already developed their EIA procedures and were not prone to introduce further optional changes. Also new Member States did not use this option. However, most Member States that did not introduce this possibility have included ways of coordination, especially through the application of the above-mentioned articles of the IPPC Directive. Most coordination measures refer to the use of information requested by the EIA Directive and/or a positive EIA decision for granting the application permit (COWI, 2009a).

Some Members States have argued that the differences in thresholds between both Directives were preventing them to create a single procedure. These differences in the thresholds have been recognised as a possible source of confusion between both legal texts (European Commission, 2009a). For this reason, and considering that no major difficulties have been reported by Member States in the coordination of both procedures, the suggestions for the amendment of the EIA Directive focus on the harmonisation of these thresholds. In addition, information requirements should also be reviewed in accordance with the new Directive on Industrial Emissions. As mentioned above, these changes are suggested by a modification of

[40] Austria, Germany, Italy and Poland have introduced this possibility in various ways whereas in Slovenia and Hungary a single procedure may be organized upon the project Developer request (COWI, 2009a).

Annex 3 through a moderate amendment of the EIA Directive (Pinho et al., 2010). Such a modification would allow changes and harmonisation with other EU acts on a larger scale. In order to further encourage the application of a single procedure, further practical guidance should be produced in this context and the exchange of experience between Member States and their practitioners supported.

4.3 The Habitats and Birds Directives

The EU Habitats Directive (92/43/EEC) requires Member States to establish a strict protection system for certain plants and species (listed in Annex V of the Directive). The sites where these important habitat types and species are located are determined as Special Areas of Conservation and form a coherent European network of protected habitats, named Natura 2000. Special Protection Areas introduced by the Birds Directive (79/409/EEC) also belong to this network of habitats, for which protection is foreseen by the Habitats Directive through a number of measures. Of particular relevance for the EIA area are the provisions foreseen under Article 6 Paragraphs 3 and 4 of this Directive, which provide the procedure to be followed when planning new developments that might affect a Natura 2000 site. Article 6(3) requires an appropriate assessment of plans or projects likely to have a significant effect on Natura 2000 sites while Article 6(4) allow exceptional cases for project implementation in spite of negative assessments for these sites. Considering their similarities, these provisions create a clear link with the EIA Directive (COWI, 2009a). However, some differences remain that may affect the effective implementation of both Directives. There is no list of projects in the Habitats Directive; thus, the decision to undergo an EIA is done on case-by-case basis. There is no definition of project contained in this Directive. In practice this means that the scope is different: whereas a project may not fall under the scope of the EIA Directive because not listed, it may fall under the scope of the Habitats Directive.

In general, most Member States have established formal links between both Directives in their legislations. For the Member States that have established two different procedures, coordination is done by the Competent Authorities, which may face difficulties in fulfilling this task. In general no particular difficulties have been reported with regard to the relationship and related implementation of both Directives. Nevertheless the mutually beneficial effects of both Directives could be enhanced by introducing the option of a single procedure for the projects under the

scope of the EIA Directive and Article 6(3) and (4) of the Habitats Directive (European Commission, 2009a), in a similar way as it exists for the IPPC Directive as described in the previous section.

There is room for improvement in the general context of biodiversity. This concept, subject to an Action Plan,[41] is not properly reflected in the EIA Directive. The main reference appears in Article 3 of the EIA Directive in relation to "*the direct and indirect effects on amongst others, fauna and flora*." The lack of a clear reference to biodiversity in the EIA Directive actually reduces its scope to Natura 2000 sites, although biodiversity should encompass a much wider range of application. For this reason, a more effective EIA in the context of biodiversity is required especially by environmental NGOs (Scrase, 2010). To achieve this would require amendments at the various stages of the EIA procedure as outlined in Section 3, including *inter alia*: recognition of the 'no net loss principle' in biodiversity at the EIA level; a better definition of the sensitive areas at the screening stage, namely these areas should not only refer to protected areas but also to areas that serve other purposes such as birds migration or offer refuges in the context of climate change; a better consideration of cumulative effects; and mandatory alternatives, including the 'most environmentally beneficial'. Thus, the role of the EIA in the protection of biodiversity should be strengthened.

4.4 The trans-European energy infrastructure

In October 2011 the Commission issued a Draft Regulation of the European Parliament and of the Council on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC. This proposal is part of the Connecting Europe Facility and the Project Bond Initiative, which support Europe's transport, energy and digital networks. The first pilot phase of this plan was adopted by the Parliament in July 2012. The Project Bond Initiative aims to revive project bond markets and to help the promoters of individual infrastructure projects to attract long-term private sector debt financing by reducing the risks of the projects. These major efforts are justified by the need to modernise and expand Europe's energy

[41] The EU Action Plan *"Halting the Loss of Biodiversity by 2010 - and beyond: Sustaining ecosystem services for human well-being"* was set out in 2006 in a communication from the Commission (COM (2006) 216). Ultimate goal was to hold the biodiversity loss by 2010. A number of objectives were established to reach this goal, including integrating biodiversity into land-use planning and development (European Commission, 2012e).

infrastructure, and to interconnect networks across borders in order to reach Europe's 2020 goals[42] to achieve smart, sustainable and inclusive growth by the end of this decade (Europa, 2012b).

In this regard, the draft Regulation establishes rules and guidelines for the timely development and interoperability of trans-European energy networks as follows (draft Regulation, Chapter I):[43]

- It lays down rules for the identification of projects of common interest, which are necessary to implement priority corridors and areas falling under the energy infrastructure categories in electricity, gas, oil, and carbon dioxide (as set out in Annex II) (under Chapter II);
- It facilitates the timely implementation of projects of common interest through streamlining, enhanced coordination, and accelerating permit granting and by enhancing public participation (under Chapter III);
- It provides rules and guidance for the cross-border allocation of costs and risk-related incentives for projects of common interest (under Chapter IV);
- It determines the conditions for eligibility of projects of common interest for Union financial assistance under the Regulation of the European Parliament and the Council establishing the Connecting Europe Facility[44] (under Chapter V).

Chapter III of this regulation is of particular interest in the context of Environmental Impact Assessment, as it provides a separate EIA regime for the timely implementation of the projects of common interest, especially by accelerating the permit granting procedure and enhancing public participation.

At this point it is worth observing the following: firstly, it should be noted that this text has been proposed in the form of a Regulation. Regulations are the most direct form of EU law. As soon as they are adopted, they have binding legal force throughout every Member State, on the same level as national laws. Contrary to Directives, "*national governments do not have to take action themselves to implement EU*

[42] This includes especially the so called 20-20-20 objectives, i.e. greenhouse gas emissions 20% lower than 1990 (or even 30%, if the conditions are right), 20% of the energy produced from renewable energies and 20% increase in energy efficiency.
[43] This Paper is based on the draft Regulation reviewed by the Council as of 31 July 2012 (Council of the European Union, 2012).
[44] This draft Regulation was issued by the Commission at the same as the other one in October 2011 and is also being discussed by the Parliament and the Council.

regulations" (European Commission, 2012d). Therefore, upon adoption the implementation of this Regulation should be much faster than the implementation of the EIA amended Directive. Secondly, it was prepared by the DG (Directorate General) Energy. Before adopting the draft proposal DG Energy had to discuss the proposal internally (inter-service consultation), amongst others with DG Environment, which finally agreed with the proposal including the suggested timeframe (Hemetsberger, 2012). Finally, the text is still a draft version. The Parliament has already submitted its comments[45] and the Council is currently reviewing it. An adoption is not to expect before the end of the year 2012. Considering the size and complexity of these projects, the interests at stake and the investments required as well as the limited timeframe, it is obvious that numbers of measures are required to ensure smooth and effective preparation and implementation of those projects. For this reason, a specific streamlined and accelerated EIA procedure is proposed to ensure that the development of these projects is not prevented or stopped through disproportionate administrative burden (Recitals 18 and 19 of the draft Regulation). The following main aspects are characterised in this procedure:

- Projects of common interest shall be granted priority status[46] (Recital 20 of the draft Regulation) and the Commission will produce relevant guidance about the legislative and non-legislative measures that should be undertaken to ensure proper international and EU law application. On the basis of this guidance, Member States will have twelve months from entry into force of the Regulation to implement non-legislative measures and twenty-seven months for the legislative ones.
- An important aspect to be underlined is that these projects are to be considered as being of public interest and may be considered as being of "overriding public interest" with regard to their environmental impacts. Article 6(4) of Directive 92/43/EC (the Habitats Directive) [47] and Article 4(7) of

[45] The Parliament's opinion and amendments were submitted in March 2012 during a first reading procedure by the Committee on Industry, Research and Energy. Other amendments are expected following the proposals of the Council (European Parliament, 2012).

[46] This aspect has been limited in the draft version of July by adding the condition that this status exists in national legislation (Hemetsberger, 2012).

[47] Under Article 6(4) of the Habitats Directive projects with an anticipated adverse effect on priority habitats can go ahead provided that there is an absence of alternative solutions and imperative reasons of overriding public interest. However compensatory measures would have to be provided for the loss habitats. The fulfilment of these conditions is subject to stringent interpretation by the ECJ

Directive 2000/60/EC (EU Water Framework Directive) would apply, should the conditions foreseen under the respective Directives be fulfilled.

- Member States have to designate the competent authority (or authorities) within six months upon the entry into force of the regulations. The competent authority is assigned a major role in the permit granting procedure. It is responsible to ensure the respect of timeframes, coordination, as well as liaison with other authorities and all stakeholders in the EIA process.
- The permit granting procedure is divided in two phases that should not exceed three years and a half in total (at the first instance level, i.e. second instance proceedings are not counted in this time-frame). The first phase is the pre-application procedure that covers the start of the permit granting process and the acceptance of the submitted application file by the Competent Authority (limited to two years). This phase includes a scoping process and the elaboration of a time-plan to conduct the proceedings. The second phase is the statutory permit granting procedure (limited to one year and a half) and covers the period from the acceptance of the application file until the decision of the Competent Authority is taken. It is emphasized that the time limits related to this procedure are without prejudice to obligations from international and EU law and to judicial remedies.
- Finally a detailed procedure is provided with regard to public information and participation, for which guidelines are provided in Annex IV of the Regulation. Member States are required to publish a manual of procedures for these types of projects, to be made available to the public.

The establishment of a specific EIA regime for these projects raises a number of questions concerning its compatibility and harmonisation with the EIA Directive and its implementation by Member States:

- Article 2(3) the EIA Directive (Article 2(4) of the codified version) foresees the possibility to exceptionally exempt a project from the EIA provisions. Could Member States envisage to resort to the application of this provision for the projects of common interest as described in the Regulation? The question may be raised although such a situation is very unlikely considering the restricted application of this Article. It should apply without prejudice to

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considering the purpose of the Directive to provide a high level protection to these sites (Glasson et al., 2012).

Article 7 of the Directive, i.e. the applicable procedure in transboundary EIAs, which characterises the projects subject to this Regulation. This provision cannot apply to a general category of projects, but only to one or part of one project and on case-by-case basis. Member States also have to report to the Commission the reasons justifying this exception and fulfil a number of additional conditions.

- The foreseen procedure includes precise timeframes and description of certain EIA stages such as scoping. However, other aspects of the procedure, which are criticised under the current EIA Directive such as the issue of alternatives, are not clearly addressed in the Regulation. Specific timeframes are also defined with regard to public consultation and participation.[48] Although the draft Regulation clearly states that these provisions apply *"without prejudice to any requirements under the Aarhus and Espoo Conventions and relevant Union legislation"*, one may raise the issue of the compliance of these timeframes with the Aarhus Convention. Like the EIA Directive, the latter only refers to *"reasonable timeframes"* without definition.[49] The question remains whether the timeframes foreseen under the Regulation are appropriate, especially considering the complexity and size of these projects.
- The question of possible overlap with the provisions of the SEA Directive is also raised in the context of such infrastructure projects. Should some of these projects actually not be subject to SEAs too in accordance with the SEA Directive? Considering that the definitions of projects, plans, programmes and policies have not been clarified yet as mentioned earlier, the implementation of the Regulation may be challenging in some Member States
- As all Projects of common interest are transboundary by nature, they should all fall under the scope of the Espoo Convention.[50] It should be noted that several inconsistencies between the EIA Directive and the Espoo

[48] According to the current practices of Member States, timeframes vary from 14 days to 60 days for the consultation phase with 30 days being the most commonly used timeframe (COWI, 2009a).

[49] In accordance with the Convention, *"reasonable timeframes"* are required to be set so that the public can be informed /have access to information, can participate effectively and have adequate time to prepare for its participation in the decision-making. The different stages of the procedure involving public participation have to be considered (UNECE, 2000).

[50] Article 4 of the draft Regulation set out the criteria for projects of common interest. One criterion is that "*the project involves at least two Member States, either by directly crossing the border of one or more Member States or by being located on the territory of one Member State and having a significant cross-border impact as set out in point 1 of Annex IV*".

Convention remain. This may lead to some difficulties in the application of transboundary EIA procedures (see Section 5.2.2 for more details). Especially in case of disputes between EU Member States some further clarification may be required. According to the 2006 ruling of the ECJ,[51] in case of disputes under a mixed agreement (signed by both the Member States and the EU), the European Commission and/or the ECJ should be the first Institutions to refer to. The ECJ should establish which jurisdiction would be competent in this case (very likely the ECJ itself in accordance to its ruling). A number of bilateral agreements on transboundary EIAs between EU Member States were concluded before this ruling and refer to arbitral procedures for such situations. As they may not be in line with the ECJ case-law and new agreements may be concluded, some further guidance on this issue should be provided by the Commission. This is necessary considering that the conclusion of bilateral (or multilateral) agreements is encouraged by the Espoo Convention to facilitate transboundary EIA proceedings. The European Commission has announced the publication of guidelines on transboundary large-scale projects,[52] which will hopefully bring some clarifications in this regard.

- Whether infrastructures projects covered under the Regulation may be affected by the reviewed EIA Directive and its implementation in the Member States is also an issue that deserves some clarification. It seems unlikely that the adoption of both legislative acts will be coordinated to ensure their application at the same time considering the negotiations procedures they are subject to. It is to expect that both acts will start applying at different time and the co-existence of multiple EIA regimes may increase the risk of confusion in their practical application.

It is interesting to note that responsibility for time limits and timeframe management is put on the Competent Authorities, although different stakeholders may play a role in causing delays in the procedure (as explained in Section 3.2.3). Member States have already expressed concerns about the implementation of these measures in

[51] Case C-459/03, Commission v. Ireland, ECJ 20 May 2006.

[52] The publication of such guidance has been announced in the European Commission 2009 Report on the on the application and effectiveness of the EIA Directive (European Commission, 2009a) and reiterated by a representative of the DG Environment in June 2012 (Kremlis, 2012).

practice. It should be noted that the initial maximum time limit for the granting permit has already been modified from three years to three years and six months at the request of Member States in the Council. This clearly signals the cautious approach taken in this regard and the potential for not being able to comply with the set timeframes. It remains questionable whether these time limits will be a real incentive for the Competent Authorities to accelerate the procedure.

Furthermore, certain vigilance should apply in this context, as streamlined procedures do not automatically translate in more effectiveness and quality. The pressure to meet fixed and short deadlines may be contra-productive in terms of quality, especially considering the complexity of those projects and their impacts to the environment, including on a larger scale such as climate change. Energy and transport infrastructure projects have been identified as *„project categories where climate change considerations should be expressly reflected within the EIA“* as reported by the Commission (European Commission, 2009a). There is a need to better address the climate change issues through the EIA Directive review but also through the draft Regulation. Projects of common interest, which aim to contribute to sustainable development and energy efficiency, should be thoroughly assessed in order not to be detrimental to environmental protection, especially in the long term.

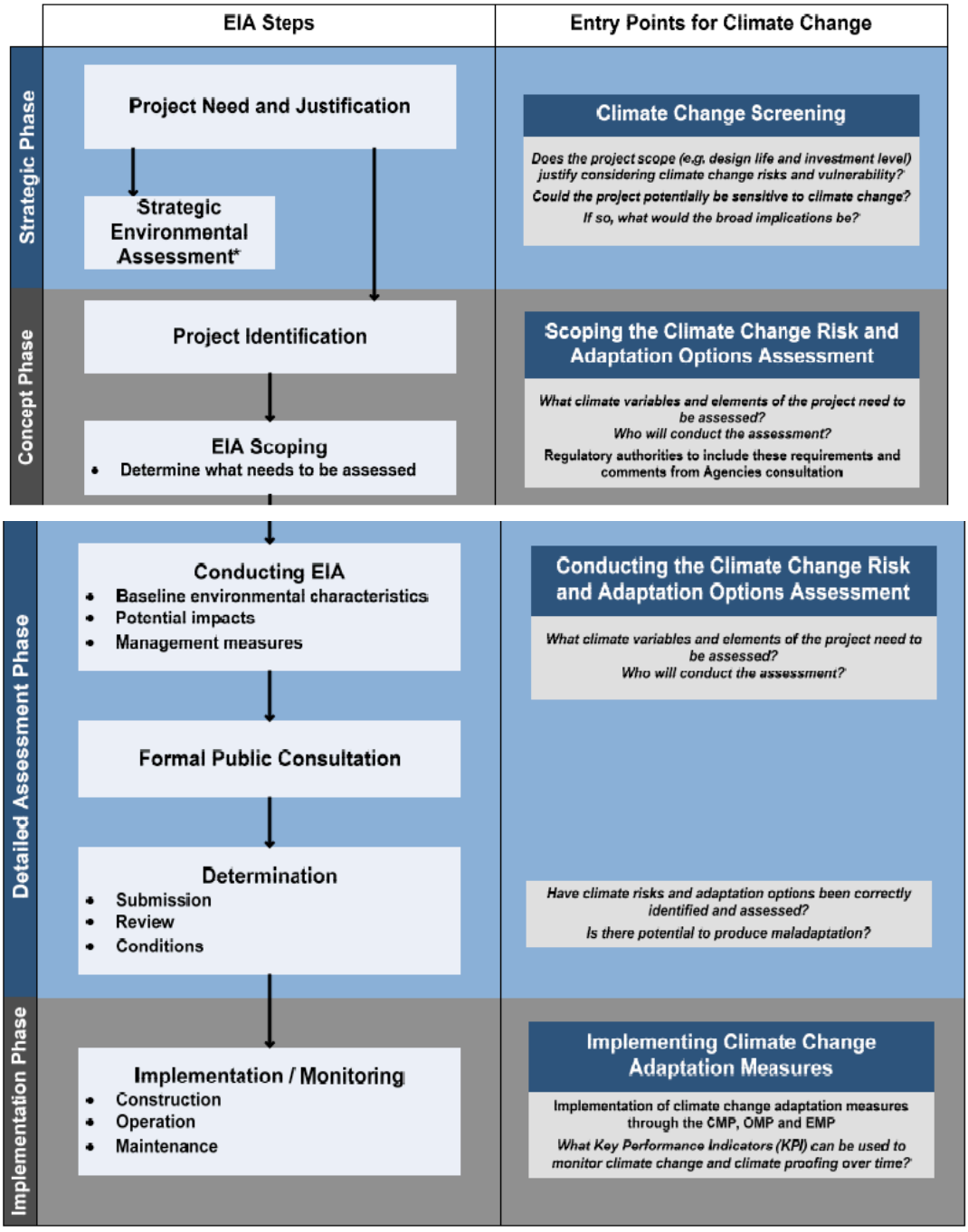
4.5 Climate change issues

Combating climate change is one of the top priorities of the EU, which has developed strategies and initiatives in this regard. While the EU aims to substantially reduce its greenhouse gas emissions it is also developing a strategy for adapting to the impacts of climate change. The EU has been active both within its territory and internationally. It has developed a climate change policy based on wide-range objectives: reduce energy consumption and increase less polluting energy; develop cleaner and more balanced transport options; enhance companies environmental awareness and responsibility; ensure environmentally friendly land-use planning and agriculture and further develop research and innovation (Europa, 2012c).

EIAs have been recognised as tools to tackle climate change issues and especially the effects and impacts of projects in this regard. The large spectrum of environmental assessments under EIAs (and/or SEAs) is particularly relevant as it facilitates the integration of intrinsic links and impacts such as climate change and biodiversity. As highlighted in Figure 3, several entry points can be found in the EIA

process to integrate climate change issues including climate change information, risk mitigation and adaptation measures. Hence, the comprehensive character of EIA can play an important tool in this regard.

Figure 3: Quick screening tool to incorporate climate change considerations into the EIA (Agrawala, 2010)



Although the debate about integrating climate change in EIAs and how, has been on going for years, experience is still limited in numbers and with regard to the scope of integration in the EIAs. As this is still a recent practice, lessons learned and feedback are also limited. As shown in Figure 4 only a few countries (Australia Canada and the Netherlands) are more advanced in this area and have developed systems, which include environmental and climate change adaptation. The US also offers an interesting example in this area. The inclusion of climate change is not mandatory in their EIAs but some guidance has been developed in this area, which has not the force of law and is only partially followed (Smith, 2010). However, there has been a rapid increase in climate change litigation and case-law in this area is starting to emerge. In 2010, 76 lawsuits were filed related to IEA and climate change, which lead to two main rules in this area: (i) climate change is relevant to Environmental Assessment; and (ii) any assessment is accepted in lieu of a set protocol. Therefore, there is a need for better and harmonised guidance and rules in this area (Gerrard, 2010). Although guidance has been developed in a number of countries and organisations feedback on its application is still limited. New and revised guidance is required to improve the climate aspects in the assessments (Kornov, 2010). In this regard it should be noted that guidance in this area is still lacking at the EU level, although the Commission had announced its development by 2011 (European Commission, 2009a). Member States have called for tools and support on how to integrate climate change in EIAs, recognising that this issue was not fully addressed by the EIA Directive and that application was limited (COWI, 2009a).

Figure 4: Stocktaking findings from OECD on incorporating climate change and adaptation in EIAs (Agrawala, 2010)

Climate is referred to into the EAI Directive[53] but no methodologies or details on how it should be considered have been provided at the EU level. For the review of the Directive, it could be interesting to draw models from the practice developed by a few Member States such as the Netherlands. The Netherlands, a country that may be particularly affected by climate change due to its proximity to and constructions on the sea, has developed and implemented an approach for incorporating climate change into impact assessment.[54] This approach consists in three phases (Verheem, 2010): (i) screening climate change risk (as climate change is not always pertinent); (ii) climate change risks and options assessment where distinction is made between mitigation and adaptation; and (iii) climate change analysis. For the first phase a list of projects[55] has been developed to determine whether mitigation is appropriate for those projects, whereas an analysis has to be conducted to decide about the relevance of adaptation. For the second phase, a three-step methodology has to be followed when mitigation and/or adaptation are considered important. In

[53] Article 3 of the Directive refers to the assessment of the direct and indirect effects on climate and Article 5/annex IV include the effects on climate factors as part of the information to be provided by the project developer.

[54] This approach has been developed by the Netherlands Commission for Environmental Assessment (NCEA), which is *inter alia* in charge of reviewing EIAs submitted by project developers.

[55] This includes industrial and agricultural activities, ground water projects, housing and infrastructure projects.

the first case, this includes a description of the expected Green House Gas (GHG) emissions and related mitigation measures; a description of the measures to increase energy efficiency in the project and an explanation of how the project contributes to the mitigation objectives at the national level. In the second case, attempts should be made to improve the project's resistance to extreme circumstances, its resilience, i.e. the capacity to recover when normal condition prevail again, and ensure flexibility and adaptation considering the uncertainty of climate change. The climate analysis phase focuses on the needs to consider the various climate change scenarios and the viability of the projects under those different conditions.

The question of which climate change scenario(s) to use in the EIA is an issue as obviously the impacts and effects will vary accordingly. On this matter, the NCEA recommended to practitioners/project developers to use the four climate scenarios developed by the Royal Netherlands Meteorological Institute (Draaijers and Velden, 2009). Because data varies in this context and is not subject to general agreement, different scenarios should be used for the evaluation. For example some scientists advised that for an EIA assessment climate change impacts should be evaluated on the basis of 2°C of global temperature increase, but also with 3 °C and 4 °C of global temperature increase scenarios (Watson, 2010). The lack of specific regional or local climate change scenarios should not prevent project developers to incorporate adaptation and mitigations measures.

The Dutch methodology has also the advantage to include the effects of climate on projects, which is an aspect that has been criticised as often missing in the EIAs that incorporate climate change aspects. In other words, there is a need *"not only to look at the impact of the project on the environment"*, but also *"to look at the impact of environment on the project"*.[56]

The methodology developed by the Netherlands, considered as a 'simple approach', could serve as basis to amend the EIA Directive to ensure that climate issue is better tackled and incorporated in EIAs by Member States. The latter have suggested some options in this direction such as a list of projects categories that

[56] These remarks were part of the recommendations for the IAIA presented at the Special Symposium on Climate Change and Impact Assessment in 2010 (IAIA, 2010).

should more specifically include climate change aspects[57] and the necessity to better address cumulative effects on climate change (COWI, 2009a). The amendment of the EIA Directive in order to better incorporate the variety of climate change issues is a necessary step to ensure that the implementation of the EU climate change policy is fully operative. EIA is a multi-faceted tool with an important potential in this area that should be further explored and used. As a result, the announcement by the Commission[58] that in the amended EIA Directive climate change considerations will have to be fully assessed has raised high expectation. Considering the important role played by the EU at the international level in climate change but also in the context of other important related conventions such as the Aarhus or Espoo Conventions, this crucial momentum should not be missed.

5 Implementation of the relevant international/regional Conventions ratified and to be ratified by the European Union

This section presents two international/regional environmental conventions directly related to the EIA Directive and one that may offer additional legal remedy within issues relating to the environment and human rights.

5.1 The Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters

5.1.1 The Aarhus Convention and its transposition into European law

Access to information, public participation and access to justice in environmental matters are anchored in Principle 10 of the 1992 Rio Declaration.[59] These fundamental elements of environmental good governance aim to ensure the participation of potentially affected persons in environmental management at

[57] This includes *inter alia* industry, energy and transportation project, and projects for which energy efficiency plays an important role.

[58] This was announced by a representative of the European Commission during the IAIA Conference on Energy Future, the Role of Impact Assessment held in May 2012 in Porto (Kremlis, 2012).

[59] Principle 10 of the Rio Declaration: "Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."

appropriate stages. These key aspects of Principle 10 have been incorporated or reflected in numerous global and regional instruments[60] to different degrees, but have also been implemented at the national level in various ways (UNEP, 2008).

The most elaborated Convention, which integrates all three elements of Principle 10, is the multilateral Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters that was negotiated and adopted in the framework of the United Nations Economic Commission for Europe (UNECE) in Aarhus in 1998. The Aarhus Convention provides detailed obligations and information on all these three environmental aspects. Although the Convention was adopted in the context of UNECE, it is important to recall that its signature is open to all UN Member States. The Aarhus Convention entered into force in 2001 and has been ratified by 46 Parties[61] at this stage. In 2005 it was ratified by the EU and integrated into the EU's legal framework.

Interestingly, it is reported that the initial EIA Directive (1985) has inspired the text of the Aarhus Convention, whereas the Directive was actually modified in 2003 to ensure compliance with the Convention. The Convention has been transposed in various legislative texts at the EU level,[62] a factor that has not facilitated the establishment of a *"clear, transparent and consistent legal framework"* as required in the general provisions of Article 3 of the Convention for the implementation of its provisions (Delnoy, 2010). As clearly set out in the full name of the Convention, it is based on three pillars: access to information (Articles 4 and 5), public participation (Articles 6, 7and 8) and access to justice (Article 9).

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[60] This includes *inter alia* the 1992 UNFCCC, the 1994 Convention to Combat Desertification and the 2001 Stockholm Convention on Persistent Organic Pollutants etc.

[61] 45 of the 56 UNECE Member States and the European Union have ratified the Convention in accordance with the latest status of ratification provided as of 20 June 2012 (UNECE, 2012a).

[62] These include *inter alia*: Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms, the IPPC Directive 2008/1/EC, the SEA Directive 2001/42/EC, the 2003/35/CE Directive providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment, Regulation 1376/2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies etc.

These three elements are described and summarised by UNECE as follows (UNECE, 2012b):

1. Access to environmental information

The public is entitled to have access, upon request, to environmental information held by public authorities in a timely manner. Public authorities must actively collect and disseminate certain types of environmental information to the public.

2. Public participation in decision-making in environmental matters

Parties must provide for early and effective public participation, when all options are still open, on decisions to permit certain types of activities and during the preparation of plans, programmes and policies relating to the environment. Parties must also promote effective public participation during the preparation of executive regulations and other generally applicable legally binding rules.

3. Access to justice in environmental matters

The public is entitled to have access to judicial or administrative review procedures to challenge:

- A refusal or an inadequate response to a request for environmental information
- The legality of a decision to permit a specific activity
- Acts or omissions by private persons or public authorities that contravene national environmental law

Review procedures must provide adequate and effective remedies, and be fair, equitable, timely and not prohibitively expensive.

Although the EIA Directive has already been modified to be in line with the Aarhus Convention, a number of provisions are still not in accordance with the Convention as described further below. Such a situation should not be maintained in the long term, as it may have legal and practical consequences. As part of the EU legal framework, the Convention - an international treaty - is on the top of the hierarchy of norms and has primacy over EU secondary legislation, which includes all directives. Therefore, a judicial review of the legality of the EIA Directive on the basis of its lack of conformity with the Aarhus Convention cannot be excluded. In theory this could lead to the annulment of certain provisions. In this regard the ECJ plays an important role in the interpretation of the EIA provisions in order to ensure their conformity with the Convention in questionable circumstances. Such a situation may also have consequences at the Member States' level. Due to the transposition of non-compliant provisions of the EIA Directive, Member States increase their risk of legislating provisions that do not conform to the Convention. This could subject them to a review by the Aarhus Compliance Committee that was established in 2002.[63] It is unique in the environmental area. Both individuals and NGOs have the right to submit complaints about a State's compliance with the Convention. Complaints can be lodged without proving a specific interest or affect by the decision procedure. A

[63] Article 15 of the Aarhus Convention foresees the establishment of the Compliance Committee.

number of these decisions have been published to facilitate and guide the implementation of the Convention by its Parties (Andrusevych, 2008).

5.1.2 Inconsistencies between the provisions of the EIA Directive and the Aarhus Convention

Delnoy (2010) has presented a comprehensive analysis of the level of harmonisation between the EIA Directive and the Aarhus Convention, identifying certain areas where the Directive is not fully in accordance with the Convention. Some of these shortcomings are presented below according to the three pillars of the Convention.

Access to information:

Access to information is not only a matter of right; it also set out to ensure that information related to the environment is available to the public in order to enhance policy efficiency. Facilitated access to information leads to increased public awareness and understanding of the environment, which improves policy monitoring in this area. In addition, it is an essential tool to enable effective public participation and a basis of good governance (International Council on Human Rights Policy, 2008).

The principle of access to information in environmental matters has been mainly transposed in European law through Directive 2003/4/EC on Public Access to environmental information. Some provisions have also been included in other directives relevant to the environment. Articles 6 and 7 of the EIA Directive (in the context of transboundary procedures) as well as Article 10 (covering exceptions) refer to access to information. Article 6(3)c specifically refers to the 2003/4/EC Directive with regard to information that is not expressly required under the EIA Directive, but still relevant to the EIA process.

Exceptions and/or limitations to this right to information are referred to in Article 10 of the EIA Directive in connection to Article 7 i.e. in the context of transboundary procedures where limitations will apply in accordance with the legislation of the concerned States. Other exceptions are provided for commercial and industrial confidentiality, intellectual property and safeguarding public interest. However, these limitations are stated in the general context of the EIA Directive, which applies not

only to the provision of information, but also to other aspects of the EIA procedure. These provisions differ from the Aarhus Convention. Article 4(4) of the Convention provides a list of possible exceptions that only apply to the disclosure of information, not in general terms. References to *inter alia* confidentiality of commercial and industrial information (if protected by law for legitimate economic interest and that does not apply to information on emissions relevant for the protection of the environment), intellectual property rights, international relations, national defence and public security are also incorporated. Nevertheless these possible exceptions are balanced by an additional clause: they should *"be interpreted in a restrictive way, taking into account the public interest served by disclosure and whether the information requested relates to emissions into the environment".* Therefore, the introduction of a general scope of exceptions in the EIA Directive, neither balanced through additional clauses, nor limited to the right to information, raises questions about its compliance with the Aarhus Convention.[64]

Public participation

Public participation in EIA has been subject to a lot of discussions both at the academic and practitioners level. The advantages of public participation in these procedures such as widening the range of solutions and alternatives, preventing costly litigations at a larger stage and ensuring local communities support, are usually recognised and acknowledged Nevertheless, it is interesting to note that project developers do not necessarily favour public participation. It is still perceived as the origin of potential delays in the EIA procedure or the source of other possible problems linked to lack of support by the public directly or indirectly concerned. In reality, most project developers/practitioners are confronted with situations, in which they are uncertain about the ideal measures to implement in order to ensure effective and efficient public participation.[65] While they experiment with various ways to involve public participation, it is likely that they do not have their objectives clearly defined. This aspect is also reflected in the literature (Wood and Hartley, 2005). O'Faircheallaigh (2010) suggests that the wide range of objectives sought through

[64] This restrictive interpretation of the exceptions to access to information has been introduced in the 2003/4/EC Directive under Article 4. The EIA Directive and the Directive on access to information should be harmonised with regard to these exceptions.

[65] This was reflected in various interviews conducted with practitioners from the project development side. Several measures such as large or individual meetings, public consultations and presentations have been implemented and new means are still being introduced in order to facilitate and improve public participation (Dreier, 2012), (Schabhüttl, 2012).

public participation in EIAs makes its effective application difficult.[66] It is necessary to be aware of the purposes of this tool in order to determine its appropriate use.[67] In this context, it is interesting to note the variety of practices established by the EU Member States. Although the EIA Directive requests the provisions to the public (concerned) of *"early and effective opportunities to participate in the environmental decision-making procedures"*, there is no clear interpretation about when and during which phase of the procedure public consultation should take place. This contributes to the establishment of diverse practices. Member States allow public participation during the scoping and/or screening phase, while others refer to the minimum, i.e. when the request for the development consent is submitted (European Commission, 2009a). A definition of early consultation would help to reduce the disparities in this regard.

Interestingly the concept of public participation is neither defined in the Convention nor in the Directive whereas the notions of *"public"* and *"public concerned"* are determined in both texts in a similar way. An interesting definition that aptly reflects the application of this concept in environmental assessments is *"a mechanism by which individuals put forward their opinions/ideas or take actions in relation to plans, projects, activities and situations that affect or will affect them either positively or negatively"* (Steinhauer and the Dutch Centre for public participation, 2012). In general Member States have used the same definitions in their legislation as they are provided in the EIA Directive. However, practices vary in the scope of application of the public concerned, which includes environmental NGOs, since the definition of criteria for their participation is left to the discretion of Member States. This has led to disparities in practice, which may be problematic especially in the context of transboundary EIAs. The participation of NGOs may be different within

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[66] O'Faircheallaigh (2010) provides a classification of ten specific purposes and activities for public participation in EIAs based on three types of relationships between the public and decision making procedures and institutions: (i)"*public input into decisions taken separately from the public";* (ii*) "public involvement in decision making";* and (iii) *"alter distribution of power and structures of decision making".*

[67] The Netherlands example is very interesting in this regard. The recent legislative amendment took into account the evolving practices in the country. From 2010 scoping and public participation and notification of intent in EIAs simplified procedures were not mandatory any more. This obligation was maintained for full-fledged procedures, but the way it should take place was not specified any more. The Dutch Centre for Public Participation issued principles and recommendations for a 'new-style' public participation, which provides flexibility to adapt to the different situations and the objectives pursued, in accordance with the leading principle *"A simple participation process if possible, and an extensive participation process if needed*" (Steinhauer and the Dutch Centre for Public Participation, 2012).

the same EIA transboundary procedure, depending on the national legislations in place (COWI, 2009a).

Although the definitions of "*public"* and "*public concerned*" are the same in the EIA Directive and the Convention, the participation of these categories differs in the stages of the procedure. The EIA Directive limits the reaction to the project through comments and opinions from the *"public concerned"* (Article 6(4) of the EIA Directive), whereas the Aarhus Convention opens this possibility to the *"public"* (Article 6(7) of the Convention). This aspect of the EIA Directive does not conform to the Aaarhus Convention and should be amended accordingly (Delnoy, 2010). With regard to other procedural aspects, the Convention requires that the *"public concerned"* be informed *"in an adequate, timely and effective manner"* (Article 6(2) of the Convention). This requirement does not appear in the Directive, which simply requires that *"the Public shall be informed"* (Article 6(2) of the EIA Directive). The lack of this additional requirement has been criticised by the Compliance Committee,[68] which has indicated that while this feature may not be a lack of compliance with the Aarhus Convention, it may *"adversely affect the implementation of Article 6 of the Convention"* (Aarhus Compliance Committee, 2008). A modification of the EIA Directive to remedy to this situation would be appropriate.

With regard to timeframes, these texts do not provide details, merely referring to "*reasonable timeframes*" to provide information to the public and enable its effective participation. Timeframes are subject to very diverse applications by Member States, for which the majority of Member States have established specific guidelines. They vary from 14 days to 60 days for the consultation phase with 30 days being the most common (COWI, 2009a). These divergences may be an issue especially in the context of transboundary procedures. In addition, timeframes are criticised as being too short to allow the public to verify the information and send relevant comments on the proposed project. Solutions such as the introduction of timeframes proportional to the size of the projects (Justice and Environment, 2010)

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[68] The Committee expressed concerns about the *"lack of express wording requiring the public to be informed in an ‚adequate, timely and effective manner' in the provisions regarding public participation in the EIA and IPPC Directives"* (Aarhus Compliance Committee, 2008)

or minimum timeframes (European Commission, 2009a) have been proposed in this regard.

Access to Justice

The provisions on access to justice have been incorporated under Article 10a of the EIA Directive (Article 11 of the codified version) through its amendment in 2003. At the same time another Directive on Access to justice in environmental matters had been proposed. However, this Directive has never been accepted by the Member States despite several attempts to introduce it. Obviously, a consensus regarding direct intervention of the Union in the procedural law of the Member States is a difficult step to reach, especially considering the diversity among the State's systems (Clément, 2012). Provisions pertaining to access to justice were also transposed in the Regulation EC 1367/2006 on the application of the provisions of the Aarhus Convention to Community Institutions and Bodies. In this context, it is should be noted that the EU has made a declaration to the ratification of the Convention, expressly stating that Members States are responsible for the obligations deriving from Article 9(3) of the Convention as they relate to administrative and judicial procedures to challenge acts and omissions by private persons and public authorities.

The EIA Directive is not fully compliant with the Convention regarding certain aspects. For example, the Convention does not specify at which stage of the procedure access to justice should be granted. While the Convention only specifies that the procedures shall provide "*adequate and effective remedies*", the Directive requires Member States to determine at which stages of the procedure decisions, acts or omissions should be challenged. This could be understood as a possibility offered to Member States to reduce the scope of access to justice only to final decisions. In this sense, such a provision would not be in compliance with the Convention (Delnoy, 2010). However, one should be cautious in this regard as this is a matter of interpretation. The recent infringement procedure that was launched against Austria in early 2012 shows that the European Commission applies the larger meaning of the Convention to the Directive. As mentioned in Section 2.3 the procedure was started against Austria for inadequate transposition of Article 10a (Article 11 of the codified EIA Directive) in national legislation. In particular, this referred to the lack of legal remedies for the public against a negative screening decision (no EIA required) from the competent authority. Interestingly, this

procedure seems to have been motivated by an Aarhus Compliance Committee decision, which established that several aspects of the Austrian legislation were not in compliance with some provisions of the Convention. This included Article 9(3) and criteria for NGO standing to challenge acts or omissions by private persons or public authorities (Alge, 2012b). The ECJ also has an important role to play in this context to ensure proper implementation of the Convention by clarifying the interpretation of the relevant norms, including the EIA Directive.[69]

Due to different judicial review systems and EIA procedures, practices on access to justice are very diverse among Member States (COWI, 2009a)[70]. Therefore, for the purpose of clarity and to ensure more harmonised practice in the Member States, some amendments would be relevant in this area. To avoid misinterpretation of the Directive with regard to access to justice, amendments to the Directive should be made to clearly indicate that screening and scoping decisions are opened to legal challenges by the public (Justice and Environment, 2010). The Directive should explicitly include a reference to *"adequate and effective"* remedies as specified in Article 9(4) of the Convention as well as injunctive relief. This latter aspect was also recognised by the Aarhus Committee as: *"Lack of clear obligation to provide the public concerned with effective remedies, including injunctive relief, in the provisions relating to access to justice in the EIA and IPPC Directives"*, which may adversely affect public participation (Aarhus Compliance Committee, 2008). The issue of high proceedings costs has also been raised as a deterrent to access to justice. In about half of the EU Member States, the cost of procedures was recognised as being an obstacle to access to justice (Milieu, 2007). This is partly explained by the lack of appropriate legal aid schemes, from which individuals could not benefit due to stringent criteria or that are not available for NGOs or associations. This situation

[69] A recent and awaited decision of the ECJ (Case C-240/09 Lesoochranárske) was brought in this respect clarifying that the provisions of Article 9(3) of the Convention had no direct effect in the Union Law. However, it is the obligation of the national Court to ensure that this Article is properly implemented, in order to enable environmental protection organisation(s) to challenge before a court a decision that was taken, following administrative proceedings liable to be contrary to European Union environmental law. Legal standing to appeal against decisions concerning environmental law is therefore recognised for environmental NGOs. In other words a form of "*moderate direct effect*" of these provisions of the Convention is actually recognised (Clément, 2012).

[70] Especially the standing of NGOs in the proceedings varies a lot in the Member States legislations. The evidence of an impairment of a right and/or a sufficient interest is often required, whereas the interpretation of this latter criterion is not the same in the Member States. In some States, environmental NGOs and associations are not required to fulfill these criteria for standing (COWI, 2009a).

also reflects an inappropriate translation of Article 9(5) of the Aarhus Convention according to which the establishment of appropriate assistance mechanisms should be considered to remove or reduce financial and other barriers to access to justice. It also creates de facto a form of discrimination with regard to access to justice and an imbalanced EIA procedure as the public and/or concerned public will possibly not be in the position to legally challenge a decision that may be favourable to the Project Developer. The European Commission has already intervened in this regard by recently taking to the ECJ the UK over excessive costs of challenges of decisions on environment. This action followed a number of warnings during the previous years, which had not resulted in any changes in the situation (Europa, 2011). De facto, NGOs and/or associations try to look for funding when confronted with this situation,[71] but this remains a difficult issue to tackle especially considering the high costs of (counter) expertise and reports that may be necessary in the particular context of EIAs. A suggestion was the creation of a public fond to support NGOs and association in their legal actions and participation in EIA process (Wurm, 2012). This would be a way of improving the balance between the parties in EIA proceedings. However, envisaging additional state funding in times when saving and cost reduction in public money are widespread appears rather challenging.

One should bear in mind that the issues related to the implementation of the Aarhus Convention also have effects on transboundary EIAs and on the implementation of the Espoo Convention. Both instruments are closely related and complementary.

5.2 The Convention on Environmental Impact Assessment in a Transboundary Context

5.2.1 The Espoo Convention and its transposition into European law

The Convention on Environmental Impact Assessment in a Transboundary Context, also referred to as the Espoo Convention, was adopted in 1991 by UNECE. It was inspired by the UNEP EIA guidelines and international environmental law principles. Although EIAs are included in several multilateral agreements,[72]this Convention is seen as the most comprehensive international agreement on EIA (UNEP, 2008).

[71] For example in Austria, some financial support is provided by a private association named BIV that is funded by donations of green MPs. It enables NGOs and private groups and persons to get parts of costs for lawyers and technical expertise recovered (Alge, 2012a).
[72] Examples can be found under Section 2.1.

The Convention has 45 parties,[73] including the European Union, and entered into force in 1997. A first amendment to the Convention was adopted in 2001 to open accession to Member States of the UN not part of UNECE (upon approval of the Parties). A second amendment was adopted in 2004 to *inter alia* revise the list of activities contained in Appendix I, allow participation of affected parties to participate in scoping as appropriate and establish a compliance review mechanism (Bonvoisin, 2010). Both amendments have not yet entered into force, as they have not reached the required number of ratifications. The Protocol on Strategic Environmental Assessment to the Convention (SEA Protocol) was adopted in 2003 and entered into force in 2010. An Implementation Committee was established by the Meeting of the Parties (MOP) in 2001. The Committee is responsible for reviewing party compliance with the obligations outlined by the Convention. It also provides opinions on the compliance, understood as *"both the legal implementation and the practical application"* of the Convention, to assist parties in meeting their commitments (UNECE, 2011).

The Convention requires the parties to assess, at an early stage of planning, the environmental impact of activities listed in Appendix I. Should an unlisted project have the potential to make a significant transboundary impact, the affected parties would also have the possibility to request an EIA. Should there be a disagreement on this matter, an Inquiry Commission may be established to provide (non-mandatory) advice to the affected Parties (Article 2 of the Convention). The Convention also regulates the parties' obligations regarding notification and consultation about projects likely to have significant transboundary impact(s) (Articles 3 and 5 of the Convention). The procedure foresees the preparation of an EIA (Article 4 of the Convention) and public participation (Articles 2 and 3 of the Convention). This includes participation from the affected party and its citizens in the EIA process. Interestingly, Article 8 of the Convention offers the contracting parties the possibility to conclude additional agreements on transfrontier cooperation. These new bilateral or multilateral agreements aim to facilitate the implementation of the obligations set by the Convention and may be based on elements proposed in Appendix VI of the Convention.

[73] Status of ratification provided as of 17 September 2012. It should be noticed that Iceland, the United States and the Russian Federation are only signatories and have not ratified the Convention (UNECE, 2012c).

The Convention was transposed into EU law through the modification of the EIA Directive in 1997. Article 7 of the Directive refers to EIA transboundary procedures and the obligations laid down by the Convention. It should be noted that the European Community has added two declarations when becoming party to the Convention. One refers to the interpretation of the information provided to the public and the other to the responsibility of its Member States to apply the obligations of the Convention, when not included in EU law or in the EIA Directive.[74]

5.2.2 Inconsistencies between the provisions of the EIA Directive and the Espoo Convention

Although the Convention is generally deemed adequately transposed through the EIA Directive, a number of disparities have been identified with regard to some provisions (Bonvoisin, 2010). Article 1 of the Convention defines the notion of *"public"* as *"one or more natural or legal persons"* [75], and Article 3(8) specifies that public information and participation procedures apply to the public "in the areas likely to be affected". The EIA Directive refers to the *"public concerned"* in a more restrictive way (as mentioned in Section 5.1.2). This difference may have practical consequences with regard to which public is entitled to participate, especially in the context of transboundary procedures between EU and non EU Member States. Also, the Directive does not provide any distinction with regard to public participation.[76] The Convention provides two types of opportunities for public participation: (i) comments on and objections to the proposed activity (Article 3(8) of the Convention) and (ii) comments on the EIA documentation (Article 4(2) of the Convention). Some clarification should be made either in the Directive or through interpretation of the relevant provision stating that it encompasses the opportunities provided in the Convention. Article 5(a) of the Convention provides for consultations *"on the possible alternatives to the proposed activity, including the no-action*

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[74] In addition, it is stated that the EIA Directive does not cover the application of the Espoo Convention between the Community and non EU Member States Party to the Espoo Convention. Therefore, the Community is competent *"to enter into binding commitments on its own behalf with non-members countries which are Contracting Parties to the Espoo Convention"* (UNECE, 2012c).

[75] With the first Amendment the definition will be modified to *"one or more natural or legal persons* and, *in accordance with national legislation or practice, their associations, organizations or* groups". This modification actually very much reflects the related provision in the EIA Directive.

[76] Article 7(3)b of the EIA Directive states that Member States concerned shall *"ensure that the authorities referred to in Article 6(1) and the public concerned are given an opportunity, before development consent for the project is granted, to forward their opinion within a reasonable time on the information supplied to the competent authority in the Member State in whose territory the project is intended to be carried out."* No distinction is made with regard to opportunities as in the Convention.

alternative", while Article 7(4) of the Directive does not refer to alternatives. Instead a general formulation *"inter alia"* is used for the matters subject to consultations. This omission can be understandable considering the issues of alternatives within the Directive itself (see Section 3.3), which does not refer to the zero or no-action alternative option. Should the requirement of alternatives be modified, a proper harmonisation of this provision with the Convention should also be operated. Furthermore, Article 7 of the Convention on post-project analysis is not translated into the Directive. This omission is certainly to be explained by the fact that the Directive does not contain any provisions on monitoring the effects of the implementation of project. This aspect has been recognised as affecting the overall quality of the EIA process and as a gap that should be addressed in the context of the Directive revision (European Commission, 2009a). Interestingly the Commission had already acknowledged this omission in the first review of the EIA Directive, but Member States did not agree on an amendment of the Directive on this matter (Glasson et al., 2012). The practice developed by some Member States such as the Netherlands could be used as an example in this area. Monitoring by the competent authority concerned is required during the implementation phase of the project. If negative impacts that were not initially anticipated are determined, appropriate measures have to be undertaken (Holder, 2012b). Monitoring is an important and integral part of the complete EIA process. It should be introduced in the EIA Directive as a mandatory step of the procedure in accordance with the Espoo Convention.

Marsden (2011) describes another gap in the transposition of the Convention in EU law. The recourse to the Inquiry Commission as foreseen under Article 2 of the Convention is not foreseen under the Directive. This may be understandable such as in a situation involving disputes between EU Member States where the determination of disputes should not take place outside EU law.[77] However, this omission prevents EU Member States from resorting to a mechanism that has proven to be an *"effective means of deciding these matters in an independent scientific way"* (Marsden, 2011).[78] The Commission and/or the ECJ, the institutions

[77] Article 344 of the Treaty on the Functioning of the European Union (former Article 292 TEC) states that *"Member States undertake not to submit a dispute concerning the interpretation or application of the Treaties to any method of settlement other than those provided for therein".*

[78] This mechanism has been invoked only once in 2004 by Romania, regarding the Danube-Black Sea Deep Water Navigation Canal in the Ukrainian Sector of the Danube Delta. The dispute involved

responsible for such disputes, are not in the position to provide decisions of this nature. Thus this situation is questionable with regard to the best results for the environment. Should the Member States not be encouraged by the Commission to resort to this mechanism when applicable, a review of the EU judicial mechanisms should be considered to introduce an appropriate alternative.

This issue regarding disputes between EU Member States and the recourse to an international instance outside of the EU was subject to a famous ruling from the ECJ. In 2006, the ECJ affirmed its competence (against arbitral tribunals) over a dispute of two Member States in the context of mixed international agreements, i.e. to which both the EU and Member States were party. Although the Espoo convention was not the Convention directly applied in this case, this ruling has consequences for its application too. As mentioned above, should disputes between EU Member States occur in this context they would have to refer to the European Commission and the ECJ. The latter should decide on its competency in the framework of this mixed agreement (it is expected that such disputes would be recognised to fall under its jurisdiction).

This ruling also impacts on the application of Article 8 of the Convention, which provides the possibility for Member States to conclude bilateral or multilateral treaties in order to ensure proper implementation of the Convention. This provision is transposed in more general terms in the EIA Directive as Article 7(5) foresees that *"the detailed arrangements for implementing this Article may be determined by the Member States […]"*. Member States have concluded a number of agreements in the context of transboundary EIAs between themselves and/or with non-EU Member States.[79] On the one hand these agreements are a useful tool that is necessary in certain circumstances to ensure that coordinated or joint procedures address issues such as timeframes, information sharing and communication, and differences in the respective proceedings.[80] On the other hand they may also render situations more

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Romania and Ukraine about the impacts that could be generated through a Canal project in the Danube Delta.

[79] The use of formal bilateral agreements or treaties appears quite limited, but less formal agreements are more widespread (European Commission, 2003). However, (new) Member States have reported a larger number of these agreements in a more recent study (COWI, 2009a). Examples of countries that have ratified bilateral or multilateral agreements are: Austria, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Slovakia.

[80] Such agreements are a way to guarantee that the countries' statutory requirements are complied with. Several advantages and positive experiences have been reported in the Netherlands with agreements concluded between Germany and regions of Belgium (Hoevenaars, 2012).

complex as they create an additional layer in the EIA legal proceedings.[81] Also, they do not always provide appropriate support for a number of practical issues such as the use of different practices in measuring impacts.[82] Such issues would often be better tackled through appropriate communication and coordination that could be subject to an agreement. Bilateral or multilateral agreements usually foresee the means or recourses in case of disputes. By legal tradition and in accordance to international law, very often reference is made to arbitral tribunals. For example, a bilateral agreement between Poland and Germany with more detailed regulations on the procedural aspects of transboundary EIAs, the so-called Neuhardenberg agreement, was signed in April 2006 (Albrecht, 2006). In case of disputes, this agreement refers to three gradual steps: a working group, a commission and in the last resort the application of Article 15 of the Espoo Convention. This Article foresees a solution by negotiation or other methods of dispute settlement as well as the possibility to submit the case to an arbitration procedure or the International Court of Justice (ICJ) provided parties have made a declaration on this matter.[83] Whereas the recourse to the Commission and/or the ECJ in case of disputes between EU Member States could be partially covered under Article 15, resorting to the ICJ or arbitral tribunal may be problematic with regard to the 2006 ECJ ruling. A number of these multilateral or bilateral agreements may actually not be in compliance with this ruling and should be reviewed. Appropriate guidance should be provided to clarify this situation (Marsden, 2011).

5.2.3 Additional issues

In the context of transfrontier EIA procedures, translation is also considered as an issue that should be cautiously considered. A lack of access to documents in a language that can be understood could easily affect the right to access to

[81] For example in the case of the preparation of an EIA for a project with effects on the Austrian and German territories, a bilateral agreement was concluded between both countries. Therefore an additional legal reference is being created in addition to the existing ones at various levels: municipal, regional (*Land*), national, EU and international (Schabhüttl, 2012). In theory, all instruments at various levels should be coherent and harmonised with each other.

[82] In the case of an EIA conducted for a project with effects on the same river, but on the Austrian and German territories, the use of a specific technique to evaluate the number of a certain fish type was problematic. This technique was forbidden in one country because of its possible harm on the fishes, whereas it was recognized as useful and reliable in the other. In particular, the impacts on this same fish category in the same river would vary from one side to the other side of the border, because the technique to measure the impacts differs in both countries (Dreier, 2012).

[83] According to the latest status of ratification, only four countries have made a declaration concerning this provision in Article 15(2): Austria, Bulgaria, Lichtenstein and the Netherlands.

information and participation of the public. Considering the amount of documents that EIAs usually produce, the question of the cost of translation is also raised. This issue is not regulated either by the Convention or the EIA Directive, but is rather left to bilateral/multilateral agreements. Nevertheless, the Espoo Convention Interpretation Committee has indicated that, unless otherwise foreseen in a bilateral or multilateral agreement, the party of origin should bear translation costs in accordance with 'the polluter pays principle' (UNECE, 2011). The view that burden of costs should be carried by the project developer is also shared by NGOs (Justice and Environment, 2010). On the other hand, it remains problematic that the party of origin also supports the costs for the translation of the objections of the affected party (Albrecht, 2008). To ensure objectivity and quality of these documents, translation by the affected party should be considered. In addition, considering the amount of documents, priority should be given to the relevant and important ones. The Espoo Convention Interpretation Committee indicated that *"The documentation to be translated should, as a minimum, include the non-technical summary and those parts of the environmental impact assessment documentation that were necessary to provide an opportunity to the public of the affected Party to participate that was equivalent to that provided to the public of the Party of origin."* The scope of the documentation to be translated should be agreed upon at the start of the procedure (UNECE, 2011).

The problems of translation and the differences in EIA national procedures and timeframes have also been reported by Member States as difficulties within the context of transboundary procedures (COWI, 2009a). To address these issues the European Commission suggested that additional guidance be issued or the Directive provisions be enhanced through the introduction of additional definitions or joint EIA procedures (European Commission, 2009a). Interestingly, the latter proposal seems to have been realised in a certain form through the draft Regulation on guidelines for trans-European energy infrastructure detailed under Section 4.4. The draft Regulation foresees specific timeframes and joint procedures for transboundary EIAs. It would be interesting to see whether these suggestions will serve as a basis for the amendment of the EIA Directive or will remain part of a separate regime, in which case the complexity of transboundary EIA procedures may be further increased through the coexistence of various regimes.

With regard to the conduct of EIA procedures in the context of the EU or UNECE, one should also bear in mind that another instance may be used when certain rights

are at stake. As most of the UNECE countries and all EU Member States are members of the Council of Europe and have ratified the European Convention on Human Rights (ECHR), access to the European Court of Human Rights (ECtHR) by individuals on the basis of environmental matters that may violate human rights is also granted. This possibility may be enhanced for EU citizens with regard to acts issued by EU institutions, as the EU ratification of the Convention is under process.

5.3 The European Convention on Human Rights and Fundamental Freedoms (ECHR)

On the contrary to the two Conventions discussed previously, this Convention has not been yet ratified by the European Union. The framework is also different: this is a treaty open for signature only to Member States of the Council of Europe and to the European Union since 2010. All EU Member States that are also part of the Council of Europe have ratified the Convention and most of the UNECE countries are also members of the Council of Europe. In addition, this is not an environmental treaty because it focuses on the protection and guarantee of human rights. However, considering the intrinsic link between environment and human rights, it is also of relevance for certain aspects of the EIA procedure.

5.3.1 The ECHR and the accession thereto by the European Union

The ECHR was adopted in 1950 and entered into force in 1953. The original text of the Convention has been amended by various Protocols to the Convention. The Convention enshrines a number of fundamental rights and freedoms,[84] whereas further rights are granted by additional Protocols. Parties undertake to enshrine undertake the task of preserving these rights and freedoms for everyone within their jurisdiction. To ensure the respect of the engagements taken by the parties, the European Court of Human Rights (ECtHR) has been established. The Court is directly accessible to individual applicants and its jurisdiction is compulsory to all Parties. It delivers binding judgements on alleged violations of the Convention, which must be executed by all necessary measures (legislative amendments or specific measures for certain individual cases). The execution of the judgments is supervised by the Committee of Ministers of the Council of Europe (Council of

[84] Such as the right to life, prohibition of torture, prohibition of slavery and forced labor, right to liberty and security, right to a fair trial, prohibition of discrimination etc.

Europe, 2012). Through the system that was established and the case-law developed by the ECtHR and the national Courts, the Convention and its Protocols have become *"the most important European human rights protection standards"* (Council of Europe, 2011).

Currently, the European Union and its Institutions are neither directly bound by the Convention, nor by the case-law developed by the ECtHR. However, the Convention is recognised as part of the general principles of European law through Article 6 of the Treaty of the European Union and the case-law of the ECJ. Consequently a certain imbalance and uncertainty about the origin of the breaches of the Convention remains as EU Members States, where EU law applies, are bound by the ECHR but not the EU nor its Institutions (Council of Europe, 2011). After decades of discussions and legal opinions, the Lisbon Treaty (2009) enabled and committed the Union to become party to the ECHR. Parallel Protocol 14 to the ECHR, which was entered into force in 2010, provided a legal basis for the EU accession. A draft Agreement on the Accession of the EU to the ECHR as well as other related instruments were prepared and opened for negotiations in fall of 2011. This is a slow and ongoing process, as this accession requires the agreement of all 47 Parties to the Convention and the consideration of complex substantive and procedural aspects.[85] Furthermore, negotiations have appeared to be on hold for some time as the process necessitates a common position of the European Union, i.e. from its Member States. This procedure requiring additional negotiations within the EU has continued over the last few months. The Council announced in spring 2012 that the negotiations on the draft agreement should resume immediately, while the discussion on internal procedures regulating the accession would continue to take place (Johansen, 2012).

This most awaited step is important for various reasons. It will further enhance the protection of human rights by allowing an independent external form of control over the European Union's legal system. Natural and legal persons in the EU will be in the position to lodge a complaint before the ECtHR when they consider that their

[85] These aspects are not discussed here, as they are not the main focus of this Paper. They include for example the possibility for the ECtHR to review EU primary law (treaties) with regard to its compatibility with the ECHR or the exclusive jurisdiction of the ECJ in case of disputes between Member States as stated in Article 344 of the TFEU previously mentioned. While some issues have been partially solved through the draft instruments for accession, negotiations will continue until a suitable agreement is achieved (Groussot et al., 2011)

human rights have been violated by acts from the EU institutions, also referred to as EU secondary law. This accession should also enable the ECtHR to examine the compatibility of EU primary law provisions with those of the ECHR. Thus, the unbalanced situation between EU Member States and the EU would be adjusted. In addition, the accession is expected to reassure EU citizens in the sense that the EU is not 'above the law' with regard to human rights and to reinforce the EU credibility.[86] Furthermore, it is an essential means towards guaranteeing a coherent and harmonious development of the human rights related case-law from both the ECtHR and the ECJ (Council of Europe, 2011).

5.3.2 Human rights and the environment

As the ECtHR is not bound by its previous decisions, it has been able to adopt an evolutive approach to adapt to the developments and changes of the society. Although the right to a sound environment is neither expressly included in the Convention nor in its Protocols, the case-law developed by the ECtHR clearly reflects the link between the protection of human rights and the environment (Council of Europe, 2006). The human rights area remains fundamental for environmental protection and sustainable development. Both substantive and procedural human rights are relevant in the environmental field. Substantive rights such as the right to life, the right to property or the right to respect for private and family life and home may be affected by impacts on the environment and/or environmental degradation. Procedural rights are an essential complement as they enable people to actively contribute to protecting the environment (UNEP, 2008). They include the right to information, the right to participation, the right to equal protection and to be free from discrimination as well as the right to judicial remedy or access to justice. Whereas some substantive rights may indirectly be affected through an EIA procedure, most relevant in the EIA context are procedural rights. As detailed in the previous sections, the right to information and the right to participation and to judicial remedy are enshrined in both the Aarhus and the Espoo Conventions but also form part of the EIA procedure.

Over the last two decades, the ECtHR has developed considerable case-law in those areas. Although this case-law will not be detailed in the framework of this

[86] This is also important bearing in mind that part of the criteria required for EU Membership is the ratification of the ECHR.

Paper, some remarks should be made. The right to receive and impart information and ideas on environmental matters is contained in the freedom of expression.[87] This right may be subject to restrictions, provided that they are prescribed by law and pursue a legitimate aim. The ECtHR made it clear that restrictive measures *"must be proportionate to the legitimate aim pursued and a fair balance must therefore be struck between the interest of the individual and the interest of the community as a whole"*. The case-law developed by the ECtHR also very much reflect the concept of public participation as foreseen in the EIA Directive as it recognised the importance of public participation in the decision-making process in the environment and where human rights are at stake. In addition, the public/individual representations should be duly taken into account in this procedure, which also should be subject to procedural safeguards. Access to justice and other remedies in environmental matters is recognised as a component of the right to a fair trial (Council of Europe, 2006).[88]However, a claim based on the alleged violation of this right must fulfil certain criteria, which renders its application difficult. Under the ECHR's meaning, there must be a *"dispute"*, genuine or serious, over *"civil rights and obligations"*[89] or criminal charges (Justice and Environment, 2011). In addition, a sufficiently direct link between the environmental issue and the civil right at stake must exist. For example, environmental associations will not automatically enjoy a right to access to a court when only defending a broad public interest (Council of Europe, 2006). To invoke this right, they would have to pursue the defence of the economic interests of their members, which is often quite different from the goals usually sought by environmental NGOs/associations. Although not directly mentioned the legal aid issue as a means to enable access to justice, is also covered by the right to a fair trial.

Fulfilling the requested conditions to lodge a complaint to the ECtHR and meeting the relevant criteria is certainly, in some cases, a burdensome and long procedure Nevertheless, the role being played by human rights instruments and more specifically the ECHR in the environmental area should not be underestimated. They complement and guarantee the proper application of rights, which form part of the entire EIA process, and contribute to their further development. Thus, the EU

[87] Article 10 of the ECHR.
[88] Article 6 of the ECHR.
[89] This must be a right or an obligation recognized in the national legal system, whereas the domestic classification as public or private law is not decisive in this regard. In the environmental context, rights such as physical integrity or enjoyment of property could be invoked (Council of Europe, 2006).

accession to the ECHR may offer interesting possibilities with regard to the compatibility of EU legislation with human rights standards, especially in the field of environment.

6 Future developments and expectations

The EIA Directive already encompasses, at various degrees, most of the aspects and issues relevant to the EIA process. Therefore, the efforts required to achieve more effectiveness and better harmonisation in its application by Member States will vary from the adjustment of recurrent issues to larger modifications of more problematic areas. One should bear in mind that the scale of the changes that may be operated not only depends on the goals pursued, but also very much on the political support and influence they may benefit from.

With regard to screening, which is one of the most problematic procedural aspects, Pinho et al. (2010) have suggested interesting scenarios for the amendments to the Directive. The five suggested options, which vary from the status quo to more radical changes of the current system, present all advantages and disadvantages. Considering the time that was required to reach a satisfactory level of implementation of the Directive by Member States and for practitioners to get familiar with the current system, radical changes would not be advisable. More moderate changes in these procedural aspects should be sufficient to address the screening issue in an appropriate and efficient way. Furthermore, this would also allow addressing over issues such as potential overlap with other related Directives (SEA, Habitats). For example, the introduction of better definitions of terminology would enhance harmonisation with the other Directives.

Other procedural aspects, which include inter alia: scoping, Environmental Impact Statement (EIS) and expertise, delays in procedure and monitoring measures, affect the overall quality of the EIA procedure. While some of these aspects mainly require some fine-tuning (scoping and delays), new measures should be taken to ensure the quality of the expertise and a new monitoring mechanism will have to be introduced. The issues of climate change and alternatives should also be addressed in a stronger manner. Both clearly appear as shortcomings in the Directive, whereas a few Member States have proven to have well-advanced and developed practices in this area. These examples should inspire the review process to reach better

standards and less diverging practices among Member States. Expectations are high in these areas, especially considering the interests at stake. Alternatives should play an essential role in EIAs and facilitate public participation; they should not simply present an additional administrative requirement. The EU plays an important role in international climate change policy. This policy should be translated into measures and practices in all possible ways and in particular at the EIA level. The potential of the EIA in this area should not remain unexploited.

Addressing the Directive's procedural issues should also facilitate the correction of its remaining inconsistencies of the Directive with the Aarhus and Espoo Conventions, especially with regard the alternatives and monitoring measures issues. Improving its compliance would directly lead to better implementation of the two most relevant regional Conventions into EU law as well as indirectly into national law by the Member States. The application of these two instruments that guide EIA procedures should not be underestimated, especially when it is scrutinised by treaty bodies or compliance committees. Combined with complementary human rights instruments, these Conventions provide a solid international and regional legal framework for the proper implementation of environmental good governance. One can expect that this framework will be strengthened in the future and that the principles it guarantees - access to information, public participation and access to justice – will also be further developed in practice. They belong to what has been called the third generation of human rights, for which protection and guarantee are still being consolidated.

The particular issue of energy infrastructure projects foreseen under the draft Regulation of the European Parliament and of the Council on guidelines for trans-European energy infrastructure should also be considered under the light of this wider legal framework. On the one hand the suggested establishment of a separate EIA regime for large and complex infrastructure and energy projects may lead to more complexity and confusion in EIA procedures, especially at the national level. Opening the door to too many exceptions may affect the general procedure. On the other hand the specific timeframes and streamlined procedures it foresees could serve as pilot measures and lessons learnt to support the amendment of the EIA Directive. This would require close coordination and consultation at the EU institutions level but also with the Member States. In any situation, strict monitoring should be applied and procedural safeguards guaranteed. The public and especially the environmental NGOs should play their role of watchdog to ensure environmental

protection and respect of the rights and procedure, but they should also be involved in order to actively and adequately contribute to this delicate decision-making process.

The review of the EIA Directive, along with other specific areas it covers such as climate change and transboundary procedures will require more specialised and updated guidance. This guidance, which has been announced at various occasions by the European Commission is now very much expected and needed. The amendment of the Directive is a very good occasion to coordinate new guidance and make adaptations to the existing one.

7 Conclusion

The overall benefits of the EIA Directive have been undoubtedly recognised. It is a means to guarantee that environmental aspects are considered (when possible) at an early stage of the decision-making process. It is also a process, which not only reflects the principles of environmental good governance - access to information, public participation and access to justice – but also requires their due application.

The implementation of this satisfactorily deemed Directive has led to the establishment of EIA regimes in all Member States, an obvious achievement. Furthermore, this comprehensive tool is recognised among the most elaborated and sophisticated devices in this area. Conversely, it has become very complex, and partly due to its legal nature, has lead to the development of diverse practices in Member States. These aspects have affected its effectiveness. Therefore, changes and efforts to ensure a better and smoother application as well as a more harmonised implementation by Member States are required.

The weaknesses presented in this Paper have been classified in three main areas: (i) the procedural aspects; (ii) the possible overlaps and/or lack of harmonisation with other EU legislations and policies; and (iii) the implementation of the relevant environmental international Conventions ratified or to be ratified by the EU. In spite of this classification and as highlighted throughout this Paper, all these aspects are actually strongly interrelated. They are all part of the EIA process, which includes obligations and rights as well as options in certain cases. It clearly appears that the EIA Directive already encompasses most of the issues relevant to EIA. Therefore, most of the required changes are more a matter of fine-tuning recurrent issues that

have evolved through practice, technology and changes in society. More important changes are only required for a few problematic areas, which include *inter alia* screening procedure, the alternatives issue and a better incorporation of the climate change aspects in the EIA procedure.

Suggested scenarios for the modification of the EIA Directive, especially with regard to the screening issue, vary from no changes at all to radical changes. A mid-way approach between these two extremes should be favoured. Without resorting to drastic modification such as the merging of two Directives or the creation of a completely new screening system, a moderate approach has the advantage of enabling changes in the most relevant areas and building on the knowledge and practices which are already familiar to Member States and practitioners.

One should also bear in mind that those EIA Directive inconsistencies and weaknesses that may not be immediately tackled through this amendment can also be addressed through other means. The interpretation of its provisions made by the ECJ or the conformity check with regard to EU law, including ratified treaties by the EU, is crucial in this regard. The guardian role played by the Commission concerning the harmonised implementation of the EIA Directive by the Member States is equally important. One should also not underestimate the function of the Aarhus Compliance Committee or the Espoo Implementation Committee. They issue recommendations and opinions on compliance with the Convention regarding both legislation and practices developed by the Parties to the Conventions. Although these recommendations and opinions are legally not equivalent to Court decisions, they very much tend in the direction of case-law. They influence and guide changes in relevant legal provisions at the national and/or EU levels as well as in practice. It is also to be expected that more individuals and/or NGOs will resort to the unique complaint system provided by the Aarhus Compliance Committee to ensure that the pillars of environmental good governance are respected and properly implemented. The ratification of the European Convention on Human Rights by the EU may also lead to further possibilities for EU citizens. The links between human rights and the environment have been long recognised and they continue to be strengthened and extended to other challenging areas of the environment. All of these elements will continue to influence and shape the conduct of EIA procedures, while guaranteeing the principles and rights they include.

Changes to the EIA Directive should also be complemented by further guidance at the EU level and by more frequent exchange of experiences and practices between Member States and practitioners. Guidance is still lacking in certain areas and is necessary to clarify certain points or practical aspects and to ensure more harmonised practice by Member States.

Finally, the EIA Directive should remain a living document. The EIA is a highly complex tool that not only reflects the diverging interests of the parties involved in the procedure, but also the complexity of human intervention on the environment. It has become an important environmental tool in today's society and is used far beyond the European borders. While its core values and principles should be preserved, it should not lose its capacity to adapt to changes in society, technology and the environment.

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