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COMMISSION STAFF WORKING PAPER

IMPACT ASSESSMENT

Accompanying the document

**PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF
THE COUNCIL**

**amending Directive 2011/92/EU on the assessment of the effects of certain public and
private projects on the environment**

**This report commits only the Commission's services involved in its preparation and does
not prejudice the final form of any decision to be taken by the Commission.**

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1. INTRODUCTION

Environmental Impact Assessment (hereafter EIA) is the process of identifying, predicting, evaluating and mitigating the relevant environmental impacts from projects prior to decisions being taken and commitments made¹. This impact assessment report is supporting the legislative proposal on the EIA of public and private projects, which will modify the existing codified Directive 2011/92/EU². An EIA can be undertaken for public or private projects, based on Directive 2011/92/EU (known as ‘Environmental Impact Assessment’ – EIA Directive) or for public plans or programmes, on the basis of Directive 2001/42/EC (known as ‘Strategic Environmental Assessment’ – SEA Directive).

Directive 2011/92/EU contains a legal requirement to carry out an EIA of projects likely to have significant effects on the environment, prior to their authorisation. Its main and explicit purpose is to harmonise the principles of environmental assessment by introducing minimum requirements with regard to the type of projects subject to assessment, the main developer’s obligations, the content of the assessment and the participation of the competent authorities and the public. Hence the Directive should lead to the alignment of national laws and a level playing field. As part of the permitting (development consent) process, the EIA is also a tool to assess the environmental costs and benefits of specific projects with the aim of ensuring their sustainability. The EIA is essentially a process directive, which establishes certain procedures, but, contrary to most environmental legislation, does not lay down any measurable environmental standards. The EIA process is about helping policy makers make well-informed decisions based on objective information and the results of consultation with the public/stakeholders.

The mid-term review of the 6th Environment Action Programme³ and the latest evaluation on the application and effectiveness of the EIA Directive⁴, stressed the need for improving the assessment of environmental impacts at national level, and the Commission announced the review of the EIA Directive.

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

Lead DG: Environment – Agenda planning/WP reference: 2012/ENV/003.

2.1. Organisation and timing

The following Commission services have participated in an inter-service Impact Assessment Steering Group (IASG): SG, LS, AGRI, ECFIN, EMPL, ENTR, MARE, MARKT, REGIO, MOVE, ENER, CLIMA and ECHO. The IASG accompanied all phases of the review process (Annex 2 contains more information).

¹ Definition of the International Organisation for Impact Assessment (IAIA):
http://www.iaia.org/publicdocuments/special-publications/Principles%20of%20IA_web.pdf.

² Directive 2011/92/EU (OJ L 26, 28.1.2012, p.1) codifies Directive 85/337/EEC and its three subsequent amendments (Directives 97/11/EC, 2003/35/EC and 2009/31/EC).

³ COM(2007)225.

⁴ COM(2009)378.

2.2. External expertise

There is considerable experience with the implementation of the EIA Directive, including information from complaints and case-law⁵. As there is no formal reporting mechanism under the Directive, but only a general obligation for exchanging information between the Member States and the Commission. To this end, the Commission has created a Group of EIA/SEA National Experts to provide inter alia support on the transposition and implementation of the two Directives at national level. Such information has been used for the purpose of this exercise. To gather more detailed data (e.g. annual number of EIAs and screenings carried out, at central, regional or local levels; costs and duration of the EIA procedures), external expertise was commissioned. The main sources used are listed in Annex 3.

2.3. Consultation of interested parties

Consultation took place in 2010, in line with the Commission's standards. From June to September 2010, a wide public consultation was launched on the review of the EIA Directive, using a web questionnaire available in all EU official languages. 1.365 replies were received (684 from citizens, 479 from organisations, companies and NGOs, 202 from public authorities and administrations). In addition, the Institute of Environmental Management & Assessment (IEMA)⁶ has sent a contribution (1.815 responses) in the form of a survey incorporating a number of the Commission's questions. The replies and their analysis are available on the web⁷. The consultation phase was concluded with a conference at Leuven (18-19 November 2010), which looked for complementary targeted input from specialised stakeholders and experts. 200 representatives from the EU and international institutions, public authorities (at national, regional and local levels), industry, environmental organisations, and the academic community were present at the conference. Papers and the conclusions of the conference are available on the web⁸.

The analysis of the input received indicates that the large majority of the stakeholders have a positive view of the EIA Directive⁹. Although 56 % of respondents consider that measures should be taken to improve the EIA process, the large majority of them (>60 %) disagrees with radical changes of the scope and structure of the Directive. The following sections of this report describe the different positions expressed and issues identified and explain how this detailed input has been taken into account in the EIA revision process.

2.4. Consultation of the Impact Assessment Board (IAB)

The draft Impact Assessment report has been discussed at the IAB meeting of 14 March 2012. In its opinion of 19 March 2012, the IAB requested a resubmission of the report, with the following recommendations for improvements: (1) to strengthen the problem definition and improve the baseline scenario; (2) to establish and justify a clear intervention logic linking the problems with the objectives and the options; (3) to improve the presentation of the options;

⁵ A collection of the most important rulings of the European Court of Justice on the EIA Directive is available at http://ec.europa.eu/environment/eia/pdf/eia_case_law.pdf.

⁶ The largest professional membership body for the environment with over 15,000 members working across all industrial sectors.

⁷ <http://ec.europa.eu/environment/consultations/eia.htm>

⁸ <http://ec.europa.eu/environment/eia/conference.htm>

⁹ For instance 63 % of the respondents consider that the Directive always/often contributes to an effective protection of the environment and the quality of life and is an efficient instrument to address environmental concerns in the design of projects.

(4) to provide a more substantive and differentiated analysis of impacts and improve the comparison of impacts per option; (5) to clarify the monitoring and evaluation arrangements.

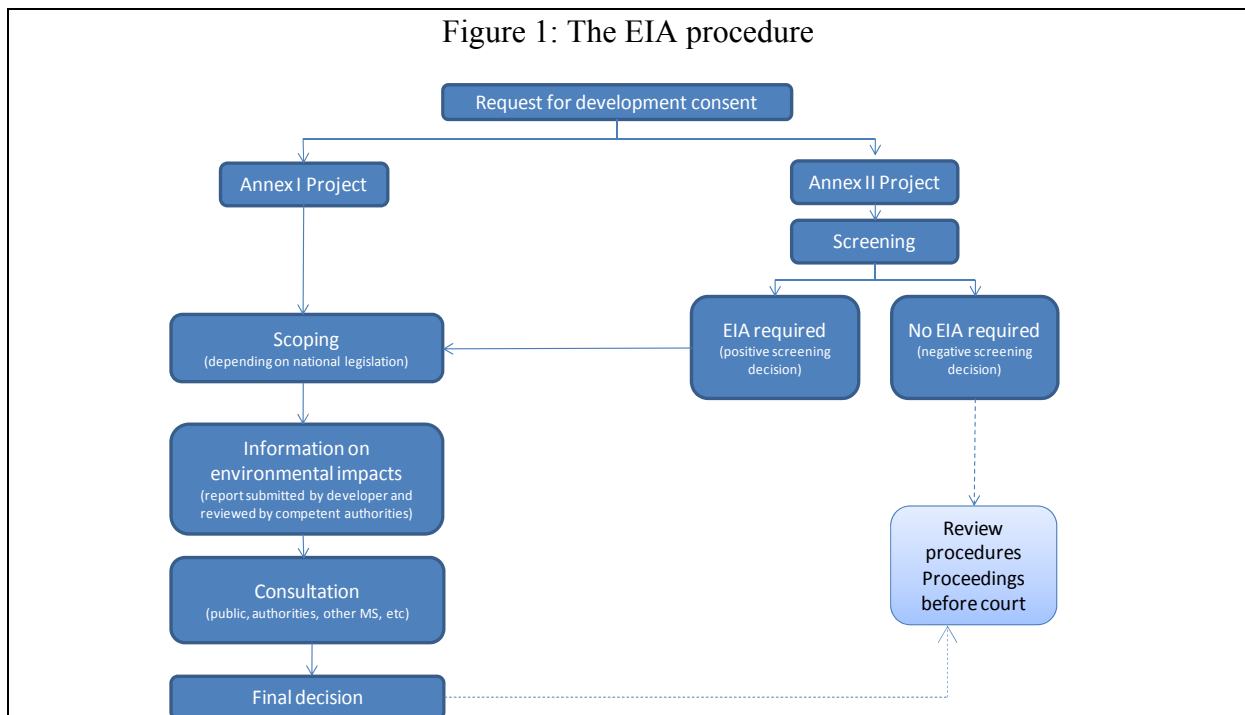
The report was accordingly reorganised and a revised version was submitted on 7 June 2012 (Annex 16 presents how the comments of the IAB have been addressed). In its new opinion of 12 July 2012, the IAB acknowledged that the report had been significantly improved and addressed its comments. The IAB opinion pointed to the need to firstly better present the content of options 1 and 2, including sub-options therein (modifications in sections 5.2.2 and 5.2.3) and secondly to strengthen the assessment of impacts by adding more information on the underlying methodologies and assumptions made and by presenting the impact of options more in detail, in particular the impacts on business, SMEs and competitiveness (changes introduced in chapter 6). In addition, the IAB suggested that the report should better present the reasons behind the evasive behaviour of developers to circumvent an EIA and the limited enforcement by national authorities (changes in sections 3.2.1, 3.2.2 and 3.3.1).

3. POLICY CONTEXT, PROBLEM DEFINITION AND SUBSIDIARITY

3.1. Policy context: overview of the application of the EIA Directive

This section summarises the EIA process and presents a comprehensive overview of the application of the Directive across the EU at Member State level: it provides key information on the features and the application of the EIA (including direct administrative costs) and assesses its environmental and wider socio-economic costs and benefits. It also identifies implementation gaps and the shortcomings that need to be addressed in the EIA revision.

3.1.1. Main features of the EIA procedure



The EIA Directive establishes procedural requirements rather than technical and measurable ones. The first step in this process is to determine **whether an EIA is needed** for a project. For all projects listed in Annex I of the Directive, which are considered to have significant environmental effects (e.g. motorways, nuclear plants, large industrial installations), a

mandatory EIA has to be carried out, in accordance with the requirements of the Directive. For projects listed in Annex II (e.g. agriculture, energy, food industry), the competent national authorities follow a **screening** procedure, based on a case-by-case examination or on nationally set thresholds or criteria. The screening is based on the criteria listed in Annex III of the Directive and aims at determining whether an EIA is required: if the screening concludes that **an EIA is not needed**, the decision is published and the process ends.

If an EIA is needed, the following steps are foreseen: (a) the developer may request the competent authority to specify what should be covered by the EIA information to be provided (scoping); (b) the developer must provide information (described in Annex IV of the Directive) on the environmental impacts of the project during the construction and operational phases (known as EIA report); (c) the environmental authorities and the public (and, where appropriate, affected Member States) must be informed and consulted; (d) the competent authority decides to grant or refuse a development consent, taking into consideration the findings of the EIA report and the results of consultations; (e) the public is informed of the decision and can challenge it before the courts. Figure 1 illustrates the EIA procedure. More information on the EIA Directive is found in Annex 1 of this report and on line¹⁰.

3.1.2. Key information on the application of the EIA Directive across the EU

The Commission has regularly evaluated the implementation of the EIA Directive¹¹. The last Commission report on the application and effectiveness of the EIA Directive, published in July 2009¹², concluded that the minimum requirements laid down by the Directive have been transposed and are implemented in all Member States. Information on the practical application of the EIA Directive across the EU, on the basis of a number of **key parameters**, for which sufficient data is available from previous studies and/or which can easily be estimated¹³, follows. More detailed information is provided in Annex 4. It was not possible to gather data regarding the application of the EIA at regional level.

For the period 2005-2008, the **average number of EIAs**¹⁴ in the EU is at the range of 15.000 to 26.000 EIAs per year. For the same period, on average 27.400 to 33.800 **screenings** were carried out yearly for Annex II projects. The number of positive screenings (i.e. EIA to follow) is estimated between 5 and 10 % of all screenings (between 1.370 and 3.380 yearly). The share of Annex II projects with regard to the total of number of projects submitted to the authorities is estimated at 7.6 %¹⁵. However, the average annual number of EIAs **varies considerably** across the EU: from fewer than 30 (10 in Malta, 11 in Latvia and 23 in Austria) to more than 1.000 (1.000 in Germany, 1.054 in Spain, 1.548 in Italy, 3.867 in France and 4.000 in Poland). The same variation is observed as regards the average annual number of

¹⁰ <http://ec.europa.eu/environment/eia/home.htm>.

¹¹ All reports are available on <http://ec.europa.eu/environment/eia/eia-support.htm>.
¹² COM(2009)378.

¹³ Data are also available on the number of actors involved in EIAs, by type (public authorities, developers, environmental consultancy firms). However, no specific pattern could be derived, as the absence of a formal reporting mechanism under the EIA Directive hinders the collection of specific data (mainly breakdown of EIAs per type of project and per type of developer).

¹⁴ It is not possible to compare the range of EIAs with the total number of development consents delivered in the EU, as there are no data available on the latter aspect (which is not subject to EU legislation).

¹⁵ This figure is the result of the following calculation: average number of positive screenings (1.370 to 3.380 per year)/average total number of screenings (27.400 to 33.800 per year), multiplied by 100.

screenings¹⁶. Such variations exist even when comparing Member States of a similar size and population¹⁷.

Main categories of projects subject to EIA: the Cohesion Member States are undertaking a significantly higher proportion (35-55 %) of infrastructure-based projects (e.g. energy, waste and water management, transport), while in other Member States the numbers of projects related to urban and industrial development¹⁸ are higher. It was not possible to find a more detailed breakdown of EIAs by project category. Also, with regard to possible overlaps with other directives, it was not possible to identify the share of projects subject to requirements of both the EIA Directive and the Industrial Emissions Directive (IED)¹⁹.

While the average **duration of the EIA process** is 11.6 months, considerable variations are observed among the Member States (the duration of an EIA ranges from 5 to 27 months)²⁰.

Average duration of the EIA process per stage	
Stage of EIA process	Average duration
Screening	1.2 months
Scoping	1.3 months
Environmental information (environmental report)	5.5 months
Consultations (public, authorities, other Member States...)	1.6 months
Final decision	2 months
	11.6 months

3.1.3. Direct administrative costs from the application of the EIA Directive

The average costs **for developers** depend on the size of the project and are estimated at 1 % of the total project cost²¹ or approximately € 41.000 per EIA²². Overall, the EIA costs for EU developers are estimated at € **558 to 846 million per year**²³. The efforts for developers per stage of the EIA process²⁴ are presented below:

Average cost of the EIA process for developers		
Stage of the EIA process	Share of total EIA cost ²⁵	Cost (€) per EIA stage
Preliminary studies (prior to the EIA)	1 %	425
Screening and scoping	2 %	850
Information on environmental impacts	80 %	32.715
Revision of EIA report (if needed)	17 %	7.010
	100 %	41.000

¹⁶ From fewer than 100 (0 in France, 36 in Finland, 58 in Cyprus, 62 in Malta and 96 in Austria) to more than 2.000 (2.200 in Germany, 2.236 in Spain, 2.337 in Belgium, 2.500 in Denmark, 2.695 in Italy, 2.745 in the UK and 4.400 in Poland).

¹⁷ E.g. 23 EIAs in Austria, 117 in the Czech Republic, 152 in Hungary, 288 in Sweden and 425 in Greece.

¹⁸ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, section 2.3.

¹⁹ It is known that most activities covered by the IED are also covered by the EIA Directive, but the annual number of EIAs concerning projects that are also subject to the IED remains unknown.

²⁰ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive. The average duration of an EIA ranges from 7 months or less (4.75 in Estonia, 5 in Slovakia, 6.5 in Latvia, 7 in Greece) to more than 20 months (21 in Denmark, 27 in Spain).

²¹ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Table 2-8.

²² According to different calculation methods, the cost per EIA can be 53,000 or 35,000 €.

²³ The total annual cost is calculated by multiplying the average cost by the total number of EIAs.

²⁴ The findings of the GHK study are confirmed by the study of JRC (The Use of Spatial Data for the Preparation of Environmental Reports in Europe, 2010). The JRC study finds that the average time needed by environmental consultants to complete an EIA report is between 1 and 3 months.

²⁵ Median values were then adjusted to give a total of 100 %.

The administrative costs per EIA **for public authorities** can be measured by the effort in terms of number of hours to process an EIA²⁶ multiplied by the average gross labour cost. The EU Standard Cost Model²⁷ has been used for this. Under the assumption that an average working day contains 7.5 working hours, the time spent in processing the EIAs results in an overall administrative cost for public authorities of approximately **€146 million to € 215 million in 2010 for the EU**²⁸. Most of the efforts for the authorities are due to the review of environmental information and the final decision-making (89 % of total EIA costs²⁹). The case studies available³⁰ show that bigger effort during the scoping stage resulted in relatively less effort during the stage of final decision-making.

Annex 8 details the methodology for calculating the direct administrative costs for public authorities and developers.

3.1.4. *Environmental and wider socio-economic benefits*

Since its coming into force, the Directive has provided significant environmental benefits³¹, which cover a wide range of areas³², such as population, fauna, flora, soil, water, air, climate, landscape, material assets and the cultural heritage. The major benefit of the EIA is that it ensures environmental considerations are taken into account as early as possible in decision-making process; this makes projects more environmentally sustainable by preventing, mitigating or compensating damages to the abovementioned environmental media³³. The Commission's experience from the assessment of major projects co-funded under the EU Regional Policy shows that EIAs have improved the projects' design from an environmental perspective³⁴. Furthermore, the EIA contributes to environmental awareness of the public and has raised the profile of the environment³⁵. The results of the public consultation corroborated the positive role played by the Directive³⁶. The EIA Directive also gives strong incentives to

²⁶ The average number of days to process an EIA is estimated at 32 man-days (GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Table 2-8).

²⁷ The EU Standard Cost Model contains average costs for administrative work, the costs being calculated according to the full cost principle.

²⁸ The low estimate is based on the GHK study, while the high estimate is based on questionnaires of the GHK study. The total cost of the entire EIA process per Member State depends on the labour cost and the number of EIAs processed by each Member State.

²⁹ The efforts for the screening and scoping stages represent 3 % and 8 % of total EIA cost respectively.

³⁰ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Chapter 3.4 and Annex 7.

³¹ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive; Report on the application and effectiveness of the EIA Directive (COM(2009) 378); GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, section 2.6.

³² This corresponds to the main aspects listed in Article 3 of the Directive. Environmental aspects to be described in an EIA cover in particular those resulting from: the existence of the project, the use of natural resources and the emission of residues and pollutants resulting from the construction and operation of the proposed project, the creation of nuisances and the elimination of waste (see also Annex IV). It is difficult to distinguish between the environmental benefits resulting from the EIA Directive itself and from the need to comply with other environmental legislation which has to be taken into account in the permitting process.

³³ For instance, through changes in the technical and spatial design of projects (e.g. route selection for transport infrastructure, location selection for industrial facilities) or through implementation of mitigation and compensation measures.

³⁴ See the report on the application and effectiveness of the EIA Directive (COM(2009) 378).

³⁵ Environmental benefits also result from decisions taken by developers during the public consultation.

³⁶ Almost all respondents (97 %) agreed that: the EIA Directive contributes to effective protection of the environment and the quality of life and that the EIA Directive is an efficient instrument to address

developers to anticipate possible compliance issues even prior to the project application. This is attributed to the screening procedure, when it is adequately used. According to a Danish study³⁷, almost half of the investigated projects were changed when environmental impacts were identified with changes being primarily of a preventive nature. More information on the environmental benefits, including concrete examples as identified in the case studies, are provided in Annex 7.

Previous studies on EIA costs and benefits have not quantified or monetised the environmental benefits that can be attributed to the EIA and have not provided any differentiated analysis per Member State or per region. This difficulty can be explained by the variety of projects and environmental issues covered by the EIA Directive, as well as the diversity of approaches to the EIA process. Evaluating the environmental benefits once the project has been developed also proves difficult, as the EIA Directive does not entail ex post project monitoring requirements.

This remark is also valid for the assessment of the wider economic and social benefits from the application of the EIA Directive. Hence, the analysis presented below is essentially of qualitative nature. Annex 9 details the wider socio-economic impacts. Having said this, the benefits of the EIA Directive can be valued in economic terms through **avoided costs of reparation**. The EIA Directive is seen as a cost-effective instrument in the field of environmental policy; indeed, Member States perceive the costs of EIAs as '*negligible*' compared to the potentially high costs of unanticipated environmental damage or liabilities which may arise at a later stage³⁸. Benefits from the implementation of the EIA Directive also result in health benefits (e.g. avoided nuisances and emissions of pollutants). The associated financial benefits, in terms of **avoided public costs for health damages**, while likely to be significant³⁹, are difficult to estimate and no data is available at present. Other social benefits include the preservation of **quality of life** (e.g. preservation of ecosystems and the landscape), where again no quantifiable data is available.

The EIA Directive has harmonised the principles and practices of environmental assessments in the EU and has introduced minimum requirements that have improved the **functioning of the internal market**. By obliging developers to assess environmental impacts, the EIA Directive, contributes to improving the **environmental profile and reputation** of the project initiator and significantly enhances the developer's environmental credibility⁴⁰. In addition, through the obligation to anticipate environmental impacts of their projects and identify measures to prevent and mitigate them, the EIA Directive provides incentives for developers to apply innovative design and pollution abatement processes. **Increased innovation** is in turn likely to translate into higher competitiveness for companies⁴¹.

environmental concerns in the design of projects. This is always or often the case for 63 % of the respondents and this is sometimes the case for 34 %.

³⁷ Nielsen, E., P. Christensen, and L. Kørnøv (2003), Are screening processes effective instruments and what are the environmental benefits? Department of Development and Planning, Aalborg University.

³⁸ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, section 2.6.

³⁹ National Health Authorities are consulted as part of the EIA process and, in most Member States, assessing the impacts of projects on human health as part of EIAs is a requirement.

⁴⁰ European Commission (1996), EIA in Europe - A Study on Costs and Benefits.

⁴¹ Impacts of Innovation on the Regulatory Costs of Energy-using Product Policy, Final Report for DEFRA (2010), p.21. See also the example of the German high pressure gas pipeline project in which specific technical design and construction methods have been implemented as part of the EIA process (in GHK (2010) Collection of information and data to support the IA study of the review of the EIA

Expertise is required to comply with the requirements of the EIA Directive (mainly the preparation of EIA reports). This has led to the **creation or to the preservation of jobs** (mostly high-skilled ones) in public authorities⁴² and in environmental consultancy companies; specific jobs dedicated to EIAs may also have been created internally in large companies.

The alignment of the EIA with the Aarhus Convention (through Directive 2003/35/EC), resulted in wider social (**governance**) benefits, such as increased **public participation** in decision-making procedures relating to projects⁴³ (e.g. changes in the design of projects and increased social acceptability), development of '**civil society**'⁴⁴ and increased possibilities for the public to **challenge the legality of final decisions**.

3.2. Problem definition

There is consensus that the main objective of the EIA Directive has been achieved (minimum requirements to harmonise the principles of environmental assessment). The Directive has also become a useful tool of environmental policy-making, which has brought environmental and socio-economic benefits across the EU, as described above. However, the implementation experience, as reflected in the Commission reports on the application and effectiveness of the EIA Directive and confirmed by the public consultation, identified a number of **shortcomings** that are explained below.

3.2.1. Factors limiting the environmental and socio-economic benefits of the EIA

The fact that the EIA Directive does not specify a hierarchical order between prevention, mitigation and compensation measures often results in a lack of preventive action at the design stage of the project and rather focuses on minor changes⁴⁵ in relation to mitigation and/or compensation. This has also been confirmed by the public consultation⁴⁶ and leads to a situation where major problems with a project are not being detected and addressed at an early stage. However, detection of impacts late in the project cycle often leads to insufficient rectification in order not to increase the costs of the project. Forgone environmental and social benefits and increased costs are often the result of such an approach.

Another shortcoming is that the Directive introduces essentially procedural requirements, but has no provisions to ensure the quality of the EIA report and the quality of the EIA process as such⁴⁷. Due to the **absence of quality enhancing provisions and standards**, there is a wide

Directive – Annex 7). It is however difficult to distinguish the extent to which innovation is the result of the EIA Directive itself or whether it is driven by other environmental legislation.

⁴² The average number of staff working on processing EIAs or screenings in the public authorities was estimated at approximately 75, with a large variation across Member states (GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, section 2.5).

⁴³ The literature mentions significant environmental impacts (IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive).

⁴⁴ Almer and Koontz (2004) Public hearings for EIA in post-communist Bulgaria: do they work? Environmental Impact Assessment Review 24, pp. 473-493, as cited by IVM (2007).

⁴⁵ Christensen et al. (2003), The advantages of EIA—Evaluation of EIA in Denmark, Ministry of the Environment, Denmark Landsplanafdelingen.

⁴⁶ 47 % of the respondents consider that the EIA Directive only sometimes contributes to modifying significantly projects to take into account environmental concerns.

⁴⁷ For instance: there is no obligation for ex-post impact monitoring; scoping, which could streamline the information to be submitted, is only optional; the Directive only requires 'an outline of the main alternatives studied by the developer' to be provided as part of the environmental information.

discretion left to the Member States and their competent authorities in implementing and interpreting certain of its provisions; this is detrimental for the internal market and – more importantly – it adversely affects the ability to have good quality EIA reports and processes, which in turn are vital for well-informed decision-making.

Furthermore, the EIA is often criticised for not addressing issues other than those listed in Annex IV (content of the EIA report). Over the last decade, **additional emerging environmental issues**, such as climate change, disaster risks, biodiversity and resource efficiency, have become more important in policy making and should therefore also be critical elements in project decision-making, especially decisions related to infrastructure projects. For instance, even if the EIA is one of the instruments that could contribute to combating climate change, many Member States already recognise that climate change issues are not specifically identified and assessed within the EIA⁴⁸ (e.g. as regards adaptation to climate change or halting biodiversity loss, insufficient information in EIA reports is observed in all Member States). Accepting the importance of such additional issues could be a good opportunity to integrate environmental impacts into the project's design⁴⁹ thereby ensuring a more complete assessment of environmental and climate change impacts of projects and foreseeing appropriate mitigation measures.

The **implementation problems** of the EIA Directive are generally underpinned by information which the Commission obtains through complaints and petitions. All Member States are involved, as confirmed by statistics available for the period 2008-2011. The EIA represents 12 % of the infringement cases initiated by the Commission in relation to EU environmental legislation⁵⁰. Furthermore, the EIA alone represents 13 % of all complaints, petitions and other cases related to the possible incorrect implementation of EU environmental legislation investigated through the EU Pilot⁵¹. Also, 14.5 % of the cases investigated through the EU Pilot do not only relate to the EIA but are combined with directives from other fields (mainly nature, water, waste and air).

Experience shows that major implementation gaps are related to the **screening** procedure, which is a problem in 69 % of the initiated EIA infringement cases. Relating this to a range of 27.400 to 33.800 screenings carried out per year means that the effectiveness of the EIA Directive is being affected negatively, and detrimental environmental effects resulting from not correctly assessed projects are likely to be widespread⁵². Implementation problems are also related to the provisions on **public participation** in decision-making process and access to justice in environmental matters, which were consolidated after 2005⁵³. This reduces the

⁴⁸ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009, p.175-178.

⁴⁹ Some project developers tend to use EIAs more as juridical insurance than as decision-making tools (see for example the French case study in the IVM study).

⁵⁰ The other environmental sectors represent 23 % (for six Directives on water protection), 22 % (for the two Directives on nature protection) and 19 % (for eleven Directives on waste management).

⁵¹ The EU Pilot has been operating since April 2008; more details are available at http://ec.europa.eu/eu_law/infringements/application_monitoring_en.htm.

⁵² Exempting in advance from the requirement of an EIA projects of a certain type disregards possible negative environmental effects. For instance, projects for the restructuring of rural land holdings, projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes or water management projects for agriculture may, regardless of their size, result in the loss of field boundaries, and therefore of hedgerows, a loss which is likely to have significant effects on the fauna and flora (see case C-66/06).

⁵³ Those amendments were introduced by Directive 2003/35/EC and apply as from 2005.

acceptability of projects by civil society and implies a risk of public opposition, which is observed for instance as regards energy infrastructure projects⁵⁴.

Implementation problems and limited enforcement are particularly observed in Cohesion countries, where there is a significant number of infrastructure projects and which have less experience, capacity and dedicated resources in applying the EIA Directive⁵⁵. Implementation problems are also observed in Member States where the application of the EIA Directive has been decentralised to regional/local levels (e.g. uneven application of screening criteria)⁵⁶ and where authorities and developers still lack sufficient experience and expertise. The limitations as described above do therefore not allow the EIA Directive to be fully effective in terms of the environmental and social benefits that could be gained from such an instrument.

3.2.2. Higher socio-economic costs limiting the effectiveness of the EIA

The limitations concerning the effectiveness of the EIA Directive extend beyond the environmental and social benefits foregone and undermine the harmonisation objective of the Directive by resulting in higher than necessary socio-economic costs.

Studies available indicate that the fixed administrative costs for an EIA represent only 1 % on average (from 0.01 % to 2.37 % in some exceptional cases) of the total project's costs i.e. a relatively modest part of total development costs⁵⁷. The administrative burdens of the EIA process has been identified by business and industry as an important problem, as in some cases, the way that the EIA is applied may increase the costs of projects considerably⁵⁸. Business and industry are mostly concerned by delays in EIA procedures; the energy sector provides such examples⁵⁹. According to studies available, the costs resulting from delays in the EIA process are generally not significant. Although delays can occur for many reasons unrelated to the EIA process itself⁶⁰, developers and business consider that the EIA often causes **delays**⁶¹, e.g. the need for new assessments when environmental data are not available or when authorities request additional information, that can generate, quite significant in some cases, costs (capital costs and revenues foregone). Delays may also occur from overlaps between the EIA and other EU environmental directives, which require specific

⁵⁴ See the Impact Assessment accompanying the proposed Regulation on guidelines for trans-European energy infrastructure (SEC(2011)1233).

⁵⁵ For instance, see the case studies at: <http://www.justiceandenvironment.org/publications/eiasea2011>.

⁵⁶ There are no specific data available related to the application of the EIA at regional/local levels.

⁵⁷ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

⁵⁸ About 44 % of respondents (all categories) to the public consultation, found that the EIA 'always' or 'often' increases the (direct and indirect) costs of projects considerably (45 % found that this is 'sometimes' the case).

⁵⁹ For instance, EWEA – European Wind Energy Association (2010), Wind Barriers: Administrative and grid access barriers to wind power; IVM Institute for Environmental Studies (2011), Wind energy and the review of the Environmental Impact Assessment Directive.

⁶⁰ EC (1996) EIA in Europe – A study on costs and benefits; IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive; GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

⁶¹ During the public consultation, about 21 % of respondents (all categories) found that the EIA 'always' causes considerable delays and about 45 % found that it 'sometimes' causes considerable delays. For instance, in the field of wind energy see: EWEA – European Wind Energy Association (2010), Wind Barriers: Administrative and grid access barriers to wind power.

environmental assessments⁶². All the above suggest that developers may adopt an evasive behaviour to circumvent the requirements of the EIA Directive.

In addition, the EIA costs weigh differently on small and medium developers (**SMEs**) and on larger companies involved in the development of projects. The higher the share of fixed costs in overall costs related to EIAs, the higher the relative impact would be on SMEs⁶³.

The EIA Directive is also found to give rise to **legal disputes** which can involve multiple stakeholders and the public⁶⁴ and generate costs; these primarily include court fees and fees for legal representation, but may also delay the implementation of projects. It is not possible to quantify or give an overview of these costs at EU level, as the court fees differ substantially between Member States and as there are no data on national EIA-related court proceedings and their length.

Despite causing problems for individual developers/enterprises, the EIA in its current form and implementation is likely to create more generally an obstacle to the proper **functioning of the internal market** as well as the **competitiveness** of industrial sectors⁶⁵, due to the differences in the implementation of the EIA across the EU. It can further be argued that uneven implementation and especially delays in the implementation of the EIA Directive may also lead to negative effects in the creation of jobs. However, **job opportunities are rarely lost because of EIAs**, as the purpose of the EIA is not to stop projects (even the ones which are negative for the environment).

The above **inherent risks of possible delays and costs** from the implementation of the EIA, which affect all Member States, but mainly those with higher numbers of EIAs, suggest that there are opportunities for reducing unnecessary burden and ensuring a more consistent application of the EIA.

3.2.3. *Need for action to address the EIA shortcomings*

If the identified shortcomings are not adequately addressed, the Directive would remain less effective and efficient in the sense that projects likely to have significant environmental effects could escape an EIA, whilst other that should not undergo an EIA because of no significant impacts are made subject to an EIA. Furthermore, when an EIA is carried out, the often poor quality of data and analysis in the EIA report does not help policy makers making well-informed decisions; this also reduces the social acceptance of projects and can lead to litigation. As a result, the EIA would not be able to ensure the integration of environmental considerations in the decision-making and this would go against the objective of a **high level of protection and improvement of the quality of the environment**.

⁶² Mainly the Industrial Emissions Directive, the Habitats Directive and the SEA Directive (see also the findings of GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, p.28-29).

⁶³ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

⁶⁴ Information from the European Commission's Infringement Database indicates that numbers of EIA-related infringement procedures was stabilised, but it started increasing after the 2004 enlargement and the amendments introduced by the 2003/35 Directive (applicable as from 2005).

⁶⁵ For instance, developers in the energy sector may be affected by the uncertainties concerning the applicability of certain requirements and possible delays in EIA processes (EWEA – European Wind Energy Association (2010), Wind Barriers: Administrative and grid access barriers to wind power).

In addition, the higher socio-economic costs from the implementation of the EIA are likely to negatively affect the internal market harmonisation. Due to the risk of adding unnecessary burdens for developers/business and public authorities, the Directive has been identified as a potential instrument for **simplification**⁶⁶.

3.3. Specific problems and their underlying causes

The shortcomings of the Directive are related to specific problems⁶⁷ concerning: (1) the screening procedure, (2) the quality of and analysis within the EIA and (3) the risks of inconsistencies in the EIA process and in relation to other legislation. Each specific problem may have one or several underlying causes, some of them being common to several ones. Table 1 presents an overview of the problems and their potential drivers. The following paragraphs describe the concrete problems to be addressed, their significance and their drivers. A more detailed explanation is provided in Annex 5.

Table 1: THE PROBLEM TREE		
DRIVERS OF THE PROBLEMS		KEY and SPECIFIC PROBLEMS
D1. Broad margin of discretion left to Member States in the screening process to decide whether an EIA is required for Annex II projects	D1+D2	Problems with the screening process P1: Projects with significant environmental impacts escape EIA P2: Projects without significant environmental impacts are subject to EIAs P3: No justified decisions on screenings by authorities
D2. Screening criteria of Annex III not very specific	D1+D2	
D3. Justification of screening decisions not required	D3	
D4a. No specific requirements for scope and quality of information provided	D4a+D8+D9	Problems in the EIA quality and analysis P4: EIA reports do not focus on the most significant impacts P5: EIA reports with poor quality of environmental data and analysis
D4b. No sufficiently stringent requirements for assessment of project alternatives		
D4c. No requirements for justification of decisions by competent authorities	D4a+D9	P6: Insufficient consideration of impacts of project alternatives P7: No justified decisions on development consent by authorities
D4d. No specific requirements for post-EIA monitoring	D4b	
D5. Potential (environmental) impacts of projects to new environmental issues (e.g. climate, biodiversity) are not sufficiently covered by the EIA Directive	D4c	P8: Gaps between predicted impacts in EIA reports and actual impacts P9: Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions
	D4d	
	D5+D6+D8	D5
D6. Lack of harmonisation among EU legislation on environmental assessments	D6	Inconsistencies within the EIA process itself and in relation to other legislation P11: Overlaps/duplications with environmental assessments under other EU legislation P12: Too short or too long public consultation
D7. The time-frames for the various stages of the EIA process are not specified or are not specific enough		
D8. Lack of experience of authorities in some MS	D7	P13: Excessive time for the processing of EIAs by authorities
D9. Lack of expertise of developers and consultants undertaking EIAs	D7+D8+D9	

⁶⁶ COM(2009)15.

⁶⁷ The specific problems were identified by the Communication Reports on the application and effectiveness of the EIA Directive (in particular the one published in July 2009), the COWI report (COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009) and the outcomes of the public consultation on the review of the EIA Directive.

3.3.1. Problems related to the insufficiencies of the screening process

Annex III criteria, which guide the screening process, are interpreted and applied in various ways by national competent authorities, which mostly use different types and levels of thresholds in addition to case-by-case assessment. As a result, large differences are observed in the number of EIAs carried out by each Member State: from 10 to over 4.000 per year (section 3.1.2), in particular when Member States use exclusion thresholds. The above discrepancies mean that, in some Member States, an excessive number of EIAs are carried out and projects with minor environmental impacts are subject to EIAs (e.g. if thresholds are low), thus generating an unnecessary administrative burden for developers, business and authorities. On the other hand, in some other Member States, certain projects with significant environmental impacts escape the EIA requirement if the thresholds used are set high⁶⁸; the most common illustration of this problem is the ‘salami-slicing’ practice⁶⁹. This may be the result of both the developers’ evasive behaviour and limited implementation capacities in some Member States. Despite the Commission’s guidance on screening⁷⁰, there was no significant improvement. These features could jeopardise the legitimacy of the Directive and undermine efforts to establish common standards; the absence of a requirement to justify the screening decisions enhance the above risks⁷¹.

The Commission’s implementation experience confirms the magnitude of the problem. Failures to correctly transpose or apply the screening process requirements of the EIA Directive constitute **the most significant and recurring problem**, as they represent 69 % of the infringement cases initiated by the Commission. When it comes to referral to the Court, the percentage of infringement cases related to screening goes up to 80 % of all cases concerning EIA implementation. Despite the absence of figures at national level, the magnitude of the problem is confirmed by the increasing number of requests for preliminary rulings from national courts⁷².

The central driver of the problem is the **broad discretion** given to Member States to determine whether an EIA is required for projects listed in Annex II. Member States often exceed their margin of discretion, either by exempting some projects in advance or by taking account only of some of the screening criteria listed in Annex III. The absence of clear provisions related to the **justification of screening decisions** is an additional driver. The different political and administrative traditions and capacities in an enlarged EU of 27 Member States enhance the diversity of approaches, while the degree of decentralised implementation in some Member States can lead to an even wider variation, not least even within a Member State⁷³.

⁶⁸ This is confirmed by the implementation experience and the case-law (e.g. see the following Court cases: C-301/95, C-392/96, C-87/02, C-332/04, C-66/06, C-255/08, C-435/09).

⁶⁹ Projects with significant environmental impacts (e.g. infrastructure projects) escape the EIA requirement by being divided into two or more separate entities or sub-projects to avoid thresholds that would trigger an EIA. This can happen through splitting of territory, dividing the project into sub-projects, stretching activities over time or doing several smaller rounds of project modifications. For instance, see cases C-142/07 and C-205/08.

⁷⁰ A guidance document on screening is available since 2001 and guidance on interpretation of definitions of certain project categories was issued in 2008.

⁷¹ More detailed information and analysis are available in Annex 5 (sections 10.5.1.1 and 10.5.1.2).

⁷² For instance, the refurbishment of the Madrid ring road and the extension of the Vienna airport were not made subject to an EIA (see cases C-142/07 and C-420/11).

⁷³ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

3.3.2. Problems related to the insufficient quality and analysis of the EIA

The insufficient quality and analysis of the EIA is a well-documented point of criticism and has been confirmed during the public consultation⁷⁴. National experts raise concerns about the quality of EIAs, as they are often too descriptive and do not include relevant data to characterise environmental impacts⁷⁵. Environmental NGOs share this concern⁷⁶ and also complain that projects having significant adverse environmental impacts are granted development consent with no clear justification of how the findings of EIA reports and consultations have been taken into account⁷⁷. The EIA consultants and developers have problems with **obtaining appropriate guidance and data** from the competent authorities (e.g. to interpret what is meant by ‘significant’ environmental effects). As a result, the decision-making process is not properly informed and environmental issues are not given the appropriate attention⁷⁸. The case-law provides a concrete example of how an inappropriate EIA may lead to environmental damages⁷⁹.

The problem of quality based decision-making also relates to the lack of proper identification and assessment of **alternatives**, as there is no specific obligation. Consequently, the number and types of alternatives assessed vary significantly across Member States. However, the ability to assess different and reasonable alternatives is seen as the main added value of an EIA process, especially for infrastructure projects, as it provides a comparison of different options upon which to make the final decision and, if necessary, to adjust the project in its early development stages in order to minimise environmental impacts⁸⁰. The insufficient examination of the project alternatives is a recurring issue during the consultation with the public. Uninformed decision-making can also cause delays with project implementation, as it often leads to resubmission of EIA reports and litigation⁸¹. The recent implementation experience confirms the recurrence of the problems linked to the quality of the EIA process⁸².

In addition, the **lack of quality standards** can result in a project that, when implemented, ensues more negative environmental impacts than those initially assessed in the EIA (e.g. because of erroneous assumptions, lack of detailed available information on climate change impacts or because mitigation measures suggested in the EIA report have not been put in place). As competent authorities often do not engage in proper **ex-post impact monitoring** of the adverse significant effects resulting from the construction and operation of a project, the effectiveness of mitigation measures suggested in the EIA report is not systematically checked and there are no means for rectification. This issue is particularly relevant for projects that are not already subject to environmental monitoring requirements (e.g. under the Industrial Emissions Directive (IED), the Habitats Directive or as part of voluntary environmental management systems), or in cases where **environmental issues not yet**

⁷⁴ See also the views expressed during the stakeholder Conference in November 2010: <http://ec.europa.eu/environment/eia/conference.htm>.

⁷⁵ This view is shared by national experts (COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009, chapters 6 and 7).

⁷⁶ For instance, this has been raised by a number of NGOs in their replies to the public consultation.

⁷⁷ More detailed information and analysis are available in Annex 5 (section 10.5.2.3).

⁷⁸ More detailed information and analysis are available in Annex 5 (section 10.5.2.1).

⁷⁹ See case C-215/06, where the EIA report did not examine the question of soil stability, although this is fundamental when excavation is intended, and despite landslides in the area.

⁸⁰ See in this regard the case study of the Britned Connector (Netherlands) in GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Annex 7.

⁸¹ More detailed information and analysis are available in Annex 5 (section 10.5.2.2).

⁸² For instance see the last Court rulings in cases C-50/09 and C-494/09.

covered by the Directive, such as climate change, disaster risks, resource efficiency or biodiversity, are addressed in a superficial manner in the EIA report⁸³ and in subsequent decisions. In relation to the latter, the results of the public consultation show that the majority (52.5 %⁸⁴) of respondents consider that synergies should be improved between the EIA and other EU policies⁸⁵. That synergies are not sufficiently exploited currently is due to the fact that the new environmental issues are not expressly referred to in the Directive⁸⁶; hence there is little incentive for developers and competent authorities to account for the impacts of their projects in these areas⁸⁷.

The abovementioned problems not only hamper the effectiveness of the EIA, as a tool to prevent and mitigate environmental damages, but also adversely affect global objectives of the EU. For instance, in the field of transportation, which is a significant for the fight against climate change and relates to many projects subject to EIAs, the EU's vision for 2020⁸⁸ is that 'transport will use less and cleaner energy and (...) reduce its negative impact on the environment and key natural assets like water, land and ecosystems'. The EIA can contribute to this objective only if the problems related to the quality of and analysis in the EIA are adequately addressed.

3.3.3. *Problems related to the risks of inconsistencies in the EIA process*

Since the adoption of the EIA Directive in 1985, **new legal requirements** have been introduced in international and EU environmental legislation. As the EIA has not been significantly adapted since 1997⁸⁹, there is a **risk of inconsistency** with other new or revised legal instruments, in particular the SEA Directive (for projects changing the land use, it is often not clear whether either an EIA or a SEA, or both, are required)⁹⁰. The public consultation confirms the need to improve synergies between the EIA and other EU Directives⁹¹. There is also a potential risk of inconsistency with the Espoo Convention⁹², as

⁸³ More detailed information and analysis are available in Annex 5 (section 10.5.2.4).

⁸⁴ This percentage is higher as regards public authorities, NGOs, citizens and developers from all Member States except Germany.

⁸⁵ 35.5 % were against and 12 % had no opinion. Biodiversity (53 %), and energy and climate (50 %) are mostly mentioned as examples.

⁸⁶ In particular in Articles 3 and 5 and Annexes III and IV. For instance, 'climate' is mentioned in Article 3 however it does not specifically refer to 'global climate change'. Effects of projects on 'human beings, (...), material assets, etc.' are mentioned in Article 3, but the specific risks to a project due to the changing climate and other man-made or natural disasters are not specifically mentioned. Article 3 also mentions 'fauna and flora', which is more restrictive than the concept of 'biodiversity'.

⁸⁷ More detailed information and analysis are available in Annex 5 (section 10.5.2.5).

⁸⁸ Roadmap to a Resource Efficient Europe (COM(2011)571).

⁸⁹ The 2003 amendment (Directive 2003/35/EC) aligned the EIA Directive with the requirements of the Aarhus Convention and the 2009 amendment (Directive 2009/31/EC) added new categories of projects in the Annexes in relation to the transport, capture and storage of carbon dioxide.

⁹⁰ More detailed information and analysis are available in Annex 5 (section 10.5.3.2).

⁹¹ The majority (52.5 %) of respondents (35.5 % were against and 12 % had no opinion) share this view, in particular regarding the Habitats Directive (80 %), Water Framework Directive (68.5 %), the SEA Directive (64 %), the IPPC/IED (54 %).

⁹² UNECE Convention on Environmental Impact Assessment in a Transboundary Context (adopted in 1991 and entered into force in 1997). The Espoo Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning and lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. More information is available at the following website: <http://www.unece.org/env/eia/eia.html>.

additional activities⁹³ have been added to the Convention through its 2004 amendment⁹⁴ as well as the ratification of the SEA Protocol⁹⁵. However, such a risk is limited, as the EU has ratified the second amendment of the Espoo Convention and the SEA Protocol. Both texts form an integral part of the legal order of the EU, and Member States have to take all necessary measures to comply with them.

Synergies between the EIA and other legal instruments would also address existing overlaps between environmental assessments resulting either from the EU or national law and leading to a duplication of efforts and costs for developers and for public authorities⁹⁶. For instance, some of the environmental information required to be submitted in EIA reports is also needed as part of the permit application required by the Industrial Emissions Directive (IED) or as part of the ‘appropriate assessment’ required by the Habitats Directive; in the case of projects which are part of wider plans/programmes subject to a SEA, there can be overlaps in the information requirements. So far possible synergies between the various environmental assessments are not sufficiently exploited (e.g. conclusions from one environmental assessment may reinforce the conclusions of another one); the above situation often leads to a fragmentation of administrative responsibilities in the Member States, as different authorities deal with different Directives. While Article 2 of the EIA Directive suggests the possibility to implement a single procedure to fulfil the requirements of the EIA and IED Directives⁹⁷, most Member States have not taken action in this respect. If no measures are taken to streamline administrative procedures under the EU environmental law, there are risks of increased uncertainty, delays and costs for business and developers⁹⁸.

Inconsistencies may also result from the **difference in timing** to conclude the EIA procedure. The average duration of an EIA procedure is approximately 11.6 months, but figures range from 5 to 27 months⁹⁹. Hence, the different time schedules applied by the authorities to finalise their decisions can generate significant uncertainty and delays for the developers, with ensuing additional costs in some countries. 46 % of the respondents to the public consultation, in particular developers and public authorities, consider that the EIA sometimes causes considerable **delays** in the approval of projects¹⁰⁰. The energy sector offers an illustrative example¹⁰¹. Overall, it appears that¹⁰² the responsibility for delays is shared between the

⁹³ The new activities are: deforestation of large areas, offshore hydrocarbon production and major installations for the harnessing of wind power for energy production. It should be noted that no thresholds have been specified.

⁹⁴ Decision III/7 – Second amendment to the Espoo Convention, adopted in 2004 (http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/2nd_amendment_en.pdf).

⁹⁵ Espoo Convention, Protocol on Strategic Environmental Assessment (<http://live.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>).

⁹⁶ For instance, this has been raised by the German Association of the Chambers of Industry and Commerce (Deutscher Industrie- und Handelskammertag) during the public consultation.

⁹⁷ "Member States may provide for a single procedure...".

⁹⁸ More detailed information and analysis are available in Annex 5 (section 10.5.3.1).

⁹⁹ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive. See also above section 3.1.2.

¹⁰⁰ 21 % considers that this is always the case, while 25 % thinks that this is often the case.

¹⁰¹ EWEA – European Wind Energy Association (2010), Wind Barriers: Administrative and grid access barriers to wind power.

¹⁰² The analysis of case studies shows that lengthy EIA processes are due to: the complexity of some projects (large scale, transboundary, sensitive location); the difficulty in collecting environmental data; the poor quality of information submitted by the developer (resulting in requests for additional information by the authorities); issues raised by local stakeholders; excessive time taken by the authorities in the decision-making process; inadequate staff resources of the competent authority; uncertainty over the applicability of thresholds; lack of agreed timetables and/or failures to respect

authorities involved in the EIA process (e.g. lack of experience) and the developers (e.g. lack of expertise) or is due to other possible actors or external factors¹⁰³. One of the main drivers of this problem is that the EIA Directive does not specify time-frames for individual steps of the process, nor for the whole EIA decision process¹⁰⁴.

The exception is the **public consultation** phase, where, according to the Directive and the Aarhus Convention¹⁰⁵, 'reasonable time-frames' for the different consultation phases should be provided. However, this provision is rather unspecific and consequently is interpreted differently by Member States. Hence, the time-frames for the consultation on the EIA report vary considerably, from 2 weeks up to 2 months. However, while too short time-frames may create a risk of inconsistencies with the principles of the Aarhus Convention¹⁰⁶, too long ones may generate additional costs and uncertainties for the developer. There is therefore a need for clarifying the text and specifying applicable time-frames.

3.4. The baseline scenario

The baseline scenario describes the implications of continuing the current application of the EIA Directive over time, without further EU action.

3.4.1. Evolution of the environmental impacts in the baseline scenario

The environmental benefits resulting from the implementation of the EIA Directive and its shortcomings (see section 3.1.3) are likely to remain at the current level. While some improvements could occur as a result of increased experience progressively gained by authorities and developers, it is unlikely that the main problems related to **screening and the quality of the EIA process** will be solved since: (a) the problems are mostly related to the design of the Directive; (b) the implementation problems are recurrent (see above section 3.2) and there is no indication in recent trends that this will change without action; (c) the use of EU guidance documents had so far very limited results¹⁰⁷. In addition, if Court rulings are the only effective means to ensure better implementation, there is a certain risk that the volume and the complexity of the jurisprudence will make implementation more difficult and possibly less transparent. This in turn will negatively affect the level of environmental protection across the EU and the level playing field.

3.4.2. Evolution of the direct administrative costs in the baseline scenario

As explained, cost estimates of the current EIA Directive are limited, as the Directive does not set out specific environmental quality requirements and measurable standards. Projections of cost into the future therefore obey to the same considerations. Further to the analysis in section 3.1.3, Tables 2 and 3 present estimates and projections of administrative costs for

agreed timetables for different stages (more details in GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, chapter 3.3.4).

¹⁰³ For instance political unwillingness to consider the project.

¹⁰⁴ More detailed information and analysis are available in Annex 5 (section 10.5.4.2).

¹⁰⁵ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (adopted in Aarhus in 1998 and entered into force in 2001). The Aarhus Convention grants the public rights and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice. Information is available at the following website: <http://www.unece.org/env/pp/welcome.html>.

¹⁰⁶ More detailed information and analysis are available in Annex 5 (section 10.5.4.1).

¹⁰⁷ The general trend is that the EU guidance on EIA is used to a quite limited extent (COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009, p.94).

developers and public authorities respectively; the projections take into account the foreseen increase in the number of EIAs and the outlook for inflation¹⁰⁸. Annex 8 details the methodology for calculating the direct administrative costs.

Table 2: Estimation and projection of administrative costs for developers				
		Administrative costs for developers		
		Method 1 (based on an average cost of € 53.053 per EIA)	Method 2 (based on a median costs of € 35.000 per EIA)	Method 3 (adjusted for wage differences and actual values of respondents € 41.000 per EIA)
2010	Overall costs for EU (€/year) ¹⁰⁹	845.727.456	557.941.322	654.236.265
	Cost per EIA (€)	53.053	35.000	41.041
Medium-term (2017)	EU (€/year)	902.144.249	595.166.570	669.662.757
	Cost per EIA (€)	55.541	36.642	41.228
Long-term (2037)	EU (€/year)	1.365.337.126	900.746.211	1.029.144.373
	Cost per EIA (€)	82.531	54.448	62.209

Table 3: Estimation and projection of administrative costs for public authorities	
Administrative burden for authorities to process EIA dossiers in the EU	
2010	146 to 215 million €/year
Medium-term (2017)	173 to 255 million €/year
Long-term (2037)	269 to 396 million €/year

3.4.3. Evolution of the wider socio-economic impacts in the baseline scenario

The EIA Directive has contributed to a certain degree of harmonisation of environmental assessment practices in the EU that is not likely to increase further without additional measures. Furthermore, in areas with a wide margin of discretion, such as the screening procedure and the quality control of the EIA process, discrepancies and differences in the implementation of the EIA across the EU and uncertainties concerning the applicability of legal requirements will persist. This can be an obstacle to the proper **functioning of the internal market**, which is likely to affect the **competitiveness** of industrial sectors and/or individual enterprises (e.g. in the field of energy). **SMEs** might be affected in a specific way, since continuation of existing policies with regard to small scale projects (Annex II of the EIA), implies that projects without significant environmental effects would still be made subject to an EIA.

The costs related to **legal disputes** will remain stable in the baseline scenario. This assumption is a compromise between two contradictory effects: on the one hand, increased awareness for environmental protection is likely to lead to challenging more decisions and eventually to an increase in legal disputes; on the other hand, both developers and authorities will get more used to the obligations of the Directive, which may reduce the risk of legal disputes.

The overall costs resulting from **delays** in the EIA process would remain the same in the baseline scenario. As regards energy infrastructure projects, the measures proposed by the Commission in October 2011 in the context of the Trans-European Energy Networks (TEN-

¹⁰⁸ Based on International Monetary Fund, World Economic Outlook Database, April 2011 for the period 2011-2016 and based on the assumption that for the period 2017-2037 the inflation remains constant at 2 % per year.

¹⁰⁹ The total annual cost is calculated by multiplying the average cost by the total number of EIAs.

E), which aim at streamlining permitting procedures, are likely to reduce delays, but only if adopted. In some Member States, recent developments show that there is a trend towards simplifying existing procedures¹¹⁰; however, in contrast, this would increase discrepancies in EIA practices across the EU (both in terms of uneven environmental protection and reduced level playing field). Other Member States have put in place schemes for coordinating/integrating environmental assessment processes (e.g. Austria or France), while in Member States where environmental assessment processes have not been coordinated to date, there is no evidence that the situation would change.

For the baseline scenario it is assumed that the remaining wider social¹¹¹ and economic¹¹² benefits (described in sections 3.1.3) resulting from the implementation of the EIA Directive would remain stable, as there are no trends or features showing that there will be significant changes of the parameters affecting those benefits.

3.5. Who is affected?

- Public authorities (at national, regional and/or local levels), through impacts such as: time/resources to implement legal requirements (e.g. review of EIA reports, scoping, monitor EIA application, consultation) litigation costs, time costs/savings through streamlined assessment and authorisation procedures.
- Industries and enterprises related to the project categories listed in Annexes I and II, through impacts such as: time/resources needed to prepare EIA reports, costs related to possible delays and litigation, time costs/savings through streamlined assessment and authorisation procedures, costs savings through efficient use of resources, better risk prevention and mitigation and integration of environmental considerations in their overall business strategies.
- Consultancy firms engaged in EIAs, through impacts such as: revenues from EIA projects, costs related to lack of clarity and uncertainties in the EIA process (e.g. scoping), accreditation costs, revenues/costs from litigation.
- Natural or legal persons and their associations, through impacts such as: avoided environmental and public health damages, well-being benefits, resource savings, public participation and litigation costs.

3.6. Justification of the EU's right to act

The EU's competence in the area of the environment is based on Article 191 of the Treaty on Functioning of the European Union (TFEU). Article 193 TFEU allows Member State to maintain or introduce more stringent protective measures, provided that they are compatible with the Treaties. The need for a high level of environmental protection and improvement of the quality of the environment are enshrined in Article 37 of the Charter of Fundamental Rights of the EU. Action at EU level is justified on the basis of the following considerations:

¹¹⁰ For instance, in September 2011, Greece adopted a new legislative framework on environmental permitting procedures, as a result of the Memorandum of Understanding.

¹¹¹ Creation/preservation of jobs in public authorities and in environmental consultancy companies; avoided public health damages; preservation of the quality of life; public participation in decision-making procedures; access to justice.

¹¹² Environmental profile and reputation for business and developers; innovation and research; avoided risks of environmental damages and cost savings.

Firstly, many of the problems identified are related to the need to define and apply minimum requirements concerning the environmental assessment processes. Individual actions from the Member States cannot address such problems, as they could even result in a deterioration of the functioning conditions of the internal market and distort competition, as varying national regulation might hamper transboundary economic activities. An EU action is needed to streamline procedures, further harmonise practices and address overlaps and inconsistencies.

Secondly, since the adoption of the EIA Directive in 1985, the EU has enlarged and the scope and seriousness of environmental issues to be tackled enhanced and the number of major EU scale infrastructure projects have also increased (e.g. in the field of energy or transport), because of available EU co-financing. Due to the transboundary nature of environmental issues (e.g. climate change, disaster risks) and some projects, action at EU level is necessary and brings added value compared to individual national actions. The EU's action will also address issues that are amongst the EU priorities, such as adaptation to climate change and disaster prevention and will support the achievement of Europe's 2020 objectives related to smart and sustainable growth.

Thirdly, as the EIA Directive is the key legislative tool for complying with international conventions (e.g. Espoo and Aarhus), action at EU level is required.

4. OBJECTIVES

4.1. General objective

After 25 years of application, the EIA Directive has not significantly changed, while the policy, legal and technical context has evolved considerably. The general objective of this review is to adjust the EIA Directive, so as to correct identified and persisting shortcomings, reflect ongoing environmental and socio-economic priorities and challenges and align with the principles of smart regulation.

4.2. Specific objectives

Taking into account the general objective and the problems and drivers identified earlier, two main specific objectives are essential for the review of the EIA Directive: (1) introduce and/or strengthen the quality related elements of the Directive; (2) enhance policy coherence and synergies with other EU/international law and simplify procedures. Each of these specific objectives contains a set of operational ones; however, it is not possible to define scoring scales in concrete measurable terms for these operational objectives, as the EIA is essentially a process Directive, which does not lay down measurable environmental standards.

4.2.1. Introduction and/or strengthening of the quality related elements of the Directive

A key objective of the revision is to ensure that all projects with significant environmental effects are made subject to an appropriate assessment, while projects with limited environmental effects are assessed to the degree needed to avoid unnecessary administrative burden. This can only be done if the quality of the information at certain stages of the EIA process is being improved either by introducing new or strengthening certain existing requirements, taking also into account the clarification provided by the jurisprudence of the Court of Justice (better law-making). The main areas for action relate to an improved and transparent screening procedure and a more comprehensive and substantiated EIA report. This specific objective of quality improvement can be translated into the following operational

objectives: (a) specify the content and justification of the screening decision; (b) specify the content and justification of the EIA report and the final decision; (c) adjust the Directive to the new environmental issues (climate change mitigation and adaptation, disaster risks, biodiversity, marine environment and resource efficiency).

4.2.2. *Enhancing of policy coherence and synergies with other EU/international law and simplification of procedures*

This objective involves improving the consistency between the EIA Directive and sectoral assessment obligations deriving from other Directives (e.g. SEA Directive, Industrial Emissions Directive, Habitats and Birds Directives, Water and Marine Framework Directives, etc) or international conventions (e.g. Aarhus and Espoo). Efficiency gains can also be realised through simplifying and streamlining assessment procedures with a view to reducing administrative burden¹¹³, particularly through better pooling of administrative processes and actors. Simplification would benefit public authorities and developers and contribute to the success of other EU policies (e.g. Regional Policy). This specific objective would be translated into the following operational objectives: (a) streamline environmental assessments and (b) specify time-frames for the various stages of the EIA process. Table 4 presents the intervention logic by linking problems, drivers and specific/operational objectives.

Table 4: Links between problems, drivers and specific objectives				
Drivers of the problems		Key and specific problems	Specific objectives	Operational objectives
D1. Broad margin of discretion left to Member States in the screening process to decide whether an EIA is required for Annex II projects	D1+D2	Problems with the screening process P1: Projects with significant environmental impacts escape EIA	1. Introduce and/or strengthen the quality related elements of the Directive (P1+P3) 2. Enhance policy coherence and synergies with other EU/international law and simplify procedures (P2)	Specify the content and justification of the screening decision (P1+P2+P3)
D2. Screening criteria of Annex III not very specific				
D3. Justification of screening decisions not required				
	D3	P3: No justified decisions on screenings		
D4a. No specific requirements for scope and quality of information provided	D4a+D8+D9	Problems in the EIA quality&analysis P4: EIA reports do not focus on the most significant impacts P5: EIA reports with poor quality of environmental data and analysis P6: Insufficient consideration of impacts of project alternatives P7: No justified decisions on development consent P8: Gaps between predicted impacts in EIA reports and actual impacts P9: Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions P10: EIAs do not cover new environmental topics	1. Introduce and/or strengthen the quality related elements of the Directive (P4+P5+P6+P7+P8+P10) 2. Enhance policy coherence and synergies with other EU/international law and simplify procedures (P9)	Specify the content of the EIA report and of the final decision (P4+P5+P6+P7+P8) Streamline environmental assessments (P9) Adjust the Directive to the new environmental issues (P10)
D4b. No sufficiently stringent requirements for assessment of project alternatives				
D4c. No requirements for justification of decisions by competent authorities				
D4d. No specific requirements for post-EIA monitoring				
D5. Potential (environmental) impacts of projects to new environmental issues (e.g. climate, biodiversity) are not sufficiently covered by the EIA Directive				
	D5	P10: EIAs do not cover new environmental topics		
D6. Lack of harmonisation among EU legislation on environmental assessments	D6	Inconsistencies within the EIA process itself and in relation to other legislation P11: Overlaps/duplications with environmental assessments under other	2. Enhance policy coherence and synergies with other EU/international law and simplify	Streamline environmental assessments (P11)
D7. The time-frames for the various stages of the EIA process are not specified or are not specific enough				

¹¹³ The main criticism on the EIA Directive by developers is related to the length of time it takes.

D8. Lack of experience of authorities in some MS	D7	EU legislation	procedures (P10+P11+P12)	Specify time-frames for the various stages of the EIA process (P12+P13)
D9. Lack of expertise of developers and consultants undertaking EIAs		D7+D8 +D9		

4.3. Interdependence between objectives and consistency with EU policies

The two specific objectives are **interrelated** and policy actions will often address more than one objective. For instance, an improved quality of EIA related elements will not only increase the Directive's effectiveness, but is also likely to contribute to harmonisation of practices across the EU. Conversely, the streamlining of environmental assessments and the definition of specific time-frames for the EIA process will contribute to better coherence with existing environmental legislation and will improve the effectiveness of the EIA Directive.

By introducing new requirements with regard to assessing issues such as biodiversity and climate change which are related to the use of natural resources, the EIA Directive can play a crucial role towards the objective of resource efficiency; the revision of the Directive is therefore part of the initiatives aiming to implement the Roadmap to a Resource Efficient Europe¹¹⁴. Furthermore, the revision of the EIA Directive subscribes to the Europe 2020 strategy¹¹⁵, in particular the priority of sustainable growth (see Table 5).

Objectives of the EIA revision	Objective 1: Introduce and/or strengthen the quality related elements of the Directive	Objective 2: Enhance policy coherence and synergies with other EU/international law and simplify procedures
Components of sustainable growth		
Build a more competitive low-carbon climate resilient economy that makes efficient, sustainable use of resources	++	+
Protect the environment, reduce emissions and prevent biodiversity loss	++	+
Capitalise on Europe's leadership in developing new green technologies and production methods	≈	+
Introduce efficient smart electricity grids	≈	++
Harness EU-scale networks to give our businesses (especially small manufacturing firms) an additional competitive advantage	≈	≈
Improve the business environment, in particular for SMEs	+	++
Help consumers make well-informed choices	≈	≈
Scale of relevance: ++ very relevant; + relevant; ≈ not relevant		

While the specific objective 1 aims at reinforcing synergies with challenges resulting from new EU policies, the specific objective 2 aims at enhancing coherence with other EU instruments. As the revision coincides with the draft legislative package which will frame the cohesion policy for the programming period 2014-2020, this is an opportunity to clarify the future application of the EIA to EU co-financed projects (e.g. by inserting specific transitional provisions on the date of application of the new requirements) and to improve the

¹¹⁴ COM(2011) 571.

¹¹⁵ COM(2010) 2020.

administrative capacity to implement the Directive in line with the Commission proposal¹¹⁶. Moreover, the revision of the EIA Directive is also in line with the measures proposed by the Commission in the context of the Trans-European Energy Networks (TEN-E), which aim at simplifying permitting procedures¹¹⁷.

5. POLICY OPTIONS

Non-regulatory policy options, except the use of guidance, have not been considered further¹¹⁸, as they are not adequate and consistent with the main objective of the EIA Directive (i.e. harmonisation of national measures). Such options would result in even greater deviation of practice in EIA, with potential distortions of the internal market and negative environmental effects within the EU, thus generating greater costs than savings. Therefore, a wider range of **regulatory policy options** has been identified, taking into account the opinions and comments expressed during the public consultation.

Option 0 (no policy-change) would not involve any new regulatory action and provides the baseline (described in section 3.4). **Option 0+ (guidance approach)** consists of new or updated Commission guidance to clarify interpretation issues and improve implementation. **Option 1 (technical adaptation)** mostly entails modification of the Annexes to the EIA Directive in order to adapt them to technical and regulatory developments. **Option 2 (modifications of substance)** would amend both the Articles and Annexes of the EIA Directive; depending on the range of the amendments, this option results in three sub-options (2a, 2b, 2c). **Option 3 (merging the SEA and EIA Directives)** would introduce a single joint assessment procedure for plans and projects. **Option 4 (new legislation on environmental assessments)** would repeal the EIA Directive and propose new legislation to harmonise and integrate environmental assessment and/or permit requirements resulting from different legal instruments (e.g. IED, Habitats and SEA Directives, etc.) that would also need to be amended accordingly.

5.1. Policy options discarded

Option 3 is neither feasible nor viable for the following reasons: (a) the information available¹¹⁹ shows that Member States have so far resisted to introduce joint assessment procedures for plans and projects¹²⁰; (b) merging would require a full revision of the SEA Directive and would entail significant institutional and procedural changes in the Member States; (c) a vast majority of Member States underlined that the SEA and the EIA processes should be distinguished, due to their specificities and the limited experience in applying

¹¹⁶ http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm.

¹¹⁷ COM(2011) 658.

¹¹⁸ Annex 6 describes in detail the reasons for discarding non-regulatory options.

¹¹⁹ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

¹²⁰ According to Article 11(1) and (2) of the SEA Directive, Member States may provide for coordination and joint procedures in situations where an obligation to carry out assessments of the effects on the environment arises simultaneously from the SEA Directive and other EU legislation. Hence, the Member States can choose to coordinate SEA and other assessments or introduce a form of joint procedure with one single assessment fulfilling the requirements of both Directives.

SEA¹²¹, as well as because of the different authorities involved; (d) this option is not favoured by any of the stakeholders groups¹²².

Option 4 could potentially bring certain benefits (e.g. ensure a level playing field and simplify the environmental assessment and permitting processes foreseen under different Directives), but is not feasible at this stage for the following reasons: (a) this option would require a thorough evaluation and fitness test of all existing legislation related to environmental assessments and/or permits; (b) the objective of reconsidering all environmental assessments and permitting processes embedded in other EU legislation would not only require various and considerable changes in the scope and content of a number of other relevant pieces of EU legislation, but it would certainly lead to important institutional and administrative changes in EU and national procedures; (c) a broad change of existing EU legislation would be disproportionate, especially in view of the fact that some of the Directives which would have to be modified have only been revised and adopted very recently¹²³; (d) this option is not favoured by any of the categories of stakeholders who participated at the public consultation¹²⁴; (e) because of the various amendments, this option could lead to reopening the discussion of the *acquis* on issues not covered by the review or the purpose/scope of the new Directive.

It should be noted, however, that even if options 3 and 4 are discarded, the inclusion of provisions for better coordination/integration (streamlining) between the EIA and other EU environmental legislation will be addressed as part of other options.

The use of a **Regulation** was not considered further. Taking into account the objectives of the EIA revision and the specific circumstances linked to the implementation of the EIA, a change of instrument, from Directive to Regulation, would not do justice to the multiplicity of projects and the diversity of project related circumstances. Moreover, in view of the current differences in national systems, the move towards a Regulation would require considerable changes by the Member States in order to adapt and harmonise their systems and, apart from considerable political resistance, is likely to generate high costs. Finally, 64 % of respondents to the public consultation were against such a change¹²⁵.

Annex 6 describes in detail the reasons for discarding policy options 3 and 4, and discusses and discards the use of a Regulation.

5.2. Description of the policy options selected for the detailed impact assessment

The majority of respondents to the public consultation favours changes to the existing Directive (54 %) ¹²⁶. The problems and objectives identified for the revision of the EIA

¹²¹ See the Commission reports on the application and effectiveness of the EIA and the SEA Directives (COM(2009)378 and COM(2009)469).

¹²² The public consultation found 29 % being in favour of this option and 50 % against (21 % no opinion).

¹²³ For instance, the IED was adopted in November 2010 following a long revision and discussion process. The ongoing implementation process of the IED in Member States would be put into question thereby creating not only legal uncertainty but most likely also having negative financial repercussions.

¹²⁴ 26 % of all respondents are in favour of this option and 61 % are against (13 % no opinion). Individual citizens and public authorities provided the greatest support for this option (31 % and 29 % respectively); NGOs and businesses were strongly opposed (15 % and 17 % were in favour respectively).

¹²⁵ 23 % were in favour and 13 % had no opinion (based on all responses). Only 14 % of businesses/private companies supported this option; the greatest support (31 %) comes from individual citizens.

¹²⁶ Mainly NGOs (85 %), public authorities (72 %) and individual citizens (53 %).

Directive can be addressed in a proportionate and realistic manner by the policy **options 1, 2a, 2b and 2c**, which will introduce specific changes/amendments to the content of the EIA; Annex 10 describes the proposed amendments to the Directive in detail. Table 6 summarises the links of the amendments to problems and objectives identified¹²⁷.

Table 6: Links of amendments with problems and objectives				
Key problems identified		Specific objectives	Operational objectives	Amendments
Screening	Projects with significant environmental impacts escape EIA	Introduce and/or strengthen the quality related elements of the Directive	Specify the content and justification of the screening decision	Adaptation of Annexes I and II Modification of Annex III
	Projects without significant environmental impacts are subject to EIAs	Enhance policy coherence and synergies with other EU/international law and simplify procedures		Alternative procedure for Annex II projects
	No justified decisions on screenings by authorities	Introduce and/or strengthen the quality related elements of the Directive		Justification of negative screening decisions
EIA quality and analysis	EIA reports do not focus on the most significant impacts	Introduce and/or strengthen the quality related elements of the Directive	Specify the content of the EIA report and of the final decision	Mandatory scoping
	EIA reports with poor quality of environmental data and analysis			Mandatory scoping Quality control of the EIA information
	Insufficient consideration of impacts of project alternatives			Mandatory assessment of reasonable alternatives
	No justified decisions on development consent by authorities			Justification of final decisions
	Potential gaps between predicted and actual impacts			Mandatory post-EIA monitoring
	Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions		Streamline environmental assessments	Adaptation of Annexes I and II Modification of Annex III Coordinated or integrated/joint procedure (EIA 'one-stop shop')
	EIAs do not cover new environmental topics		Adjust the Directive to the new environmental issues	Additional environmental issues Modification of Annex III Quality control of the EIA information
Risks of inconsistencies	Overlaps/duplications with environmental assessments under other EU legislation	Enhance policy coherence and synergies with other EU/international law and simplify procedures	Streamline environmental assessments	Coordinated or integrated/joint procedure (EIA 'one-stop shop')
	Too short or too long public consultation		Specify time-frames for the various stages of the EIA process	Specific time-frames for public consultation
	Excessive time for the processing of EIAs by public authorities			Maximum time-frames for decision-making

However, a quite large share of respondents (41 %) would also support an option involving no changes of the EIA Directive¹²⁸ but only the development of guidance documents; this is why **Option 0+** (guidance approach) has also to be considered further. The above options will be assessed against **Option 0** which corresponds to the baseline scenario. The following sections describe the content of the policy options selected. Table 7 summarises the links of the selected policy options to the problems and objectives of the EIA revision, as well as to the links of options 1, 2a, 2b and 2c to specific amendments¹²⁹.

¹²⁷ Some amendments (e.g. modification of Annex III) are likely to address more than one problem, while some problems (new environmental topics not covered by EIAs) can be addressed by more than one amendment.

¹²⁸ 5 % had no opinion. The largest support for this came from business and private companies (62 %).

¹²⁹ As Option 0+ does not involve any modification, there is no link to specific amendments.

Key problems identified		Specific objectives	Operational objectives	Option 0+	Amendments	Option 1	Option 2a	Option 2b	Option 2c
SCREENING	Projects with significant environmental impacts escape EIA	Introduce and/or strengthen the quality related elements of the Directive	Specify the content and justification of the screening decision	Update guidance on the screening procedure and on the project categories	Adaptation of Annexes I and II	✓	-	-	✓
	Projects without significant environmental impacts are subject to an EIA	Enhance policy coherence and synergies with other EU/international law and simplify procedures			Modification of Annex III	✓	✓	✓	✓
					Alternative procedure for Annex II projects	✓	✓	✓	✓
No justified decisions on screenings	Introduce and/or strengthen the quality related elements of the Directive	Justification of negative screening decisions	-	✓	✓	✓			
EIA QUALITY AND ANALYSIS	EIA reports not focusing on the most significant impacts	Introduce and/or strengthen the quality related elements of the Directive	Specify the content of the EIA report and of the final decision	Update existing guidance (on scoping and EIA review checklist) and develop new guidance on monitoring of predicted impacts	Mandatory scoping	-	-	✓	✓
	EIA reports with poor quality of environmental data and analysis				Mandatory scoping	-	-	✓	✓
					Quality control of the EIA information	-	-	✓	✓
	Insufficient consideration of impacts of project alternatives				Mandatory assessment of reasonable alternatives	✓	-	✓	✓
	No justified decisions on development consent				Justification of final decisions	-	✓	✓	✓
	Potential gaps between predicted and actual impacts				Mandatory post-EIA monitoring	-	-	✓	✓
	Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions				Adaptation of Annexes I and II	✓	-	-	✓
Modification of Annex III		✓	✓	✓	✓				
Coordinated or integrated/joint procedure (EIA 'one-stop shop')		-	✓	✓	✓				
EIAs do not cover new environmental topics	Additional environmental issues	✓	-	✓	✓				
	Modification of Annex III	✓	✓	✓	✓				
	Quality control of the EIA information	-	-	✓	✓				
RISKS OF INCONSISTENCIES	Overlaps/duplications with environmental assessments under other EU legislation	Enhance policy coherence and synergies with other EU/international law and simplify procedures	Streamline environmental assessments	Develop new guidance on streamlining environmental assessments	Coordinated or integrated/joint procedure (EIA 'one-stop shop')	-	✓	✓	✓
	Too short or too long public consultation	Specify time-frames for the various stages of the EIA process	Specify time-frames for the various stages of the EIA process	Develop new guidance on best practices related to public consultation and EIA decision-making	Specific time-frames for public consultation	-	✓	✓	✓
	Excessive time for the processing of EIAs by public authorities				Maximum time-frames for decision-making	-	✓	✓	✓

5.2.1. Option 0+ - Guidance approach

This option seeks to enhance the implementation efforts through Commission guidance. Existing guidance documents would be updated and new ones developed, where appropriate, in order to address the problems identified. Guidance would refer to the stages of the EIA process (i.e. updating of the guidance documents on screening, scoping and the EIA review

checklist or new guidance on streamlining environmental assessments), specific environmental issues to be addressed in EIA reports (e.g. climate change and biodiversity) and specific guidance for types of projects (e.g. energy projects). In addition, this option implies intensified enforcement action, based on the priorities laid down in the Commission's communications¹³⁰.

Improved policy coordination and exchange of information (e.g. support to national EIA networks) would continue to address problems in implementation. For instance, due to the allowed flexibility for Member States in transposing some aspects of the Directive and the right of Member States to set stricter requirements, many Member States have already voluntarily gone beyond the Directive's provisions. The Commission services would identify the benefits of such requirements and would promote their use across the EU. This would be particularly relevant as regards measures aiming to streamline environmental assessments, practices of public consultation and measures framing the EIA and permitting decision-making processes. Furthermore, important rulings from the ECJ or national courts would be collected and disseminated.

As part of this option, existing policy developments which will affect the EIA process in future years also need to be taken into account both in guidance and enforcement activities and could potentially be related to the Habitats and Birds Directives, the Industrial Emissions Directive (2010/75/EU), Water Framework Directive (2000/60/EC), Marine Strategy Framework Directive (2008/56/EC), Waste Framework Directive (2008/98/EC), as well as the new legal framework related to specific categories of projects, e.g. energy infrastructure projects¹³¹, offshore oil and gas projects¹³².

5.2.2. *Option 1- Technical adaptation*

This option aims to **adapt the scope of the Directive (mainly its Annexes) to the new technical and regulatory developments by introducing a minimum number of changes**: update of project categories (Annexes I and II), clarification of screening criteria (Annex III), and modification of the information to be submitted by the developer (Annex IV). This policy option was the most supported by the respondents to the public consultation: 61 % were in favour, 34 % against and 5 % not having an opinion¹³³. Besides, such an option could also satisfy those respondents who support no changes of the EIA Directive and can be seen as a logical prolongation of Option 0+. The following amendments of the EIA Directive can be envisaged:

Adaptation of Annexes I and II: this amendment would aim at tackling the problems related to the discrepancies in screenings and the inconsistency with other policies, mainly those involving additional environmental issues. This amendment is linked to the implementation of the criteria listed in Annex III. The adaptation process would include moving project categories from Annex II to Annex I¹³⁴ and adding new projects to both Annexes¹³⁵.

¹³⁰ COM(2012)95 and COM(2008)773.

¹³¹ Proposal for a Regulation on guidelines for trans-European energy infrastructure (COM(2011)658).

¹³² Proposal for a Regulation on safety of offshore oil and gas prospection, exploration and production activities (COM(2011)688).

¹³³ The largest support for this option came from NGOs (89 %) and public authorities (81 %).

¹³⁴ For instance, in some Member States (Greece, Romania) projects meeting the thresholds provided for by the IED are automatically subject to an EIA.

¹³⁵ For instance, several Member States have introduced golf courses or desalination plants when transposing the Directive.

However, even if the respondents to the public consultation favour the technical adaptation option, they were against the broadening of Annex I¹³⁶ and rather prefer targeted changes to the project categories.

A number of Member States (e.g. Austria, Denmark, Sweden, Italy, Greece) have adopted **alternative procedures for Annex II projects**, mainly for small-scale activities and projects¹³⁷, which are often carried out by SMEs. Prior to or during the screening process, the developer modifies the project at an early stage to reduce any negative impacts; hence an EIA is not needed. Moreover, during the screening stage, if it appears that a project impacts on a few environmental media and appropriate solutions are identified to avoid or mitigate such effects, an EIA will not be required. For instance, in Denmark, almost 50 % of projects are changed as a result of this process¹³⁸. By specifying the content of the screening decision and streamlining the process, this amendment would ensure that EIAs are carried out only for projects that would have significant environmental effects, avoiding unnecessary administrative burden for small-scale projects. To reach its full potential, this measure will have to be combined with the setting of maximum time-frames for authorities to make their final decisions.

In order to address discrepancies in the screening process for Annex II projects, the **modification of Annex III** is crucial. The modified screening criteria would mainly address the issue of ‘salami-slicing’ and cumulative impacts. The public consultation found the stakeholders divided, as 44 % were in favour of this policy option and 47 % against¹³⁹.

Mandatory assessment of reasonable alternatives would be required as part of the information to be submitted by the developer¹⁴⁰. This assessment should include at least the ‘zero alternative’ and one ‘reasonable’ alternative (e.g. of a technical or spatial nature or related to the timescale for construction and operation). 13 Member States have already introduced a legal obligation to consider specific alternatives (including the ‘zero-alternative’ in some cases). This amendment was supported by 55 % of all respondents to the public consultation.

Additional environmental issues (i.e. climate change, biodiversity, marine environment, availability of natural resources, disaster risks), which at present are not specifically mentioned in the relevant sections of the EIA Directive (Articles 3 and 5, Annexes III and IV), will be covered. Hence, when determining whether an EIA is needed, the above issues should be considered. Furthermore, the EIA report should describe impacts of projects on the above issues and vice versa (e.g. impacts of a project on greenhouse gas emissions and climate change impacts on a project).

¹³⁶ 60 % reject it, 33 % are in favour (7 % no opinion). Public authorities and business are strongly opposed (87 %).

¹³⁷ Of the 12 project categories listed in Annex II, 9 are related to industrial activities (e.g. extraction, energy, production and processing of metals, minerals, chemicals, food, rubber, textile, wood).

¹³⁸ See the presentations of Lone Kørnøv and Kaja Peterson at the stakeholder Conference (available at: <http://ec.europa.eu/environment/eia/conference.htm>).

¹³⁹ The largest support for this option came from consultants (85 %), NGOs (60 %), public authorities (50 %); business and private companies are against (60 %).

¹⁴⁰ The current provisions of the EIA Directive only require ‘an outline’ of the main alternatives studied by the developer.

5.2.3. Option 2 - Modifications of substance

This policy option **builds on Option 1**, but aims at **adapting both the Annexes and the Articles** of the Directive, in particular those related to various stages of the EIA process. Hence, Option 2 has a considerable potential for changes, especially if all possible amendments (see Table 7) would be taken on board. The public consultation found 38 % being in favour of a comprehensive modification, 53 % against, and 9 % not having an opinion¹⁴¹. A large percentage of respondents (56 %) was in favour of changes on more specific issues, including measures to streamline the EIA process. For instance, the European Wind Energy Association¹⁴² called for streamlining the EIA process and proposed changes which in that respect require comprehensive modifications of the EIA Directive. **The paragraphs below set out all possible amendments of Option 2, which are add-ons to the amendments examined above under Option 1.**

Screening decisions, which have to be made publicly available, do not so far include the reasons to justify the nature of the decision. In order to be consistent with the transparency objective of the EIA Directive and the Aarhus Convention, public authorities would have to **justify negative screening decisions** and make their reasoning public. This would also be in line with the relevant Court case-law¹⁴³ and was supported by 62 % of the respondents to the public consultation.

In the scoping stage, which is optional under the current Directive¹⁴⁴ but would become mandatory, the competent authority is required to specify the content and level of detail of the environmental information to be submitted by the developer (e.g. ‘significant’ environmental impacts of the project, project alternatives to be considered, methodologies for the analysis, data sources) and the EIA process (timeline and milestones of the process, authorities to be consulted); hence, the developer can avoid potential delays later on in the process (because the request for additional information would be limited), while a better quality assessment is ensured. Scoping is therefore a highly recommended measure to optimise EU permitting procedures¹⁴⁵. 37 % of all respondents to the public consultation supported mandatory scoping and 10 % are in favour of mandatory scoping at the request of environmental authorities¹⁴⁶. Introducing **mandatory scoping** would improve the effectiveness and efficiency of the EIA process. In approximately in half of the Member States, scoping is already mandatory. Mandatory scoping has strong links with other amendments (i.e. the assessment of reasonable alternatives and additional environmental issues).

Article 8 of the Directive only requires the results of the consultations and the environmental information gathered to be taken into account in the development consent without specifying how this is done. Hence, there is no obligation for competent authorities to provide **justification of their final decisions**. The Directive provision would be further detailed to ensure that competent authorities explain how the results of the consultations and the

¹⁴¹ 77 % of NGOs supported this option compared to only a 19 % support from business and private companies, in particular from Germany.

¹⁴² EWEA – European Wind Energy Association (2010), Wind Barriers: Administrative and grid access barriers to wind power.

¹⁴³ See cases C-87/02 and C-75/08.

¹⁴⁴ It is carried out at the request of the developer.

¹⁴⁵ Roland Berger Strategy Consultants (2011) Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations.

¹⁴⁶ The largest support came from NGOs (80 %), consultants (57 %), public authorities (50 %); business and private companies consider that scoping is needed at the request of the developer (73 %).

environmental information were taken into consideration, in particular when the EIA shows that a project will have negative environmental effects. This amendment will be enhanced in its effects by the mandatory scoping, as explained in the previous paragraph.

The need for reinforcing the **quality control of the EIA information** would address the problems pointed out by many Member States and stakeholders. Among the various quality control measures already put in place in some Member States, two main possibilities emerge: the use of *accredited consultants*¹⁴⁷ and the creation of a *quality control committee*¹⁴⁸; these two possibilities could also be implemented simultaneously. The implementation of a mechanism to ensure the quality of the environmental information supplied by the developer was supported by 53 % of all respondents to the public consultation.

Mandatory post-EIA monitoring of significant impacts from the construction and operation of a project, is relevant to ensure that the impacts from projects do not exceed impacts initially predicted in the EIA report, take account of additional relevant information on the foreseeable impacts, e.g. due to climate change, and necessary remedial measures are taken as early as possible. It is also relevant to assess which methods are sufficiently robust to predict actual impacts from future projects, with a view to improving the characterisation of impacts in future EIA reports. Finally, it brings consistency with the SEA Directive and the international best practices¹⁴⁹. Such a requirement was supported by 47 % of the public consultation respondents and rejected by 49 %¹⁵⁰. This requirement is already in place in two Member States.

The Directive would be amended to **specify time-frames for the public consultation phase** (minimum and maximum ones) to harmonise the current considerably varied practices¹⁵¹. Competent authorities would be allowed to extend these time-frames, provided that this is duly justified¹⁵². During the 2010 public consultation on the EIA Directive's review, respondents generally favoured the introduction of minimum and maximum time-frames for public consultation¹⁵³.

The Directive would be amended in order to specify a **maximum time-frame for the competent authorities to issue their final decision** (screening decision and EIA decision)¹⁵⁴, once all the required information has been submitted by the developer, mainly the information identified at the scoping stage. An extension of the time-frames would be possible, provided that adequate justification is given (e.g. new circumstances or complexity of the proposed project). The introduction of such time-frames is also recommended as a highly relevant

¹⁴⁷ Accredited consultants exist in at least 14 Member States.

¹⁴⁸ Such committees are already in place in 4 Member States (NL, FR, IT, EL).

¹⁴⁹ 'EIA has little value unless follow-up is carried out because without it the process remains incomplete and the consequences of EIA planning and decision-making will be unknown' (IAIA (2007) EIA Follow-Up – International Best Practice Principles, <http://www.iaia.org/publicdocuments/special-publications/SP6.pdf>).

¹⁵⁰ The largest support for monitoring came from consultants (94 %), NGOs (92 %), public authorities (73 %); business and private companies (mainly from Germany) are against (76 %).

¹⁵¹ The average duration of the public consultation phase is estimated at 1.6 months (GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive).

¹⁵² The extension would depend on the nature, complexity, location and size of the proposed project.

¹⁵³ Maximum time-frames: 51 % yes vs. 43 % no; minimum time-frames: 49 % yes vs. 46 % no.

¹⁵⁴ The average duration of the screening stage is 1.2 month (this can range from 0.1 to 3 months depending on the Member State), while the average duration for issuing the final decision is 2 months (ranging from 1 to 3 months depending on the Member State). See GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

measure to optimise EU permitting procedures¹⁵⁵. The introduction of a maximum time-frame for the screening decision was supported by 69 % of all respondents to the public consultation.

One of the amendments would concern the introduction of a mechanism, a sort of **EIA ‘one-stop shop’**. This mechanism will not necessarily entail the creation of a new specialised body, but, through the designation of an authority for facilitating and managing the development consent procedure, it will ensure **coordination or joint/integrated procedures** of the EIA process with the environmental assessments required under other relevant EU legislation, e.g. the IED, the Habitats Directive, WFD and the SEA Directive (this would be done through a modification of the EIA Directive, not the other Directives). This way it will formally address potential overlaps and inconsistencies between environmental assessments.

In view of the percentage of respondents to the public consultation (56 %) that were in favour of more specific changes, it was decided to assess three alternative sub-options (2a, 2b and 2c). These sub-options reflect the **varying degrees of changes to the existing EIA process** and the **various levels of policy ambition**, with their associated potential administrative costs and the **interlinkages between the possible various amendments**. The content of the options and how they are linked to the problems are presented in Table 7.

- **Option 2a (basic modifications)** includes those amendments aiming to improve the efficiency of the EIA process by simplifying and streamlining it. Hence, it includes 7 amendments: introduction of an alternative screening procedure, the modification of Annex III, the justification of the final decisions, the introduction of specific time-frames (for public consultation and for decision-making) and the coordinated or joint procedures for the EIA process and other environmental assessments.
- **Option 2b (targeted modifications)** is based on Option 2a with five additional amendments aiming at reinforcing the quality of the EIA process: mandatory scoping, mandatory assessment of reasonable alternatives, inclusion of additional environmental issues, quality control of the EIA information and mandatory monitoring. In total, Option 2b includes 12 amendments.
- **Option 2c (comprehensive modifications)** includes the 12 amendments of Option 2b described above and in addition the adaptation of Annexes I and II.

6. ANALYSIS OF IMPACTS

All the impacts discussed below represent incremental costs and benefits with regard to the baseline scenario. Environmental and wider socio-economic impacts have been assessed in a qualitative manner only, due to the lack of quantitative parameters in the Directive and the lack of relevant quantitative data. Direct administrative costs and benefits have been quantified, where sufficient information was available. Specific methodologies and assumptions are described below in each relevant section. The assessment of impacts relies on extrapolations using existing data¹⁵⁶ and case studies. Annex 11 details the data sources, assumptions made and the methodology used. The extent to which Member States will be

¹⁵⁵ Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations.

¹⁵⁶ E.g. examples of Member States which have already implemented some of the measures considered.

affected by the various proposed amendments is different, as it depends on whether similar measures are already implemented. The analysis of impacts has therefore taken into account whether an amendment will affect all or most of the Member States (e.g. in the case of additional environmental issues) or only those where such requirements are not yet in place (e.g. for the assessment of alternatives). It was not possible to make a differentiated analysis per region, as there are no specific data available.

Each section will first analyse the relevant impacts for each of the possible amendments to the EIA Directive. Subsequently, the impacts of each of the selected policy options as outlined in Table 7 will be analysed.

6.1. Environmental impacts

6.1.1. Environmental impacts of the various possible amendments to the EIA

No attempt has been made to distinguish between different environmental impacts associated with the various amendments (e.g. emissions of pollutants, use of resources, climate change), as each amendment is likely to provide multiple environmental benefits. One exception is the amendment related to additional environmental issues, which clearly focuses on certain types of impacts (e.g. disaster risks, biodiversity...). The specific environmental benefits are strongly related to the types of projects being developed in the future. Due to the wide variety of project categories, it is not possible to provide a quantitative assessment of the environmental impacts. The following sections therefore present a broad qualitative assessment. Annex 12 describes the environmental impacts in detail.

The **adaptation of the project categories listed in Annexes I and II** would lead to a higher level of mandatory assessments of Annex II projects and would have a positive environmental impact. However, the scale of such impacts is significantly limited by two parameters: a) the Member States have already moved project categories of Annex II to Annex I or lowered the thresholds of Annex I, considering that, on the basis of the national circumstances, such projects are likely to have significant negative environmental effects; b) the Member States have already added new projects in Annexes I and II¹⁵⁷. Consequently, the benefits from this amendment will vary from limited (for those Member States which imposed stricter criteria, going beyond the classification of the Directive) to high (for those Member States which have not gone beyond the classification of the Directive).

An **alternative procedure for Annex II projects** may have some environmental benefits¹⁵⁸, but its overall environmental impact would be neutral, as it may not produce the same effects for all Member States. The clarification and specification of the **Annex III screening criteria** is likely to have high environmental benefits. It will address the major problem of projects with significant effects escaping an EIA (including the problems of salami-slicing and cumulative effects). Any update that improves the consideration of additional environmental issues will also inevitably have high environmental benefits.

¹⁵⁷ For instance: installations working with Genetically Modified Organisms (GMOs), golf courses, masts for radio and telecommunications, underground electricity cables, desalination plants.

¹⁵⁸ A Danish study, which examined a vast number of screening decisions in Denmark, found that in the majority of the cases, the applicant changed already its project prior to the screening procedure in order to reduce significant environmental effects and hence avoid an EIA (Holm Nielsen, et al. in Journal of Environmental Policy, Assessment, and Management, vol.7 no.1, March 2005).

A **mandatory assessment of reasonable alternatives**, including the zero option, would provide better information for future decision making, induce improvements in the environmental design of projects at an early stage and increase the awareness of developers and of the general public. Such an amendment is also expected to better identify the most efficient use of natural resources and serve research and innovation (e.g. promote the uptake of innovation in terms of materials used or technologies/design employed and indirectly leading to more research). Overall, this amendment would improve the quality of the EIA process and of the final decision and would have high benefits for environment.

Providing information in EIA reports on projects' impacts on **additional environmental issues** would increase the quality of EIA reports and lead to well-informed decisions. This is also likely to contribute to a reduction in greenhouse gas emissions, resilience to disasters, a reduction of environmental damages due to climatic events, a reduction in the loss of biodiversity, an increased protection of the marine environment and savings in the use of natural resources. In the longer term, these new environmental issues would be better taken into account at an early stage of project design (before EIA application). This amendment would also contribute to increased overall environmental awareness of the public concerning these environmental challenges. This amendment is therefore expected to have high benefits. More specific benefits are discussed in Annex 12.

The **justification of negative screening decisions** may have a positive environmental impact by obliging the authorities to better preparing and justifying their decisions. Similar impacts are expected from the **justification of final decisions**; indeed, authorities would be obliged to better motivate decisions which grant development consent to projects with significant negative effects and would have to demonstrate how consultations and the EIA information were taken into consideration. Both amendments would be expected to have limited environmental benefits.

A **mandatory scoping** procedure clarifies the environmental issues to be covered by the EIA report, identifies the most significant environmental impacts and specifies preferred methodologies for their assessment, advises relevant information sources and considers the efficient use of natural resources. Hence, the EIA report is likely to be of better quality, without significant gaps in the environmental information, and would provide robust evidence for the final decision. Scoping would result in significant environmental benefits¹⁵⁹ in those Member States where scoping is not yet mandatory (approximately half of them¹⁶⁰).

Mechanisms for **quality control of the EIA information** (accredited consultants or national quality control committees) will have significant environmental benefits, as a means to ensure better quality of EIA reports and better informed final decisions. The use of '**accredited consultants**', having sufficient experience and expertise¹⁶¹, to prepare or to verify EIA reports would ensure that the information and the assessments are objective¹⁶². Such mechanism has

¹⁵⁹ The overall majority of the new Member States considers scoping as an important feature of an adequate EIA regime and beneficial in improving the quality of the EIA (in COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive).

¹⁶⁰ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive.

¹⁶¹ The accreditation should not be based on the possession of specific professional qualifications, but on the assessment of the experience/expertise of the consultants.

¹⁶² In the Walloon region of Belgium, the accreditation procedure seems to have been effective in improving the overall quality of EIAs. Even if not all EIAs are of good quality, the process works well, as the accreditation of consultants which would have produced unsatisfactory work is cancelled or

been mainly used by the Member States who joined the EU after 2004; it could be argued that public authorities, developers and consultants in Member States with more experience in the EIA would not need such an accreditation process¹⁶³. However, the challenges resulting from the need to assess complex projects or specific issues may require the use of accredited experts in order to ensure that the EIA information is complete and the assessments robust and objective. The review of EIA reports by **national ‘quality control committees’** would bring similar environmental benefits, as it would provide a critical and objective opinion on the quality of EIA reports.

The environmental benefits of **mandatory post-EIA monitoring** have been widely discussed in EIA-related literature¹⁶⁴. Ultimately it is not the predicted impacts, but rather the real effects of the construction and operation of projects that are relevant for protecting the environment. This requirement would provide a higher level of environmental protection, by checking whether actual impacts are similar to impacts predicted in the EIA report and by enabling learning from experience to occur¹⁶⁵. If actual negative impacts are more significant than expected, monitoring would enable early identification of the problem and better mitigation or compensation of environmental damages. Such a requirement would also contribute to improved quality of EIA reports. Consequently, this amendment will have high environmental benefits.

In Member States where the public consultation phase can be considered as being too short to ensure effective public consultation, an increase in the minimum duration could provide environmental benefits (i.e. additional time-frame for debating on environmental impacts and mitigation measures; better integration of environmental considerations in the project’s design; well-informed decisions). According to available information, if the minimum **time-frame for public consultation** is set at one month for the consultation on the EIA information submitted by the developer, this will increase the minimum duration of public consultation phase in six Member States. Hence, the environmental benefits would overall be limited. A maximum time-frame for public consultation would have no negative environmental impacts, provided that there is a possibility for extending the duration, in the case of particularly complex projects.

Maximum time-frames for decision-making (on screening and EIA decisions) would have no negative environmental impacts, provided that there is a possibility for extending the duration, in the case of particularly complex projects. The introduction of a **coordinated or**

modified (CGEDD (2011), Competencies and professionalization of consultancies with regard to EIAs – Report for the French Ministry of Environment).

¹⁶³ As suggested by the COWI report (2009).

¹⁶⁴ For example see: Dipper, B., C. Jones and C. Wood (1998) Monitoring and Post-Auditing in Environmental Impact Assessment: A Review. *Journal of Environmental Planning and Management* 41 (6), November; Arts J (1998) EIA Follow-up. On the Role of Ex Post Evaluation in Environmental Impact Assessment. PhD thesis, Geo Press, Groningen; Morrison-Saunders A, Baker J and Arts J (2003) Lessons from practice: towards successful follow-up. *Impact Assessment and Project Appraisal*, volume 21, number 1, pages 43–56; Morrison-Saunders A and Arts J (2004) Exploring the Dimensions of EIA Follow-up. Presented at: IAIA’04 Impact Assessment for Industrial Development Whose Business Is It? (IA Follow-up stream), 24th annual meeting of the International Association for Impact Assessment, 24-30 April 2004, Vancouver, Canada.

¹⁶⁵ Knowledge gathered or lessons learnt through monitoring may be transferred into future developments, as illustrated by a case study in the UK (Marshall, R. (2005), Environmental impact assessment follow-up and its benefits for industry. *Impact Assessment and Project Appraisal* 23 (3), pp.191-196).

integrated/joint procedure (EIA ‘one-stop shop’) is likely to have a positive impact on the environment, as it enables a more comprehensive information base for decision-making¹⁶⁶.

Based on the above qualitative description of environmental impacts, a comparative overview is presented in Table 8.

Table 8: Summary of environmental benefits of the possible amendments	
Amendment	Environmental benefits
Modification to Annex III criteria	High
Mandatory assessment of reasonable alternatives	High
Additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use)	High
Mandatory post-EIA monitoring	High
Adaptation of Annexes I and II	Limited to High*
Mandatory scoping	Moderate
Quality control of the EIA information	Moderate
Justification of negative screening decisions	Limited
Justification of final decisions	Limited
Specific time-frame for public consultation	Limited
Coordinated or integrated/joint procedure (EIA ‘one-stop shop’)	Limited
Alternative procedure for Annex II projects	Zero
Maximum time-frame for decision-making	Zero
*Depending on the nature of changes performed (e.g. number and types of projects moved from Annex II to Annex I, new thresholds, new projects added to Annexes, etc.) and the Member States concerned (the effects will be limited for those Member States which have already imposed stricter criteria and have gone beyond the classification of the Directive and high for those Member States which have not gone beyond the classification of the Directive).	

6.1.2. Environmental impacts of the identified policy options

Option 0+: as this option does not involve any change of the Directive, the impacts described above are not relevant. The main action under this option would be the update of existing guidance documents¹⁶⁷ and the development of new ones. These updates¹⁶⁸ might bring environmental benefits (better assessment by the public authorities or anticipation of an EIA requirement by developers). However, with regard to screening procedures, the benefits would be limited, as it is unlikely that the competent authorities would ignore binding national thresholds and rules in order to follow the Commission’s guidance. Hence, the problems identified with regard to screening will probably remain.

The development of new guidance documents on specific issues (e.g. climate change and biodiversity) or types of projects (e.g. energy) is likely to have environmental benefits, as the quality of EIA reports and the environmental awareness of the public and the developers would be increased. However, the scale of such benefits is likely to be limited by the fact that such documents would not be binding. On the basis of the experience with the existing guidance, including in other fields (e.g. nature protection), it is unlikely that the environmental benefits would be significant. In addition, even if the situation improves in some Member States, considerable discrepancies across the EU would most likely remain

¹⁶⁶ This is the case in Austria, where all projects requiring a permit (such as those covered by the IED, the Habitats Directive or the water, waste and air legislation) undergo an integrated assessment procedure. For instance see Sommer Andreas, Land Salzburg, One Stop Shop – Conclusions from the Austrian experience with Consolidated Procedures and Integrative Assessment, Presentation for the Conference for the 25th Anniversary of the EIA Directive, Leuven, 18-19 November 2010.

¹⁶⁷ All existing guidance documents are available at: <http://ec.europa.eu/environment/eia/eia-support.htm>.

¹⁶⁸ For instance, the guidance related to the interpretation of the project categories and to the screening process.

leading to an unequal level of environmental protection. Consequently, the environmental benefits of the option 0+ would be negligible to limited.

Option 1: this option is composed of five amendments, of which three have high benefits (modification of Annex III, mandatory assessment of reasonable alternatives, additional environmental issues), one has limited to high benefits (adaptation of Annexes I and II) and one has no benefits (alternative procedures for Annex II projects). This option will address all problems related to screening and some of the problems related to the quality of EIA reports. Based on the above, the overall magnitude of the environmental benefits is expected to be moderate.

Option 2a: this option includes seven amendments, of which **only one has high benefits** (modification of Annex III), while four have limited benefits (justification of the screening and final decisions, specific time-frame for public consultation, EIA one-stop shop) and two have no benefits (alternative procedures for Annex II projects, maximum time-frame for decision-making). This option will mostly address problems related to screening and some of the problems related to the quality of the EIA report and process. Based on the above, the magnitude of the environmental benefits is expected to be limited to moderate.

Option 2b: this option proposes twelve amendments, of which **four have high benefits** (modification of Annex III, mandatory assessment of reasonable alternatives, additional environmental issues, mandatory post-EIA monitoring), two have moderate benefits (mandatory scoping, quality control of the EIA information), four have limited benefits (justification of the screening decision and the final decision, specific time-frame for public consultation, EIA one-stop shop) and two have no benefits (alternative procedures for Annex II projects, maximum time-frame for decision-making). This option will address all problems related to screening and to the quality of the EIA report and process. Based on the above and the synergetic effects between the various amendments, the magnitude of the environmental benefits is expected to be significant.

Option 2c: this option includes the twelve amendments of option 2b and the adaptation of Annexes I and II, which has limited to high benefits depending on the nature of changes made and the Member States concerned, as explained above. This option will address all problems related to screening and to the quality of the EIA report and process, but with a higher combined environmental effect than Option 2b (due to possible **high benefits of the adaptation of Annexes I and II**). The overall magnitude of the environmental benefits is therefore expected to be very high.

6.1.3. Summary of environmental impacts of the policy options

Based on the qualitative description presented above, a comparative overview of environment impacts associated with the different policy options is presented in Table 9. The magnitude of environmental benefits should be viewed as the level of influence a particular policy option would have on specific issues (problems and objectives identified) and as a function of the magnitude of the impacts of specific amendments, **both individually and cumulatively**.

The analysis does not distinguish between short term and long-term impacts, as there is no reason why environmental impacts would differ significantly over time, once the amendments are in place.

Table 9: Summary of environmental benefits of the policy options				
Policy options	Problems addressed (see above section 3.2)	Links with objectives*		Magnitude of environmental benefits**
		Specific	Operational	
Option 0	0	0		0
Option 0+	All	1, 2	All	+
Option 1	<ul style="list-style-type: none"> - Projects with significant environmental impacts escape EIA - Projects without significant environmental impacts are subject to EIA - Insufficient consideration of impacts of project alternatives - EIAs do not cover new environmental topics - Overlaps/duplications with environmental assessments under other EU legislation 	1, (2)	1, 2, 3, (4)	++
Option 2a	<ul style="list-style-type: none"> - Projects with significant environmental impacts escape EIA - Projects without significant environmental impacts are subject to EIA - No justified decisions on screenings by authorities - No justified decisions on development consent by authorities - Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions - Overlaps/duplications with environmental assessments under other EU legislation - Too short or too long public consultation - Excessive time for processing EIA dossiers by public authorities 	1, 2	1, (2), 4, 5	++
Option 2b	<ul style="list-style-type: none"> - Projects with significant environmental impacts escape EIA - Projects without significant environmental impacts are subject to EIAs - No justified decisions on screenings by authorities - Problems in the EIA quality and analysis - EIA reports do not focus on the most significant impacts - EIA reports with poor quality of environmental data and analysis - Insufficient consideration of impacts of project alternatives - No justified decisions on development consent by authorities - Gaps between predicted impacts in EIA reports and actual impacts - Inconsistencies between requirements of EIA Directive and other EU legislation and international conventions - EIAs do not cover new environmental topics - Inconsistencies within the EIA process itself and in relation to other legislation - Overlaps/duplications with environmental assessments under other EU legislation - Too short or too long public consultation - Excessive time for the processing of EIAs by public authorities 	1, 2	1, 2, (3), 4, 5	+++
Option 2c	All	1, 2	1, 2, 3, 4, 5	++++

* Specific objectives: (1) Introduce and/or strengthen the quality related elements of the Directive; (2) Enhance policy coherence and synergies with other EU/international law and simplify procedures. Operational objectives: (1) Specify the content and justification of the screening decision; (2) Specify the content of the EIA report and of the final decision; (3) Adjust the Directive to the new environmental issues; (4) Streamline environmental assessments; (5) Specify time-frames for the various stages of the EIA process. The use of brackets implies that the objective is not fully addressed.

** The magnitude of the impacts (costs/benefits) depends on the level of influence a particular policy option would have on specific issues (problems/objectives): no impact (0), small (-/+), moderate (-/+), significant (-/+), very high (-/+).

6.2. Direct administrative costs

6.2.1. Direct administrative costs of the possible amendments to the EIA

This section assesses the administrative costs related to each amendment and then the changes between the baseline scenario and the different policy options. Orders of magnitude of the estimates provided can be compared with costs for conducting EIAs in the baseline scenario, i.e. 146 to 215 million €/year for public authorities and 558 to 846 million €/year for developers in 2010.

The type and size of projects is an important factor determining the cost of the EIA. In addition, the baseline scenario identified considerable differences between Member States in the way they have transposed and apply the EIA. These factors undoubtedly lead to

significant differences in administrative burden between Member States, even for comparable projects¹⁶⁹. Therefore, quantification of administrative burden provides orders of magnitude of the potential impacts of an amendment at EU level, which can be used to rank the impact of policy options. As Member States have transposed the EIA in different ways, some amendments analysed are already in place (partially or completely) in some of them; hence, for those Member States there will be no additional administrative burden. This is taken into account for each amendment when estimating the overall impact of amendments at EU level. Quantitative estimates provided in the sections below correspond to *long-term* costs and benefits associated with the implementation of the amendments (i.e. not taking into account possible one-off costs for the transposition and implementation of the legislative changes). Given the limited data available, the possible evolution of impacts over time has only been assessed in a qualitative manner, where relevant. Annex 13 describes the direct administrative costs of each amendment in detail.

It is difficult to calculate the overall impact of the **adaptation of Annexes I and II** without specifying in detail which types of projects would be concerned and what new thresholds would be imposed. However, on the basis of reasonable assumptions, an order of magnitude can be given. A shift of projects from Annex II to Annex I would decrease the number of screenings carried out. Under the assumption that only the projects most likely to be subject to an EIA would be transferred to Annex I, the shift is not expected to significantly affect the number of EIAs. Hence, there would be a limited impact on the total cost for authorities and developers reported in the baseline scenario. On the other hand, additional thresholds or types of projects to be included in Annexes I and II would increase the costs for authorities and developers, unless Member States have already imposed similar thresholds and similar additional project categories. If 10 % of the projects undergoing a screening are moved to Annex I and are subject to an EIA, the costs for public authorities and developers would be quite high compared to the baseline (approximately 17-20 %) ¹⁷⁰; the costs can be very high if 15-20 % of the projects undergoing a screening are subject to an EIA. The relative burden of costs of undertaking an EIA is likely to be proportionately higher for **SMEs**, as they are more vulnerable to a change in the scope of the Directive.

A number of Member States have adopted **alternative procedures for Annex II projects**¹⁷¹. The impact of this procedure can only be calculated on a case-by-case basis per Member State and would also depend on what other changes are required, such as moving more Annex II projects to Annex I or modifying Annex III criteria. Based on the information available, only a theoretical estimate of potential impacts can be made; according to a conservative assumption¹⁷², the impact would be in the order of **€ 3.8 million annual savings for**

¹⁶⁹ In some Member States differences might even occur between regions. These differences between regions and Member States are difficult to quantify due to the lack of necessary data.

¹⁷⁰ The average costs of processing one extra EIA is in the order of € 11.000 for the authorities and € 41.000 for developers. If these figures are multiplied by 10 % of the average number of screenings (2.740-3.380), the costs would be for € 30.140.000 to € 37.180.000 for public authorities and € 112.340.000 to € 138.580.000 for developers.

¹⁷¹ For example, in Austria, approximately half the projects submitted to the authorities undergo a 'simplified' EIA procedure. The duration of such a simplified process is estimated to be 50 % of the duration of a normal procedure (Kammer für Angestellte und Arbeiter zu Wien (2008), Die UVP auf dem Prüfstand, Zur Entwicklung eines umkämpften Instruments).

¹⁷² The assumption is that, at EU level, 50 % of Annex II projects could be carried out with 20 % less effort.

authorities and almost €21.4 million annual savings for developers¹⁷³. This estimate takes into account the fact that some Member States already have such a procedure in place. Since projects listed in Annex II are of a small-scale, such procedures would be **particularly relevant for SMEs and for the sectors mentioned in the project categories listed in Annex II** of the Directive¹⁷⁴.

The **modification of the screening criteria listed in Annex III** is expected to reduce the time spent by authorities during the screening, as there would be fewer margins for interpretation. As there is no information from Member States' experience, it is roughly assumed that screening time could be reduced on average by 10 to 20 % at EU level. The associated **annual savings for the authorities** would be **€0.5 to 1.5 million**¹⁷⁵.

The **mandatory assessment of reasonable alternatives**, including the 'zero-alternative', would affect 14 Member States and only projects not already subject to similar requirements arising from other EU legislation (e.g. SEA, Industrial Emissions, Habitats and Water Framework Directives)¹⁷⁶. For developers, additional information will have to be provided at the scoping stage and additional scenarios (e.g. a 'zero-option' and 'reasonable alternatives' related to location, design or technology depending on the project) will have to be taken into account when preparing the EIA report. It is assumed that this amendment would be implemented in conjunction with mandatory scoping option, since this would greatly facilitate its implementation and reduce costs. For the public authorities, this new requirement will increase the number of man-days required to be spent in the EIA process¹⁷⁷, but it will reduce the time needed to answer further requests and issues raised during the public consultation. No information through other sources is currently readily available on the impact of this requirement on developers and on public authorities (e.g. as regards the current implementation of this obligation for other EU Directives or from the Member States where it is already in place). However, according to a conservative estimate, it can be assumed that the costs for the extra work for consultants/developers would correspond to **€41.9 to 55.8 million per year**. This cost may decrease in the long term, as developers and consultants gain more experience. It is also logical to assume that pursuing further the analysis of alternatives may provide for some cost reductions too (in case that an alternative with more benefits and less costs is identified), but it is difficult to quantify them. There could also be policy gains, as looking to alternatives may boost positively the uptake of new technologies and provide for innovation and research. For public authorities, it could be assumed that, on average, 5 % extra time would have to be spent during the EIA process, corresponding to **€3.8 to 5.6 million per year at EU level**.

¹⁷³ This estimate takes into account the fact that some Member States already have a simplified procedure in place.

¹⁷⁴ For instance extraction, energy, production and processing of metals, minerals, chemicals, food, rubber, textile, wood.

¹⁷⁵ Assuming a total screening cost (i.e. efforts to conduct positive and negative screenings) estimated at 4.8-7.7 million €/year.

¹⁷⁶ Unfortunately it is not possible to calculate the percentage of projects for which the assessment of alternatives is not required under the current state of implementation of the EIA Directive.

¹⁷⁷ In the case of projects which are part of larger plans or programmes subject to the SEA Directive, the incremental work would be minimal since reasonable alternatives would have already been assessed in the context of the SEA process. A similar conclusion can be reached for projects requiring a permit under the IED, as technological alternatives are likely to be assessed in this framework.

It is difficult to estimate the impact from the **assessment of additional environmental issues**, as relevant data is not available (e.g. the proportion and types¹⁷⁸ of projects likely to have significant impacts on each of the additional issues¹⁷⁹). Developers will need to assess a broader scope of impacts, in particular as regards projects with significant impacts on greenhouse gases emissions, on biodiversity, on the marine environment and/or resource use, as well as projects with high vulnerability to a changing climate or to other man-made or natural disasters. As there are no methodologies for assessing these impacts¹⁸⁰, more time will be needed in the first years of implementation. For public authorities, there would also be a slight increase in the time needed during the scoping phase and the review of the EIA report, depending on the type of project and the number of authorities involved. Costs may be higher in Member States where the implementation of the EIA is highly decentralised. The overall additional costs of this amendment, at EU level, are **likely to be moderate to high for public authorities and developers**.

The **justification of negative screening decisions** will require time for the authorities to formally write the reasons for their decision, but it will save time because there will be less queries and informal discussions. On the basis of the information available¹⁸¹, **the annual cost for public authorities would be in the range of € 0.96 to 1.2 million**¹⁸². The requirement to **explain in the final decision** how the opinions expressed during consultations and hearings were taken into account may result in a small increase in the time spent during the last stage of the EIA process. However, this would likely be offset by reduced time needed to justify any decisions that might be challenged by stakeholders later. Overall, it is **unlikely that significant impacts on administrative burden** will result.

In approximately half of the Member States, scoping is already mandatory. Based on the average times spent on the scoping step, the introduction of **mandatory scoping** in all Member States is estimated to cost in the order of € 6.4 million per year for authorities and € 14.8 per year for developers. On the other hand, scoping is generally seen as a useful way of reducing the costs of an EIA procedure¹⁸³. According to a recent survey in the UK (where scoping is not mandatory), the majority of authorities (67 %) consider that scoping yields beneficial effects on the quality of the EIA report subsequently submitted¹⁸⁴. The experience in Hungary¹⁸⁵ shows that ignoring scoping can lead to EIA reports containing a lot of unnecessary or unimportant information. In France, it is noticed that some project developers produce extensive EIA reports on some topics (e.g. air pollution) which would not have

¹⁷⁸ For example, the need to further describe impacts due to indirect greenhouse gas emissions or impacts from a changing climate is likely to concern the majority of projects, while the need to describe impacts on the marine environment would only concern a small number of projects.

¹⁷⁹ Most projects will require further assessment only in relation to one or two additional environmental topics (i.e. only the ones corresponding to significant effects) and very few projects will be concerned by all the additional environmental topics.

¹⁸⁰ Except for the direct impacts on greenhouse gas emissions and the inventory of fauna and flora species.

¹⁸¹ This amendment has been subject to an impact assessment in the UK (UK Communities and local government (2011), The Town and Country Planning (EIA), Regulations 2010, Consultation on draft regulations). The impact assessment concluded that the average net effect of this change is an increase in screening time equivalent to one working hour per negative screening decision.

¹⁸² For 24.660 to 32.110 negative screening decisions per year. Hourly rates for public authorities are taken from the EU Standard Cost Model.

¹⁸³ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

¹⁸⁴ UK Communities and Local Government (2006), Evidence review of scoping in environmental impact assessment, EIA Centre, University of Manchester, DCLG, London.

¹⁸⁵ Radnai and Mondok (2000), Environmental Impact Assessment Implementation in Hungary, in: Bellinger, E., et al. (eds.), Environmental Assessment in Countries in Transition. CEU Press, (p.57-62).

necessarily been the case if scoping had been done correctly¹⁸⁶. This extra time needed for authorities to undertake mandatory scoping is therefore expected to be largely offset by the fact that EIA reports would be of better quality and more focused. Thus, authorities would spend less time requesting further information to developers, reviewing lengthy EIA reports and asking for successive modifications of these reports. For developers, the extra cost is also likely to be offset by time savings during the drafting of the EIA, as the analysis of irrelevant information would be avoided. It was previously estimated that, when an EIA report needs to be revised by the developer, the revision step can represent up to one third of the total EIA cost for the developer. Given the above, overall, this option is likely to have **zero net impact on administrative burden** for authorities and developers.

As regards the mechanisms for ensuring **quality control of the EIA information**, it was not possible to quantify the costs for the creation of a ‘quality control’ committee at national level. However, it is considered as a costly variant for public authorities, especially if a new body has to be created. The use of accredited consultants seems to be the easiest way to address quality issues. This mechanism is already in place in 17 Member States. For those Member States that do not have any of the above requirements, this amendment would generate some costs for the authorities that would have to organise the accreditation process and enforce the requirements¹⁸⁷. However, the extra cost for authorities is likely to be offset by an improved quality of EIA reports, leading to less time being spent at requesting further information from developers and at reviewing revised versions of EIA reports. It is therefore assumed that there would be **no net impact for public authorities**. For consultants, this amendment would involve costs for obtaining and maintaining accreditation. According to the estimates, the average cost (for consultants in those Member States that do not yet have any requirement in place) equals approximately **€2 to 3 million per year**¹⁸⁸. It is assumed that half of this cost would be passed on to developers and business. For developers, the cost of preparing an EIA report might increase due to the fact that accredited consultants may be more expensive to hire than using internal resources. However, only a small share of developers currently has dedicated staff working on EIAs (usually large companies or public entities).

The administrative burden related to **mandatory post-EIA monitoring** would affect projects not already subject to similar requirements arising from other EU or national legislation (e.g. IED, WFD, Habitats Directive), from EU or national guidance (e.g. guidance on the assessment of projects with impacts on biodiversity), from voluntary initiatives (e.g. ISO 14001 or EMAS) or as a mitigation measure proposed by the EIA reports. No data could be found on the share of projects which are subject to environmental monitoring on the basis of the above. In addition, no quantitative information is available on the costs of existing post-EIA monitoring activities. The efforts required are likely to vary from one project to another. The type and number of environmental parameters to monitor and the monitoring frequency would be defined by the authorities on a case-by-case basis. Developers would need time to conduct monitoring activities in compliance with the requirements of the authorities’ final

¹⁸⁶ BIO Intelligence Service (2006), Cost and benefits of the implementation of the EIA directive in France (Appendix IIB to the IVM report of 2007 on Costs and benefits of the EIA Directive).

¹⁸⁷ Costs for the authorities in a decentralised state are higher than in a centralised state (see Nationales Zentrum für Bürokratiekostenabbau (2010), Expert Opinion on the Assessment of Administrative Burdens arising in connection with the draft Soil Protection Directive (COM(2006)232), and taking account of the proposed compromise of the Czech Presidency submitted on 5 June 2009).

¹⁸⁸ The cost per hour in each of the concerned Member States is taken from the EU Standard Cost Model, for Category 1 staff.

decision¹⁸⁹. In the absence of data from Member State's experience and given the wide range of monitoring procedures that could be established, only theoretical estimates can be made. According to a conservative estimation, monitoring would create additional burden in 50 % of projects subject to EIA. In order to obtain an order of magnitude of possible costs, the following assumptions are made: additional monitoring would be required on an annual basis during 3 or 6 years following the development of the project; this requirement would apply to 50 % of projects being developed each year and the time requirements would be 5 to 10 man-days of environmental expert covering the monitoring and evaluation of 1 or 2 key environmental parameters per project per year. Based on these assumptions, the cost of this amendment is estimated at a total of **€ 22.8 to 45.7 million per year for developers**¹⁹⁰, however it would be incurred by different developers each year since monitoring would only be conducted annually during the first 3 years of the project¹⁹¹. **For each new project, the average cost of this option would amount to 1.100 to 2.200 €/year** across the EU. This represents a total of € 3.300 to 6.600 per new project for a 3 year monitoring period¹⁹² (or € 6.600 to 13.200 per new project for a 6 year monitoring period). The above estimates could be lower if monitoring focuses only on projects where significant negative effects are predicted, if one considers the number of projects already subject to environmental monitoring¹⁹³, or if requirements are set to account for less frequent monitoring effort. Public authorities would need additional time to enforce monitoring requirements (e.g. via random inspections and evaluation of monitoring results). In the absence of quantitative data based on Member State experience, only a theoretical estimate can be made. It is assumed that authorities would inspect each year 10 % of projects having received a development consent in the previous year and would spend 1 to 2 man-days for each inspection, which leads to an **additional cost in the order of €0.46 to 0.92 million per year**¹⁹⁴.

Changes related to **time-frames (for public consultation and for decision-making)** will influence the duration of the EIA, but will not have a zero impact on administrative burden¹⁹⁵.

Case studies show that better **coordination or integration of different types of assessment and permits ('EIA one-stop shop')**¹⁹⁶ can result in economic benefits. For public authorities, a reorganisation of the administration in some Member States may be required and, in the short term, this may be costly. However, as this measure will avoid duplication of efforts at the various stages of the EIA process, it is expected to reduce administrative burden in the

¹⁸⁹ The identification of relevant monitoring measures to be proposed in the EIA report is considered as negligible compared to the overall time needed to prepare an EIA report.

¹⁹⁰ Cost calculated for 2010, covering 25 MS (it is considered that NL and FR already have similar requirements in place). The calculation takes into account the average number of EIAs per Member State and the average cost per hour in each Member State given by the EU Standard Cost Model (staff category 1). It is assumed that the cost of monitoring equipment is included in the hourly rates used in the calculation.

¹⁹¹ For a 6-year period, it would be € 45.6 to 91.4 million per year.

¹⁹² Between 8 % and 16 % of the average cost of an EIA.

¹⁹³ If this requirement would apply to 25 % of projects, the annual cost would be € 11.4 to 22.8 million.

¹⁹⁴ The calculation takes into account the average number of EIAs per Member State and the average cost per hour in each Member State given by the EU Standard Cost Model (staff category 1).

¹⁹⁵ The time-frame for public consultation does not entail any direct costs for the developers or the public authorities; the time-frames for decision-making will be based on EU averages and will even provide incentives to public authorities to consolidate internal processes.

¹⁹⁶ Austria has introduced an integrated one-stop shop approach, which combines the assessment and permit requirements of the EIA, the IED, the Habitats Directive and the national legislation on water, air and waste licensing, etc. The SEA Directive is not part of this process, as SEAs are seen to be part of the responsibility of planning authorities, not permitting ones.

medium/longer term. A formalised coordinated or joint procedure for environmental assessments reduces the administrative burden for developers compared to an approach where the assessment and permitting responsibilities are allocated to several separate entities (e.g. reduced environmental assessment costs as a single assessment report would be prepared). Cost savings will be particularly significant in Member States where such procedures are not yet in place and for certain types of projects, e.g. projects related to industrial activities (i.e. also subject to the IED) and projects with significant impacts on biodiversity (e.g. infrastructure projects¹⁹⁷; quarries and mines; projects related to agriculture, silviculture and aquaculture; tourism and leisure projects). In order to assess the **potential cost savings for public authorities and developers**, it would be necessary to have an estimate of the percentage of projects for which there are overlapping information requirements¹⁹⁸. In the absence of such data, it is **difficult to quantify the economic impacts** of this amendment in a more concrete manner.

Table 10: Summary of direct administrative costs/savings of the possible amendments

Amendment	Net impact for public authorities	Net impact for developers
Coordinated or integrated/joint procedure (EIA 'one stop shop')	Moderate savings	Moderate savings
Alternative procedure for Annex II projects	Limited savings (€ 3.8 million)	Limited savings (€ 21.4 million)
Modification of Annex III criteria	Negligible savings (€ 0.5 to 1.5 million)	/
Justification of final decision	/	/
Mandatory scoping	/	/
Specific time-frame for public consultation	/	/
Maximum time-frame for decision-making	/	/
Justification of negative screening decisions	Negligible costs (€ 0.96 to 1.2 million)	/
Quality control of the EIA information	/	/
Mandatory assessment of reasonable alternatives	Limited costs (€ 3.8 to 5.6 million)*	Moderate costs (€ 41.9 to 55.8 million)*
Mandatory post-EIA monitoring	/	Moderate costs (€ 22.8 to 45.7 million)*
Additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use)	Moderate to high costs	Moderate to high costs
Adaptation of Annexes I and II	High costs** (€ 30.1 to 37.2 million)	High costs** (€ 112.3 to 138.5 million)
/ : Zero or negligible costs/savings, i.e. +/- 0-1 % with regard to baseline scenario Limited costs/savings: +/- 1-5 % with regard to baseline scenario Moderate costs/savings: +/- 5-10 % with regard to baseline scenario High costs/savings: +/- 10-25 % with regard to baseline scenario Very high costs/savings: > +/- 25 % with regard to baseline scenario		
*These estimates correspond to the assumptions that would lead to the highest costs (i.e. it is assumed that monitoring would apply with no exemptions to 50 % of projects and/or that the assessment of alternatives would require 15-20 % extra work). It can be reasonably expected that actual costs would be lower (e.g. monitoring could be needed for less projects, due to selection criteria or sampling, while the assessment of alternatives could require less work than the effort assumed, as this often is the experience from other EU legal requirements). Therefore, these are upper limit estimates of costs, not central estimates.		
**These estimates are based on the conservative assumption that 10 % of the projects undergoing a screening are moved to Annex I and are subject to an EIA; the costs can be very high, if 15-20 % of the projects undergoing a screening are subject to an EIA.		

Based on the above description of direct administrative costs and savings of the various amendments, a comparative overview is presented in Table 10.

¹⁹⁷ According to GHK study (2010), in Cohesion Member States most projects are infrastructure related projects (up to 80 % in Greece), whereas in old Member States this is not always the case (only 20 % in France).

¹⁹⁸ Mainly between the EIA Directive and other EU legislation, in particular the SEA Directive, the IED, the Habitats/Birds Directives.

6.2.2. Direct administrative costs of the policy options

Option 0+: as this option does not involve any regulatory change, no additional administrative burden is expected, compared to the baseline scenario. The costs related to the preparation and implementation of guidance documents by the Commission and the public authorities are not expected to be significant.

Option 1: of the five amendments under the option, two will result in negligible (modification of Annex III) or limited (alternative procedures for Annex II projects) savings, one has moderate costs (mandatory assessment of reasonable alternatives), and two have high costs (additional environmental issues and adaptation of Annexes I and II). In total, option 1 leads to an additional annual cost of € 34.9 to 44 million for authorities and of € 155.2 to 195.8 million for developers (plus moderate-to-high costs related to the additional environmental issues). The annual savings would be in the order of € 4.3 to 5.3 million for authorities and € 21.4 million for developers.

Option 2a: of the seven amendments included in this option, four have zero or negligible costs (justification of the screening decision and the final decision, specific time-frame for public consultation, maximum time-frame for decision-making), two will result in negligible or limited savings (modification of Annex III, alternative procedures for Annex II projects) and one will lead to moderate savings (EIA ‘one-stop shop’). In total, option 2a will have negligible annual costs for authorities (€ 0.96 to 1.2 million) and will lead to annual savings in the order of € 4.3 to 5.3 million for authorities and € 21.4 million for developers (plus moderate savings from the EIA one-stop shop).

Policy options	Public authorities		Developers	
	Costs	Savings	Costs	Savings
Option 0	-	-	-	-
Option 0+	0	0	0	0
Option 1	€ 34.9 to 44 million* + moderate to high costs related to the addition of environmental issues	€ 4.3 to 5.3 million	€ 155.2 to 195.8 million* + moderate to high costs related to the addition of environmental issues	€ 21.4 million
Option 2a	€ 0.96 to 1.2 million	€ 4.3 to 5.3 million + moderate savings from the ‘EIA one-stop shop’	0	€ 21.4 million + moderate savings from the ‘EIA one-stop shop’
Option 2b	€ 4.8 to 6.8 million + moderate to high costs related to the addition of environmental issues		€ 65.7 to 103 million + moderate to high costs related to the addition of environmental issues	
Option 2c	€ 34.9 to 44 million* + moderate to high costs related to the addition of environmental issues		€ 178 to 241.5 million* + moderate to high costs related to the addition of environmental issues	
0 : Zero or negligible costs/savings, i.e. +/- 0-1 % with regard to baseline scenario Limited costs/savings: +/- 1-5 % with regard to baseline scenario Moderate costs/savings: +/- 5-10 % with regard to baseline scenario High costs/savings: +/- 10-25 % with regard to baseline scenario Very high costs/savings: > +/- 25 % with regard to baseline scenario				
* These estimates are based on the assumption that 10 % of the projects undergoing a screening are moved to Annex I and are subject to an EIA; the costs can be very high, if 15-20 % of the projects screened are subject to an EIA.				

Option 2b: of the twelve amendments included in this option, six have zero or negligible costs (justification of the screening decision and the final decision, specific time-frame for public consultation, maximum time-frame for decision-making, mandatory scoping, quality control of the EIA information), two will result in negligible or limited savings (modification of Annex III, alternative procedures for Annex II projects), one will lead to moderate savings (EIA one-stop shop), two have moderate costs (mandatory assessment of reasonable alternatives, mandatory post-EIA monitoring), and one has moderate to high costs (additional environmental issues). In total, option 2b will lead to annual savings in the order of € 4.3 to 5.3 million for authorities and € 21.4 million for developers (plus moderate savings from the EIA one-stop shop). The additional annual costs would be in the order of € 4.8 to 6.8 million for authorities and € 65.7 to 103 million for developers (moderate-to-high costs related to the additional environmental issues should be added to both estimates).

Option 2c: this option will have the same savings as option 2b. However, its costs will include the additional high costs of adapting Annexes I and II and amount to approximately € 34.9 to 44 million for authorities and € 178 to 241.5 million for developers (moderate-to-high costs related to the additional environmental issues should be added to both estimates).

Table 11 presents a comparative overview of the direct administrative costs and savings of the various policy options with regard to the baseline scenario¹⁹⁹.

6.3. Wider socio-economic impacts

6.3.1. Wider socio-economic impacts of the possible amendments to the EIA

The wider economic and social impacts described in this section correspond to indirect, long-term impacts of the amendments. As some of the wider socio-economic impacts are very similar for all amendments, they are described in a first section (functioning of the internal market and competition; competitiveness and trade; better integration of environmental aspects; public health and safety). Other types of impacts, which may differ significantly from one amendment to the other, are described separately in the remainder of this chapter. Annex 14 describes the wider socio-economic impacts in detail.

6.3.1.1. Wider socio-economic impacts common to most of the amendments

Functioning of the internal market and competition: all the amendments analysed aim to set higher minimum standards for different stages of the EIA process and thus contribute to an increased degree of harmonisation of the EIA practices between Member States; this is the case in particular for the amendments related to the screening procedure (alternative procedure for Annex II projects, modification of Annex III criteria and justification of negative screening decisions), the justification of final decisions, the introduction of time-frames and the mandatory scoping and assessment of alternatives. Increasing harmonisation between Member States contributes to improving the functioning and efficiency of the internal market, as developers and business in general benefit from a more level playing field and less distorted market conditions. For example, the differences in the overall duration of EIAs across the Member States can provide an indication of the discrepancies in terms of the

¹⁹⁹ The levels of costs and benefits (zero, negligible, limited, moderate, high, very high) correspond to the estimated order of magnitude of costs or savings with regard to the costs for conducting EIAs in the baseline scenario, i.e. 146 to 215 million €/year for public authorities and 558 to 846 million €/year for developers in 2010.

EIA procedures, the level of requirements imposed by national authorities to developers and the ability of developers to submit sufficiently completed EIA reports²⁰⁰. Developers and business involved in transboundary projects (e.g. energy and transport) would be the first to benefit from a harmonisation of EIA requirements and practices within the EU; benefits are also expected for business related to the **sectors mentioned** in the project categories listed in Annex II of the Directive²⁰¹.

The magnitude of the benefits from the increased degree of harmonisation depends on the specific changes that will be made. For those Member States that have already put these amendments in place voluntarily, the benefits would be moderate, while for those that have not done so the benefits would be higher. The overall effect of the benefits is expected to be moderate.

Competitiveness, trade and investment flows: the present revision is not relevant for all the above aspects of competitiveness; it refers mostly to effective market competition. At least eight amendments²⁰² would clarify the administrative requirements, provide a more certain regulatory environment and improve the overall economic and business environment. Hence, they are likely to have direct moderate **competitiveness** gains for developers and business, by reducing uncertainties and delays, and by avoiding lost business opportunities and any costs related to delays²⁰³. To some extent, this would also be the case for the amendments related to the assessment of alternatives and the quality control mechanism, especially if they are combined with other amendments, such as mandatory scoping. **SMEs and the sectors mentioned in the project categories listed in Annex II** of the Directive will very likely benefit more from the above changes, in particular from the alternative screening process. As mentioned in the baseline scenario, delays caused by lengthy EIA processes are one of the main issues raised by developers²⁰⁴. A more certain regulatory environment and clear time-frames for certain steps of the EIA process are beneficial to attract private investment.

Avoiding new costs: 9 of the 13 amendments will have **no additional administrative cost (or will even generate savings)**. Two amendments (assessment of alternatives, monitoring) will have moderate costs (i.e. 5-10 % with regard to the baseline) and two amendments (additional environmental issues, adaptation of Annexes I and II) will have high costs (i.e. 10-25 % with regard to the baseline). However, the EIA costs only represent 1 % of the total costs of projects (on average), i.e. a relatively modest part of total development costs²⁰⁵. On the basis of the above, even the most costly amendments are not likely to affect the competitiveness of EU developers significantly.

²⁰⁰ The average duration of the EIA process is approximately 11 months, ranging from 5 months (Slovenia, Estonia) to 27 months (Spain), with a standard deviation of more than 6 months (see GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive).

²⁰¹ For instance extraction, energy, production and processing of metals, minerals, chemicals, food, rubber, textile, wood.

²⁰² Alternative procedure for Annex II projects, modification of Annex III, justification of (screening and final) decisions, introduction of time-frames, mandatory scoping, EIA one-stop shop.

²⁰³ For instance, mandatory scoping would make the content of the EIA report clearer and would help planning.

²⁰⁴ During the public consultation on the review of the EIA Directive, about 22 % of respondents (all categories) found that the EIA 'always' causes considerable delays in the approval of projects and about 25 % found that it 'sometimes' causes considerable delays.

²⁰⁵ Costs range from 0.01 % to 2.37 % in some exceptional cases (see GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive).

Avoided risk of environmental damages and cost savings through better integration of environmental aspects: 11 of the 13 amendments analysed are expected to bring environmental benefits, as described in Section 6.1. These environmental benefits also lead to benefits, in terms of avoided risk of environmental damages and cost savings through better integration of environmental aspects. Benefits would be high for five amendments (adaptation of Annexes I and II, modification of Annex III criteria, additional environmental issues, assessment of reasonable alternatives; mandatory monitoring). For instance, in the case of climate change and disaster risks to projects, it has been demonstrated that the avoided damage costs to population, materials assets, the economy and the environment largely outweigh the costs of adequately assessing and preventing such risks²⁰⁶.

Public health and safety and quality of life: For 8 of the 13 amendments²⁰⁷, moderate or high benefits are expected in terms of public health and safety and quality of life, for similar reasons as those described in section 6.1. The avoided adverse impacts on public health, safety and quality of life are potentially significant for infrastructure projects, especially in the transport sector, which generate important amounts of local air pollutants and are a source of other negative externalities (noise, congestion, etc.)²⁰⁸.

Costs related to delays and legal disputes: The measures aiming at improving the quality of the EIA process (e.g. use of accredited consultants, assessment of alternatives, monitoring) can reduce the number of disputes on the quality of the EIA information. For instance, the assessment of alternatives and the monitoring of significant negative effects help building social acceptance for projects. The improvement of the EIA information will reduce the risks of reports that are rejected by public authorities or the public and have to be revised by the developers. As demonstrated in section 3.1.3, the costs of revising and resubmitting the EIA report can represent up to one third of the total EIA cost for the developer and approximately 17 % of the total costs, on average. This will be translated into reduced costs related to delays and legal disputes both for developers and public authorities. Such costs can seriously affect SMEs, which are more vulnerable due to their limited financial capacity; hence, SMEs will very likely benefit more from such reduced costs. Timely completion of EIA procedures will have positive impacts on climate change, as projects necessary to produce and integrate renewable energies may be implemented in line with the EU's 2020 targets²⁰⁹.

Governance: All amendments which improve the quality of the EIA process will provide greater impartiality, transparency and legitimacy to the decision-making process²¹⁰. Consequently, they will have moderate or high²¹¹ benefits for the civil society.

²⁰⁶ Draft estimates for inland flooding from the ClimateCost project (<http://www.climatecost.cc>) suggest the following: the EU costs of inaction would be 20 billion per year by 2020 and 46 billion by 2050; the EU costs of adaptation would be 2.4 billion per year by 2020 and 5.7 billion per year by 2050; the EU avoided costs (benefits) would be 8 billion per year by 2020 and 20 billion per year by 2050.

²⁰⁷ High benefits are expected from: additional environmental issues; assessment of reasonable alternatives; mandatory monitoring. Moderate benefits are expected from: modification of Annex III; mandatory scoping; quality control of EIA information. The adaptation of Annexes I and II may have limited to high benefits, depending on the projects and Member States concerned.

²⁰⁸ For instance, assessment of reasonable alternatives and mandatory monitoring will contribute avoiding adverse impacts on public health, safety and quality of life from infrastructure projects.

²⁰⁹ In October 2011, the Commission proposed measures to simplify permitting procedures in the context of the Trans-European Energy Networks (TEN-E).

²¹⁰ For instance, see Jan De Mulder, EIA quality issues in a broader decision making perspective, Presentation for the Conference for the 25th Anniversary of the EIA Directive, Leuven, 18-19 November 2010.

Job creation: The additional workload resulting from the new requirements to be addressed in the EIA process (mainly: assessment of alternatives, mandatory monitoring, new environmental issues, adaptation of Annexes I and II) may lead to job creations within environmental consulting companies, as there will be an increased need for various relevant experts. The introduction of monitoring would probably also increase the overall workload of public authorities. However, there is insufficient data to estimate the magnitude of possible impacts on employment. The overall impact on employment would probably remain limited but positive.

6.3.2. Additional wider socio-economic impacts specific to each amendment

The **adaptation of Annexes I and II** and the **modification of the screening criteria of Annex III** would reduce the amount of legal disputes as more certainty would be provided. Given that screening is the most common cause for litigation, moderate benefits are expected regarding the costs related to *legal disputes*.

The introduction of an **alternative procedure for Annex II projects** would be **particularly relevant for SMEs**, which are more affected from the administrative compliance costs inherent to a requirement for an EIA. Annex II of the EIA Directive, which mainly refers to small-scale activities and projects, is the most relevant for SMEs. The aim of the alternative procedure would be to avoiding unnecessary EIAs for projects with low environmental impacts.

The requirements for **assessing reasonable alternatives**²¹² and **additional environmental issues**²¹³ entail *innovation gains* (and indirectly support to competitiveness).

The **justification of negative screening and of the final decisions** would reduce the risk of misinterpretation that often leads to *legal disputes*. Hence, financial and time costs associated with legal disputes would be reduced, for all stakeholders. In addition, such measures will bring greater transparency helping developers to gain a better understanding of EIAs; this may reduce EIA costs for developers in the long-term²¹⁴. Finally, the above amendments would have a strong positive effect on *governance and public participation*.

Mandatory scoping is likely to *reduce the overall duration* of EIA processes, by avoiding additional requests for information by the authorities, when the EIA report is incomplete or after the public consultation²¹⁵. Mandatory scoping may also contribute to reducing unexpected delays. In addition, mandatory scoping would contribute to reducing the number of *legal disputes*, as there would be more clarity at the beginning of the process about the information requested and the methodologies to be employed. There are also synergetic

²¹¹ High benefits are expected from the justification of the screening and final decisions.

²¹² The examination of alternatives, e.g. related to the technology or location of a project, will affect positively the uptake of new technologies and promotion of innovation and research.

²¹³ The assessment of new environmental issues is likely to identify measures for a more cost-efficient project design and thus contribute to innovation.

²¹⁴ The reduction in average EIA costs for developers is due to a reduction in time spent in queries and information requests, and a better understanding of the EIA requirements. This is the conclusion of the impact assessment carried out in England for the introduction of a similar amendment.

²¹⁵ The positive and significant role of mandatory scoping on reducing the duration of EIA processes is also highlighted in a recent study on EU permitting procedures (Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations).

effects from the combined implementation of scoping with the requirements for assessing reasonable alternatives and additional environmental issues²¹⁶. **All the above is particularly relevant for competitiveness and for SMEs.** Finally, mandatory scoping would favour good administration and *transparency* in the EIA process. Overall, the benefits will be moderate, as the amendment is already in place in half of the Member States.

The use of accredited consultants to ensure **quality control of the EIA information** will generate a loss of revenues for consultancies which will not fulfil the accreditation criteria (e.g. technical capabilities, years of experience, EIA track record) and an increase in revenues for those consultancies having obtained the accreditation. The involvement of national quality control committees may introduce an additional step in the EIA procedure, with a risk of additional delays. However, as this measure would also provide greater impartiality and transparency to the decision-making process, this risk of delays would be offset by a reduced occurrence of conflicts between public authorities, developers and/or other stakeholders.

Table 12: Summary of wider socio-economic benefits per amendment

Possible amendments	Wider economic benefits					Wider social benefits		
	Internal market	Competitiveness	Avoided damages and wastage, risk prevention	Decrease in costs on legal disputes	Decrease in costs on delays	Governance	Health, safety, quality of life	Jobs creation
Adaptation of Annexes I and II	Moderate	Limited	Limited to high	Moderate	/	/	Moderate to high	/
Alternative procedure for Annex II projects	Moderate	Moderate	/	/	/	/	/	/
Modification of Annex III criteria	Moderate	Moderate	High	Moderate	/	/	High	/
Justification of negative screening decisions	Moderate	Limited	Limited	Limited	/	High	Limited	/
Mandatory scoping	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	/
Quality control of the EIA information	Moderate	Limited	Moderate	Moderate	Limited	Moderate	Moderate	Limited
Mandatory assessment of reasonable alternatives	Moderate	Limited	High	Moderate	/	Limited	High	Limited
Justification of final decisions	Moderate	Limited	Limited	Moderate	/	High	Moderate	/
Mandatory post-EIA monitoring	Moderate	Limited	High	Moderate	/	/	High	Limited
Additional environmental issues	Moderate	Limited	High	/	/	/	High	Limited
Specific time-frame for public consultation	Moderate	Moderate	Limited	Moderate	Moderate	Moderate	Limited	/
Maximum time-frame for decision-making	Moderate	Moderate	/	/	High	Moderate	/	/
Coordinated or integrated/joint procedure (EIA 'one-stop shop')	Moderate	Moderate	Limited	/	High	Limited	Limited	/

²¹⁶ The identification of reasonable alternatives and of the environmental issues requiring detailed assessment at the scoping stage is likely to avoid requests for additional information at a later stage or a modification or resubmission of the EIA report following the phase of consultations.

The introduction of **time-frames** (for public consultation and decision-making) would reduce the costs related to **delays**, facilitate investments by providing a stable legal framework for investors to plan their investments ahead and reduce the likelihood of unforeseen delays²¹⁷. Moreover, clear time-frames will **improve governance**, as it will increase the transparency of the overall EIA process, allow for sufficient time for public consultation and improve the visibility of developers. **Coordinated or integrated/joint procedures** for EIAs and other environmental assessments (**EIA one-stop shop**) will **reduce the delays** resulting from the overall development consent (permitting) process²¹⁸. In addition, it will have benefits on **governance and public participation** (e.g. easier access to documents). The combined implementation of the above amendments is very likely to have **synergetic effects**.

Table 12 presents a comparative overview of the wider socio-economic impacts associated with each amendment, on the basis of the above qualitative analysis.

6.3.3. Wider socio-economic impacts of the policy options

A comparative overview of the wider socio-economic impacts per policy option is presented in Table 13.

Option 0+: the development of guidance documents summarising and promoting best practices is likely to provide incentives to competent authorities to align with such practices (e.g. better motivation of decisions, time-frames or coordination of assessment procedures). Those Member States that put additional provisions and best practices in place voluntarily would benefit from these more than those Member States that do not take action. Developers may also be convinced to go beyond the requirements of the Directive (e.g. increased use of scoping, environmental issues taken on board in the EIA reports). The scale of benefits will be significantly reduced due to the non-binding character of guidance documents and the effects of the continued discrepancies in the EIA process across the EU.

Option 1: the modification of the Annexes will moderately increase harmonisation and improve the functioning of the internal market. Similar benefits can be expected in terms of competitiveness, in particular through the introduction of an alternative procedure for Annex II projects (as these projects would not be subject to an EIA, which is longer than screening), which is particularly relevant for SMEs. This option will also bring high benefits in terms of avoided damages and wastage, risk prevention, and social benefits (health, safety, quality of life).

Option 2a: this option contains several amendments to increase the degree of harmonisation, which will be beneficial to the functioning of the internal market. In addition, as the different stages of the EIA process will be streamlined, significant competitiveness gains are expected,

²¹⁷ The positive and significant role of legally defined target durations on reducing the duration EIA processes and reducing possible delays is also highlighted in a recent study on EU permitting procedures (Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations).

²¹⁸ See Sommer Andreas, Land Salzburg, One Stop Shop – Conclusions from the Austrian experience with Consolidated Procedures and Integrative Assessment, Presentation for the Conference for the 25th Anniversary of the EIA Directive, Leuven, 18-19 November 2010.

as well as decreased costs due to delays and legal disputes, mainly due to the synergetic effects from the combined implementation of amendments related to time-frames and the one-stop shop. The benefits for governance will also be significant, due to the better justification of the screening and final EIA decisions.

Policy options	Wider economic benefits					Wider social benefits*		
	Internal market	Competitiveness	Avoided damages, risk prevention	Decrease in costs on legal disputes	Decrease in costs on delays	Governance	Health, safety, quality of life	Jobs creation
Option 0	-	-	-	-	-	-	-	-
Option 0+	0	0	0	0	0	0	0	0
Option 1	++	++	+++	++	+	+	+++	0
Option 2a	++	+++	++	++	+++	++	++	0
Option 2b	+++	+++	++++	+++	+++	+++	+++	+
Option 2c	+++	+++	++++	+++	+++	+++	++++	+

The magnitude of the impacts (costs/benefits) depends on the level of influence a particular policy option would have on specific issues (problems/objectives): no impact (0), small (-/+), moderate (-/+), significant (-/+), major (-/+).

* Other social impacts were considered (e.g. on poverty or distribution of incomes), but no significant impacts are expected.

Option 2b: this option will have significant benefits for all kinds of wider socio-economic impacts. All amendments under this option will ensure a high degree of harmonisation, streamline the EIA process and provide a more stable regulatory framework, hence being beneficial to the functioning of the internal market and competitiveness; the synergetic effect of the amendments (e.g. scoping combined with assessment of alternative, time-frames and one-stop shop) will also reduce delays and disputes. This option will also bring moderate to significant benefits in terms of avoided damages and will be equally beneficial as regards health, safety and quality of life. Significant benefits for governance, due to the enhanced quality of the EIA process, and limited benefits in terms of job creation may also be expected.

Option 2c: this option, which includes all amendments, will have the same moderate or significant wider socio-economic benefits. The adaptation of Annexes I and II will provide additional positive socio-economic benefits (avoided risk of environmental damages and cost savings and benefits in terms of public health and safety and quality of life).

7. COMPARING THE OPTIONS

7.1. Comparison and cost-benefits analysis of the possible amendments

Figure 2 below classifies the possible amendments analysed under the different policy options, according to their cost-benefit ratio. In this cost-benefit ratio, costs correspond to administrative burden for public authorities and developers, while benefits include environmental as well as wider indirect socio-economic benefits in addition to potential administrative cost savings.

9 of the 13 amendments analysed are expected to provide moderate or high environmental and socio-economic benefits **without additional administrative costs**.

Of the four amendments with additional administrative costs, two (**assessment of alternatives and monitoring**) are expected to provide high environmental and socio-economic benefits at moderate costs for developers and limited or negligible costs for public authorities; one amendment (**additional environmental issues**) is expected to provide high benefits at moderate to high costs for developers and public authorities (see above sections 6.1.1, 6.2.1, 6.3.1 and 6.3.2). However, in the long-term, environmental and socio-economic

benefits are likely to exceed the administrative costs associated with these amendments. Overall benefits for developers would include, in particular, better level playing field, reduced litigation costs, avoided costs to repair potential damages²¹⁹, possible cost savings from a better integration of environmental concerns into projects (energy savings, more efficient use of natural resources, innovation providing more cost-efficient project design, etc). Overall benefits for the society at large would include a higher level of environmental and public health protection and more transparency.

Figure 2: Classification of possible amendments according to benefit/cost ratio

	Amendments	Policy options				
		0+	1	2a	2b	2c
Moderate/high benefits at no administrative cost	Alternative procedure for Annex II projects	-	✓	✓	✓	✓
	Modification to Annex III criteria	-	✓	✓	✓	✓
	Justification of negative screening decisions	-	-	✓	✓	✓
	Mandatory scoping	-	-	-	✓	✓
	Quality control of the EIA information	-	-	-	✓	✓
	Justification of final decisions	-	-	✓	✓	✓
	Specific time-frame for public consultation	-	-	✓	✓	✓
	Maximum time-frames for decision-making	-	-	✓	✓	✓
	Coordinated or integrated/joint procedure (EIA ‘one-stop shop’)	-	-	✓	✓	✓
	High benefits at moderate administrative costs	Mandatory assessment of reasonable alternatives	-	✓	-	✓
Mandatory post-EIA monitoring		-	-	-	✓	✓
High benefits at moderate to high administrative costs	Additional environmental issues	-	✓	-	✓	✓
Limited to high benefits at high/very high administrative costs	Adaptation of Annexes I and II	-	✓	-	-	✓

One amendment (**adaptation of Annexes I and II**) is also expected to provide limited to high benefits (see above sections 6.1.1, 6.3.1 and 6.3.2). However, its associated administrative costs depend very much upon the specific modifications that would be made (types of projects to be shifted, new thresholds, new project categories), but these can be high/very high for developers and public authorities.

The analysis of impacts also highlighted that **some amendments are closely interrelated**. Their common implementation would increase the overall coherence of changes made to the EIA Directive and may also improve the overall cost-benefit ratio due to possible synergies. Amendments that would benefit from being implemented together are the following:

- The combined implementation of the amendments concerning the screening process (adaptation of Annexes I and II, modification of Annex III, alternative procedure for Annex II projects, justification of screening decisions and maximum time-frame for screening decision) would effectively address one of the main problem areas identified.

²¹⁹ For instance, in the case of climate change and disaster risks to projects, previous studies have already demonstrated that the avoided damage costs to population, materials assets, the economy and the environment largely outweigh the costs of adequately assessing and preventing such risks.

- A mandatory scoping is the necessary condition to limit the additional efforts and costs for developers to implement amendments related to the assessment of reasonable alternatives and the inclusion of additional environmental issues; it will also lead to more legal certainty and a level playing field.
- The implementation of amendments on time-frames will be facilitated by the implementation of coordinated/integrated assessment procedures. A mandatory scoping can also further facilitate the implementation of these amendments (by identifying at an early stage possible synergies between the requirements of the different environmental assessment procedures that need to be coordinated).
- If the assessment of reasonable alternatives and monitoring become mandatory, this should be part of the final decision made by the competent authorities, as the latter would have to explain how such critical issues have been taken into account. The assessment of alternatives and the monitoring measures envisaged to address negative effects would be the main issues showing how environmental considerations were taken into account during the development consent process.

7.2. Comparison of the policy options

Table 14 compares the impacts of the various policy options. It builds upon quantitative estimates developed for the assessment of the administrative impacts and on the results of the qualitative assessments carried out for the non-quantifiable impacts (environmental and wider socio-economic ones).

Policy options	Costs/savings for public authorities	Costs/savings for developers	Environmental benefits*	Wider economic benefits*	Wider social benefits*
Option 0	-	-	-	-	-
Option 0+	0	0	+	0	0
Option 1	Costs: € 34.9 to 44 million** + moderate to high costs related to the addition of environmental issues	Costs: € 155.2 to 195.8 million** + moderate to high costs related to the addition of environmental issues.	++	++	++
	Savings: € 4.3 to 5.3 million	Savings: € 21.4 million			
Option 2a	Costs: € 0.96 to 1.2 million	Costs: 0	++	++	++
	Savings: € 4.3 to 5.3 million + moderate savings from the 'EIA one-stop shop'	Savings: € 21.4 million + moderate savings from the 'EIA one-stop shop'			
Option 2b	Costs: € 4.8 to 6.8 million + moderate to high costs related to the addition of environmental issues	Costs: € 65.7 to 103 million + moderate to high costs related to the addition of environmental issues.	+++	+++	+++
	Savings: € 4.3 to 5.3 million + moderate savings from the 'EIA one-stop shop'	Savings: € 21.4 million + moderate savings from the 'EIA one-stop shop'.			
Option 2c	Costs: € 34.9 to 44 million** + moderate to high costs related to the addition of environmental issues	Costs: € 178 to 241.5 million ** + moderate to high costs related to the addition of environmental issues	++++	+++	++++
	Savings: € 4.3 to 5.3 million + moderate savings from the 'EIA one-stop shop'	Savings: € 21.4 million + moderate savings from the 'EIA one-stop shop'			

* The magnitude of the environmental and wider socio-economic impacts (costs/benefits) depends on the influence a particular policy option would have on specific issues (problems/objectives): no impact (0), small (+), moderate (++), significant (+++), major (++++).
** These estimates are based on the assumption that 10 % of projects undergoing a screening are moved to Annex I and are subject to an EIA; the costs can be very high if 15-20 % of the projects undergoing a screening are subject to an EIA.
/ : Zero or negligible costs/savings, i.e. +/- 0-1 % with regard to baseline scenario Limited costs/savings: +/- 1-5 % with regard to baseline scenario Moderate costs/savings: +/- 5-10 % with regard to baseline scenario High costs/savings: +/- 10-25 % with regard to baseline scenario Very high costs/savings: > +/- 25 % with regard to baseline scenario

The implementation of **Option 0+ (guidance approach)** has no costs and only marginal environmental benefits. **Option 2a (basic modifications)** has negligible costs for public authorities, will result into moderate savings for developers and public authorities and will result in moderate environmental and wider socio-economic benefits. **Option 1 (technical adaptation)** brings similar environmental and wider socio-economic benefits to Option 2a, but its costs are high for public authorities and developers with only limited savings to be expected. **Option 2b (targeted modifications)** will have moderate to high costs for public authorities and developers, but it will also result into moderate savings for developers and public authorities and will bring significant environmental and wider socio-economic benefits. **Option 2c (comprehensive modifications)** will have very high costs for public authorities and developers, but it will also result into moderate savings for developers and public authorities and will bring significant wider economic benefits, as well as major environmental and wider social benefits.

Table 15: Overview of the achievement of objectives per policy option					
Policy options	Specific objective 1: Introduce and/or strengthen the quality related elements of the Directive			Specific objective 2: Enhance policy coherence and synergies with other EU/international law and simplify procedures	
	Operational objective 1	Operational objective 2	Operational objective 3	Operational objective 1	Operational objective 2
	Specify the content and justification of the screening decision	Specify the content of the EIA report and of the final decision	Adjust the Directive to the new environmental issues	Streamline environmental assessments	Specify time-frames for the various steps of the EIA process
Option 0+	≈	≈	≈	≈	≈
Option 1	++	++	+++	++	+
Option 2a	+++	++	+	+++	+++
Option 2b	+++	+++	+++	+++	+++
Option 2c	+++	+++	++++	+++	+++

The level of contribution to the achievement of the objectives is assessed qualitatively on a five scale basis: neutral/marginal (≈); small magnitude (+), moderate (++), significant (+++), major (++++).

In addition to the above cost-benefit analysis, it is necessary to assess to what extent the policy options can help achieving the objectives set for the review of the EIA Directive. An overview is presented in Table 15.

Option 0+ will most likely not contribute to achieving any of the objectives of the EIA revision. **Option 1** would only have a moderate level of contribution towards the achievement

of the specific and operational objectives. **Option 2a** would significantly contribute to the achievement of specific objective 2, mainly due to the time and cost savings from streamlining and simplification potential for developers. Public authorities would also benefit from streamlining and simplification, by avoiding a duplication of certain tasks and taking advantage of synergies between different environmental assessment requirements. There would be also certain benefits in relation to specific objective 1, e.g. better justification of decisions and better quality of the EIA report, but they would be rather moderate. **Option 2b** would significantly contribute to the achievement of specific objectives 1 and 2, through the amendments related to the quality of the EIA process (scoping, quality control of the EIA information, assessment of alternatives, monitoring, additional environmental issues) and the streamlining and simplification of procedures (one-stop-shop; time-frames). **Option 2c** would also significantly contribute to the achievement of objectives 1 and 2. The adaptation of Annexes I and II would ensure a very significant contribution to the achievement of the operational objective related to the assessment of additional environmental issues.

Table 16 compares the options in terms of their effectiveness, efficiency and coherence²²⁰. **Option 0+** is not effective, as it will most likely not contribute to the achievement of any of the objectives of the EIA revision and it only has marginal environmental benefits. **Option 1** cannot be considered efficient, as it would only partially achieve the objectives at a high cost and with only moderate wider environmental and socio-economic benefits. **Option 2a** is efficient, but its performance in terms of coherence and particularly effectiveness is quite weak.

Policy options	Effectiveness	Efficiency	Coherence
Option 0+	Neutral/marginal contribution to the achievement of objectives	No resources needed	Marginal environmental benefits
Option 1	Moderate contribution to the achievement of objectives	High to very high costs for public authorities and developers	Moderate environmental and wider socio-economic benefits
Option 2a	Moderate contribution to the achievement of objectives	Negligible costs for public authorities Moderate savings for developers and public authorities	Moderate environmental and wider socio-economic benefits
Option 2b	Significant contribution to the achievement of objectives	High costs for public authorities and developers Moderate savings for developers and public authorities	Significant environmental and wider socio-economic benefits
Option 2c	Significant/major contribution to the achievement of objectives	Very high costs for public authorities and developers Moderate savings for developers and public authorities	Significant wider economic benefits Major environmental and wider social benefits

Option 2b satisfies the criteria of effectiveness and coherence. With regard to efficiency, it should be noted that the high level of environmental and wider socio-economic benefits (competitiveness gains and increased level of harmonisation) will most likely give rise to high

²²⁰ Effectiveness: the extent to which options achieve the objectives; efficiency: the extent to which objectives can be achieved in a cost-effective manner; coherence: the extent to which options are coherent with the objectives of EU policy and are likely to limit trade-offs across the environmental, social and economic domains.

costs (this is a result of taking up cumulative costs). More specifically, the administrative costs for the mandatory assessment of reasonable alternatives and for monitoring range between 5 and 10 % of the baseline costs for developers in each case; for both amendments, the possibilities of lowering the costs have been duly verified²²¹. The costs of adding environmental issues may range between 5 and 25 % of the baseline costs for developers. However, the analysis showed that significant environmental and wider socio-economic benefits are associated with the implementation of those three amendments, which have the potential to outweigh the administrative costs. In addition, this option includes all amendments leading to moderate savings for developers and authorities.

Option 2c has similar impacts as Option 2b with regard to effectiveness and coherence, but would fail on the efficiency criterion, since its possible high environmental and social benefits would be outweighed by the very high costs, which are mainly due to the adaptation of Annexes I and II. Consequently, **Option 2b** is considered the preferred policy option.

8. MONITORING AND EVALUATION

8.1. Indicators of progress

The indicators for progress towards meeting the specific and operational objectives set for the Directive's revision are: a) extent to which the EIA Directive contributes to correctly assessing and addressing the environmental impact of projects; b) extent to which new environmental challenges are integrated into future EIAs; c) evolution in the harmonisation of EIA processes across the Member States (mainly the extent to which developers are provided with more certainty concerning applicable requirements and time-frames); d) extent to which unnecessary administrative burdens are reduced, for public authorities and developers (costs for an EIA, duration of the screening and/or EIA process, duration of the various stages of the EIA process).

Due to the procedural nature of the EIA Directive, which does not lay down measurable quality standards, it is not possible to define more concrete indicators. The above indicators will be assessed at national level; it is not possible to propose indicators at regional level, due to lack of data. Table 17 presents an overview of how these indicators are linked to the objectives. The number of infringements and ECJ cases would also constitute an indicator of a more general and cross-cutting nature.

8.2. Monitoring and evaluation arrangements

The EIA Directive does not require any formal reporting from the Member States concerning its implementation. The absence of such a requirement is one of the reasons why the data available was scarce and sometimes of limited reliability. In order to evaluate the future implementation of a revised EIA Directive, the Commission's Group of EIA/SEA National Experts will be formally set up to collect and monitor relevant key parameters in each Member State. The involvement of national experts guarantees the reliability and comparability of data. The data will be collected by Member States and reported to the Commission on a regular basis (every 6 years following the transposition of the new Directive) via periodic surveys covering all Member States. As a minimum, the following

²²¹ E.g. monitoring would be required for a 3-year instead of a 5-year period and it could be related only to projects having significant negative effects; the number of alternatives to be assessed would be limited.

parameters will be monitored in each Member State: a) number of EIAs carried out per year; b) number of Annex I and Annex II projects subject to EIA; c) breakdown of EIAs according to the project categories of Annexes I/II; d) breakdown of EIAs undertaken by type of developer (including SMEs); e) number of screenings performed per year; f) duration of the EIA process (including duration per stage); g) average cost of EIAs (for developers and authorities). The above parameters, which are relevant for evaluating the impacts of most of the amendments analysed, are relatively easy to collect with a sufficient level of reliability. The Commission will ensure monitoring and evaluation via implementation reports every 6 years. Beyond these core parameters, monitoring would include additional parameters, which are more specifically related to the implementation and/or the impacts of some of the amendments within the Member States. Those specific parameters are described in Annex 15.

Table 17: Links between objectives and progress indicators/monitoring

Specific objectives	Operational objectives	Indicators of progress	Parameters monitored
Introduce and/or strengthen the quality related elements of the Directive	Specify the content and justification of the screening decision	Extent to which the EIA contributes to correctly assessing and addressing the environmental impact of projects	Qualitative judgement of national authorities
		Evolution in the harmonisation of EIA processes across the Member States	<ul style="list-style-type: none"> - Annual number of EIAs carried out - Annual number of screenings carried out - Breakdown of EIAs according to the project categories of Annexes I/II - Number of Annex I and Annex II projects subject to EIA - Breakdown of EIAs undertaken by type of developer (including SMEs)
		Extent to which unnecessary administrative burdens are reduced	
	Specify the content of the EIA report and of the final decision	Extent to which the EIA contributes to correctly assessing and addressing the environmental impact of projects	<ul style="list-style-type: none"> - Annual number of EIAs carried out - Qualitative judgement of national authorities - Average cost of EIAs
		Evolution in the harmonisation of EIA processes across the Member States	
	Adjust the Directive to the new environmental issues	Extent to which new environmental challenges are integrated into future EIAs.	<ul style="list-style-type: none"> - Qualitative judgement of national authorities - Breakdown of EIAs according to the project categories of Annexes I/II
Extent to which the EIA contributes to correctly assessing and addressing the environmental impact of projects			
Enhance policy coherence and synergies with other EU/international law and simplify procedures	Streamline environmental assessments	Extent to which unnecessary administrative burdens are reduced	Number of environmental assessments coordinated or integrated
			Duration of the EIA process (as a whole and per stage)
			Average cost of EIAs
	Specify time-frames for the various steps of the EIA process	Extent to which unnecessary administrative burdens are reduced	<ul style="list-style-type: none"> - Average cost of EIAs - Duration of the EIA process (as a whole and per stage)
Evolution in the harmonisation of EIA processes across the Member States			

9. GLOSSARY

Consultation	It is the stage of the EIA process where the environmental authorities and the public (including from affected Member States, where appropriate) are entitled to express comments and opinions on a project.
Developer	The company or public authority which initiates a project and applies for authorization.
Development consent (authorization)	The decision of the competent authority or authorities which entitles the developer to proceed with the project. It is the end of the decision-making process.
EIA	Environmental Impact Assessment for public and private projects
Habitats Directive	Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
IED	Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)
Mitigation measures	Measures aimed at minimising or even cancelling the negative impact of a project, during or after its completion.
Scoping	It is the stage of the EIA process that determines the content and extent of the matters to be covered in the environmental information to be submitted to a competent authority by the developer.
Screening	It is the part of the EIA process that determines whether an EIA is required for projects listed in Annex II of the Directive. The screening is carried out through a case-by-case examination or based on thresholds or criteria, in accordance with the criteria listed in Annex III of the Directive.
(Negative) screening	A screening that does not result in an EIA, because the competent authority considers that a project is not likely to have significant environmental effects.
(Positive) screening	A screening that results in an EIA, because the competent authority considers that a project is likely to have significant environmental effects.
SEA	Strategic Environmental Assessment for certain public plans and programmes, which is carried out according to Directive 2001/42/EC
SME	Small and Medium Enterprises
WFD	Water Framework Directive (2000/60/EC)

10. ANNEXES

10.1. Annex 1: Information on the EIA Directive

The EIA Directive has been in force since 1985 and applies to a wide range of defined public and private projects, which are described in its Annexes I and II:

- **Mandatory EIA:** All projects listed in Annex I are considered as having significant effects on the environment and require an EIA (e.g. long-distance railway lines, motorways and express roads, airports with a basic runway length ≥ 2100 m, installations for the disposal of hazardous waste, installations for the disposal of non-hazardous waste > 100 tonnes/day, waste water treatment plants > 150.000 p.e.).
- **Discretion of Member States (screening):** For projects listed in Annex II, the national authorities have to decide whether an EIA is needed. This is done by the 'screening procedure', which determines the effects of projects on the basis of thresholds/criteria or a case by case examination. However, the national authorities must take into account the criteria laid down in Annex III of the Directive. The projects listed in Annex II include for example urban development projects, flood-relief works, changes of Annex I and II existing projects, etc.

The Directive adopted in 1985 has been amended in 1997, in 2003 and in 2009:

- Directive 97/11/EC brings the Directive in line with the UN ECE Espoo Convention on EIA in a Transboundary Context. The Directive of 1997 widened the scope of the EIA Directive by increasing the types of projects covered, and the number of projects requiring mandatory EIA (Annex I). It also provided for new screening arrangements, including new screening criteria (at Annex III) for Annex II projects, and established minimum information requirements.
- Directive 2003/35/EC aligns the provisions on public participation with the Aarhus Convention on public participation in decision-making and access to justice in environmental matters.
- Directive 2009/31/EC amends Annexes I and II of the EIA Directive, by adding projects related to the transport, capture and storage of carbon dioxide (CO₂).

The initial Directive of 1985 and its three amendments have been codified by Directive 2011/92/EU of 13 December 2011.

The EIA procedure can be summarised as follows: the developer may request the competent authority to describe what should be covered by the EIA information to be provided by the developer (scoping stage); the developer must provide information on the environmental impact (EIA report – Annex IV); the environmental authorities and the public (and affected Member States) must be informed and consulted; the competent authority then makes a decision, taking into consideration the findings of the EIA report and the results of consultations. The public is informed of the decision afterwards and can challenge the decision before the courts.

10.2. Annex 2: Information on the meetings of the IASG

The inter-service Impact Assessment Steering Group (IASG) was established in November 2009 and met 7 times between December 2009 and February 2012.

The first meeting of the IASG (on 9 December 2009) discussed the **draft roadmap** and the draft questionnaire for the public consultation.

The second meeting (on 4 May 2010) focused on the **policy options** for the review of the EIA Directive.

The third meeting (on 24 June 2010) discussed the Directives and provisions potentially affected by the introduction of a coordinated/joint EIA in relation to sectoral assessments and permits required by other environmental Directives (**‘one stop shop’**).

The fourth meeting (on 19 October 2010) discussed the results of the **public consultation**.

The fifth meeting (on 7 July 2011) discussed the **skeleton of the IA** report.

The sixth meeting (on 23 November 2011) discussed the findings of the **draft IA** report prepared by an external contractor.

The seventh meeting (on 3 February 2012) reviewed the **final draft** of the IA report.

10.3. Annex 3: Main sources and studies used

10.3.1. Legislation

Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC

Espoo Convention of 25 February 1991 on environmental Impact Assessment in a transboundary context Decision III/7 – Second amendment to the Espoo Convention, adopted in 2004

Protocol on Strategic Environmental Assessment to the Convention on environmental impact assessment in a transboundary context, 2003

Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

Directive 2001/42/EC of 27 June 2001 on the assessments of the effects of certain plans and programmes on the environment

Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage

Directive 2008/56/EC of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

10.3.2. *Commission documents*

COM(2001)264, A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development

COM(2005)670, Thematic Strategy on the sustainable use of natural resources

COM(2006)216, Halting the loss of biodiversity by 2010 – and beyond; Sustaining ecosystem services for human well-being

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COM(2007)225, Mid-term review of the Sixth Community Environment Action Programme

COM(2008)791, Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU

COM(2009)147, White Paper, Adapting to climate change: Towards a European framework for action

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COM(2009)469, Report on the application and effectiveness of the Directive on Strategic Environmental Assessment (Directive 2001/42/EC)

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COM(2011)112, A roadmap for moving to a competitive low carbon economy in 2050

COM(2011)244, Communication on our life insurance, our natural capital: an EU biodiversity strategy to 2020

COM(2011)571, Roadmap to a Resource Efficient Europe

10.3.3. *Guidance documents and studies*

European Commission (1996), Environmental Impact Assessment in Europe - A Study on Costs and Benefits, <http://ec.europa.eu/environment/eia/sea-support.htm>

European Commission (1999), Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions, <http://ec.europa.eu/environment/eia/eia-studies-and-reports/guidel.pdf>

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European Commission (2011), Main ECJ rulings regarding the EIA Directive, http://ec.europa.eu/environment/eia/pdf/eia_case_law.pdf

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10.4. Annex 4: Detailed information on the key parameters related to the application of the EIA Directive

In order to evaluate the different impacts – environmental, economic and social – of possible changes to the EIA Directive, it is necessary to estimate beforehand the likely evolution of key variables under the baseline scenario. Three main sources of information were used to obtain estimates: the GHK study of 2010, the replies to questionnaires from national authorities and the results of the public consultation. The absence of a formal reporting mechanism under the EIA Directive (i.e. no obligation of Member States to collect and report data) hinders the collection of specific data (in particular breakdown of EIAs per type of project and per type of developer).

In the baseline scenario for each of these key variables, impacts are considered according to three time horizons: current situation, medium-term horizon (2017) and long-term horizon (2037). Hence, the baseline scenario is not only based on historic data but also on prospective scenarios under the assumption that no changes to the EIA Directive would be made. In that sense, the baseline scenario is a ‘business as usual’ scenario.

10.4.1. Number of EIAs processed

One of the main drivers of the total administrative burden of each policy option is the number of EIA procedures that have to be carried out. For instance, if a legislative change lowers the thresholds for projects to be subject to an EIA, the number of projects subject to an EIA will increase, causing more work for both developers and authorities.

In order to estimate the number of EIAs, the first and second sources of information were used in this report. The third source (public consultation results) was used to test the validity of the data provided in the first two sources but it was not used as a basis for calculation. The available data per source and the results of the calculation per data source are discussed below:

Data source 1: Number of EIAs based on the GHK study (2010)

The GHK study provides estimates for the total number of EIAs undertaken by each Member State for the period 2005-2008. Significant differences in the numbers of EIAs can be observed between Member States of similar sizes, which can be explained by large differences in the way the EIA Directive has been transposed across the Member States (see the problem definition in Section 3.2). According to GHK, approximately 15.800 EIAs are conducted each year in the EU.

However, this result is subject to high uncertainty due to the fact that missing data for eight Member States were estimated by GHK using a correlation between the number of EIAs and population counts; establishing such a correlation is not justified since the main reason for differences in the number of EIAs across Member States is the way the EIA Directive has been transposed.

Member State	Average number of screenings/year (2005-2008)	Average number of EIAs/year (2005-2008)
AT	96	23 ⁽⁻⁾
BE	2.337 ⁽⁺⁾	183
BG	1,031	249
CY	58	96
CZ	1.610 ⁽⁺⁾	117 ⁽⁻⁾
DE	2.200 ⁽⁺⁾	1.000
DK	2.500 ⁽⁺⁾	125 ⁽⁺⁾
EE	830 ⁽⁺⁾	80 ⁽⁺⁾
ES	2.236 ⁽⁺⁾	1.054 ⁽⁺⁾
FI	36	38
FR	0	3.867 ⁽⁺⁾
GR	1.146	425
HU	613 ⁽⁺⁾	152 ⁽⁺⁾
IE	928	197
IT	2.695 ⁽⁺⁾	1.548 ⁽⁺⁾
LT	895	142
LU	802	70
LV	710	11
MT	62	10
NL	1.312	123
PL	4,400	4.000
PT	1.127 ⁽⁺⁾	323 ⁽⁺⁾
RO	1.476 ⁽⁺⁾	596
SE	1.081	288
SI	851	108
SK	476	670
UK	2.745 ⁽⁺⁾	598*
EU-27	34.253	16.093

The white cells show numbers reported by the Member States to GHK, while the shaded cells contain numbers estimated by GHK based on population size.

*: After the publication of the GHK study, the UK reported figures for 2005-2008 of 724, 544, 505 and 482 respectively. The figures for several sets of EIA Regulations were however not available for 2006-2008. The number of EIAs is estimated to be short by 30-60 EIAs.

(+/-) The number of screenings/EIAs in the GHK data/estimates is of the same order of magnitude as the reported number of screenings or EIAs in the public consultation.

(+) The number of screenings/EIAs in the GHK data/estimates is higher than the reported number of screenings or EIAs in the public consultation. No conclusion can be drawn since we have no information on the completeness of the public consultation data.

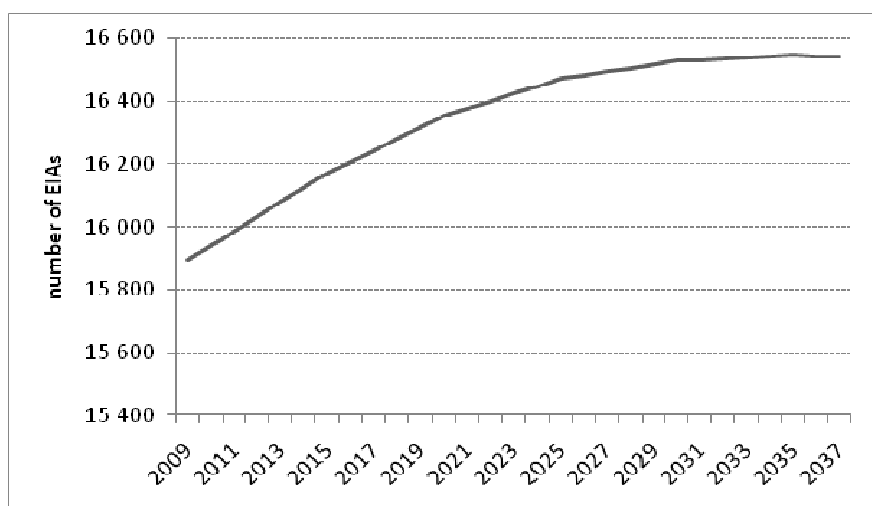
(-) The number of screenings or EIAs in the GHK data/estimates is lower than the reported number of screenings or EIAs in the public consultation. This could indicate that the GHK data is an underestimation.

For the definition of a baseline scenario, the evolution in the number of EIAs over time also has to be estimated. For this purpose, it is assumed that the number of EIAs in the EU will grow in proportion to EU population numbers²²². Application of the population growth rates drawn from Euro stat projections to the 2005-2008 average numbers of EIAs results in a gradual rise from approximately 15.800 EIAs/year (average for the period 2005-2008) to approximately 16.500 EIAs/year in 2037, as shown in the Figure 3 below.

²²²

While the ratio number of EIAs/number of inhabitants is very different from one Member State to another, a correlation can be assumed between the total number of EIAs at EU level and the total number of EU inhabitants over the years.

Figure 3: Projected number of EIAs per year for the EU (2008-2037)



Data source 2: Number of EIAs based on data reported in the questionnaires of the GHK study

An alternative method to estimate the number of EIAs for EU is to calculate an average number of EIAs/year per Member State, based on values provided by the 16 Member States that replied to this question, and multiply this average number of EIA per Member State by 27²²³. This results in 25.650 EIAs/year on average at EU level, for the same period (against 15.800 EIAs/year reported by GHK).

Data source 3: Number of EIA reported in the public consultation

Two hundred public authorities responded to the public consultation on the review of the EIA Directive in 2010, which included questions on the number of EIAs and screening decisions. The main issue with these data is that it is unclear, which fraction of public administrations involved in EIAs replied. In some Member States, the screening decisions and EIAs are considered by a central administration, in other Member States these are addressed at the regional or provincial level. For some Member States specialised administrations or authorities, such as water agencies are also involved in screening decisions and EIAs. Some of these administrations give advice during an EIA procedure or apply for a decision, themselves, as initiator of a project. It is not clear which of the 202 respondents act as leading public authorities in an EIA process, which as advisors in some stages of the EIA process or which as initiators of projects. Therefore, the risk exists that a significant amount of the EIAs reported in the consultation are in fact double counts of the same EIA, which prevents any extrapolation of these figures. The consultation results were not used as a data source for calculations in this study, however it gives an idea of the reliability of the data provided in the GHK study.

Conclusion: Based on the analysis of the three data sources, a plausible range for the average number of EIAs for the period 2005-2008 in the EU is **15.000 to 26.000 EIAs per year**. It is not possible to compare this range of values with the total

²²³

It is assumed that the number of EIAs per Member State is entirely dependent on the transposition of the EIA Directive in each Member State and not correlated to any socio-economic characteristics of the Member State (population, GDP, etc.).

number of development consent delivered in the EU, as there are no data available on the latter aspect (which is not subject to EU legislation).

10.4.2. *Number of screenings undertaken*

Under the current system, Member States are required to ensure that no project likely to have significant impacts on the environment escapes an EIA and the flexibility and discretion provided by the Directive is not to undermine this (see for example ECJ case C-435/97). Screening is carried out for Annex II projects only on the basis of the criteria listed in Annex III. The number of screenings undertaken is an important variable since part of the administrative burden for authorities depends on the time required to conduct these screenings. Some of the amendments analysed are likely to have an impact on the number of screenings, e.g. an increase in the number of Annex II projects or a shift of projects from Annex II to Annex I or a modification of Annex III criteria would increase or decrease the number of screenings to be carried out by the authorities.

In the baseline scenario, no changes are assumed to be made to the screening procedures or the project categories. Member States would be free to add new project categories to the Annexes as well as to set stricter criteria for projects to require an EIA. The process would be, as so far, guided by Commission guidance and ECJ rulings.

It is worth noting that the flexibility that currently exists within the EIA Directive on screening does not provide a tangible baseline, to the extent that some current practices in Member States are already similar to those that are considered here as new amendments for the EIA Directive. For instance, consultation of the public and/or environmental authorities at the screening stage is mandatory in several Member States, even if it is not a requirement of the EIA Directive.

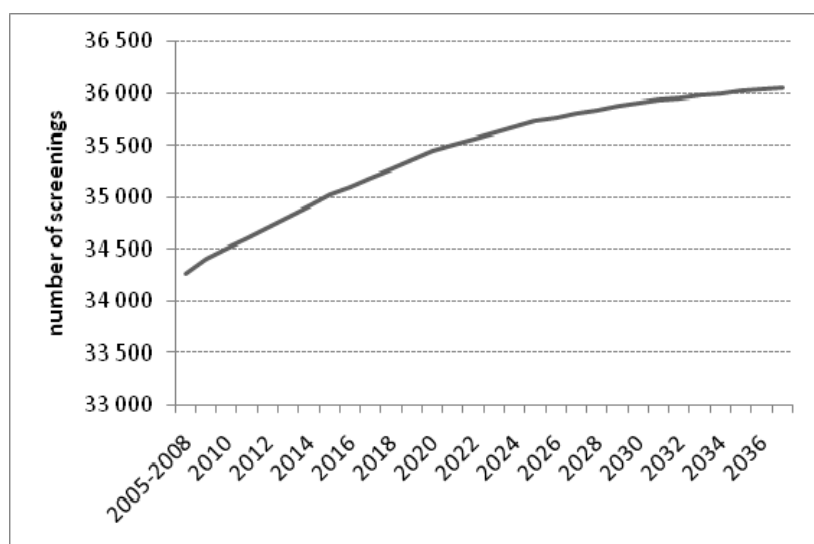
It has been observed that Member States tend to implement national requirements going beyond the EIA Directive, for example by adding more projects to their list in annexes than required in the EIA Directive. This is done by either moving Annex II projects in the EIA Directive into Annex I list in national legislation or by lowering the thresholds for mandatory EIA projects in Annex I compared to the threshold of the corresponding project type in the EIA Directive. These national additional requirements may have both costs and benefits.

Data source 1: Number of screenings based on the GHK study (2010)

Average numbers of screenings per Member State have been estimated by GHK for the period 2005-2008. Similar to the case of EIA numbers, significant differences in the numbers of screenings can be observed between Member States of comparable sizes, due to differences in the way the EIA Directive has been transposed. According to GHK, approximately 33.800 screenings were conducted each year in the EU, for the period 2005-2008. For the same reasons as above, this result is subject to high uncertainty.

Based on these data and the forecast on the number of EIAs presented above, an extrapolation of the number of screenings was made up to 2037, as illustrated in Figure 4. This results in an average number of screenings of 36.000 per year in 2036 in the EU.

Figure 4: Projected number of screenings per year for the EU (2008-2037)



Data source 2: Number of screenings based on data reported in the questionnaires of the GHK study

According to data on the number of screenings reported by 11 Member States, the average number of screenings per Member State can be estimated at 1,054 per year, for the period 2005-2008. An extrapolation of this average value to the EU gives a total of 27.400 screenings per year.

Conclusion: On the basis of the results provided by the two different data sources, a plausible average range of values for the EU can be given as 27.400 to 33.800 screenings per year for the period 2005-2008.

10.4.3. *Share of positive and negative screening decisions*

This parameter is also related to Annex II projects only. During the screening process, competent authorities have to decide whether an EIA is required, on the basis of thresholds or on a case-by-case, taking into account the criteria listed in Annex III of the Directive. A positive screening decision is the one requiring an EIA for a project. Based on the calculations using the data sources available, the number of positive screenings is estimated between 5 and 10 % of all screenings, i.e. between 1.370 and 3.380 per year.

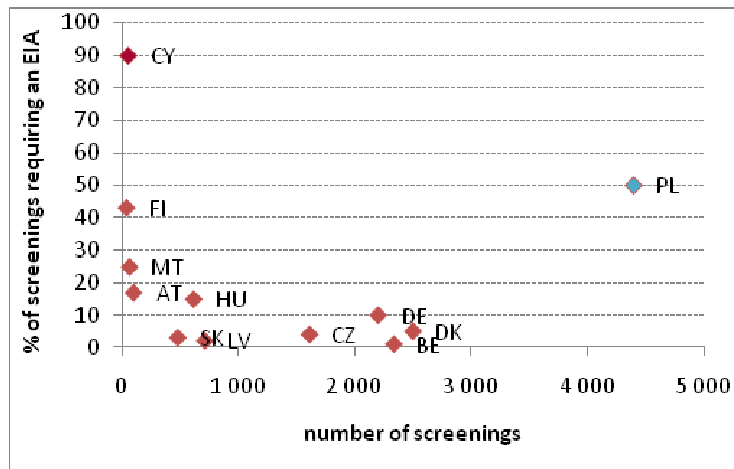
Data source 1: Number of positive screenings (GHK study (2010))

The average share of screenings requiring EIAs (‘positive screenings’) per year is only reported for 12 Member States in the GHK report. Plotting the share of positive screenings and the total number of screenings for the 12 Member states for which data is available leads to the following observations:

- A decreasing relationship seems to exist between the share of positive screenings and the total number of screenings (see Figure 5).
- The relationship is not linear but most likely log-linear.

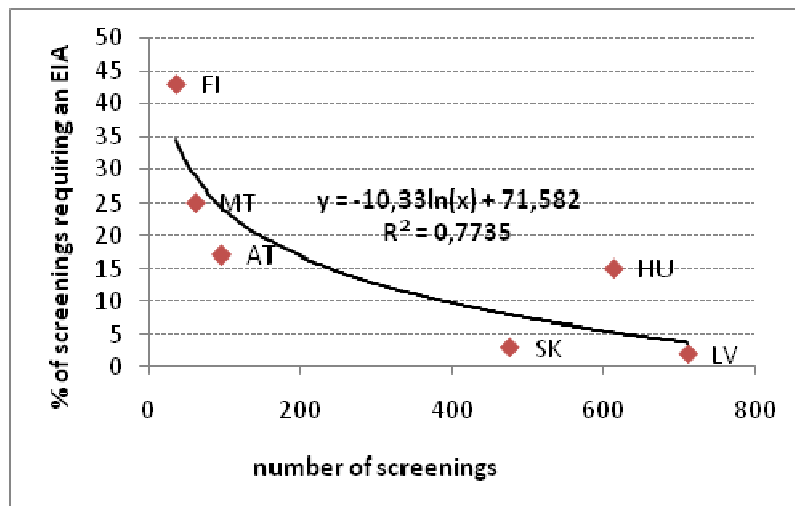
- Poland and Cyprus can be considered as outliers, the first with an extremely large number of screenings and the latter a very large share of positive screenings.

Figure 5: Share of positive screenings based on data from the GHK study (2010)



Based on these observations, several tests were carried out in order to estimate the relationship between the share of positive screenings and the total number of screenings. The best fit for the respondents (excluding Cyprus and Poland) is a log-linear relationship, as illustrated in Figure 6.

Figure 6: Relationship between the share of positive screenings and the total number of screenings per year



Based on this relationship, the share of positive screenings for Member States that did not report such data in the public consultation has been estimated for the period 2005-2008: it amounts to 5 % of the total number of screenings or some 1.610 positive screenings per year, excluding Poland (and 11 %, or some 3.800 positive screenings per year if Poland is included).

The small percentage of positive screenings could indicate a high level of uncertainty from authorities and developers on when an EIA is actually required. It could also

mean that the screening process is actually used to modify the project plan in a way that an EIA would no longer be required.

Estimates of the numbers of positive screenings and Annex I projects for each Member State are presented in Annex B.

The projection of the number of positive screenings for the period 2008-2037 is made by applying the share of positive screenings in 2005-2008 to the projected total number of screenings. This projection results in approximately 1.900²²⁴ to 4,000 positive screenings for 2036²²⁵.

Data source 2: Number of positive screenings based on data reported in the questionnaires of the GHK study

Only five Member States provided data on the total number of screenings and the number of positive screenings. They reported that, on average, 10 % of the total number of screenings result in an EIA. Extrapolating this figure to the EU gives 2.791 positive screenings per year for the period 2005-2008.

If we also take into account the data of the Member States that solely stated a number for the positive screenings, the average is 50 positive screenings per Member State. For the EU this would amount to 5 % or 1.371 positive screenings per year for the period 2005-2008.

Conclusion: Based on the calculations using the two data sources, the number of positive screenings is estimated between 5 and 10 % of all screenings, i.e. between 1.370 and 3.380 per year.

10.4.4. Average duration of the EIA process

In the current situation, the EIA Directive does not specify a maximum time-frame for the overall EIA process. With regard to public participation, the Directive requires that ‘reasonable time-frames’ for the different consultation phases be provided (Article 6(6)). This provision seems to be interpreted in different ways by the Member States: durations for the public consultation vary considerably among Member States, from two weeks up to two-three months.

Table 19: Average duration of the EIA process per stage	
Stage of EIA process	Average duration
Screening	1.2 months
Scoping	1.3 months
Environmental information (report)	5.5 months
Consultations (public, authorities, other Member States...)	1.6 months
Final decision	2 months

According to GHK estimates, the average duration of an EIA process is **11.6 months**²²⁶. This is illustrated in the Table 19, which also provides a breakdown

²²⁴ Based on the ratio of positive screenings to the total number of screenings excluding Poland, i.e. 5 %.

²²⁵ Based on the overall ratio including Poland.

²²⁶ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

according to the main stages of an EIA process. The assumption used here is that the average duration of the whole EIA process as well as the average duration of each of the key stages of the EIA process would remain the same over the forecasting horizon, in the baseline scenario.

10.4.4.1. Efforts required for each step of the EIA process

The GHK study only give case-by-case information on the breakdown of costs and efforts for authorities and for developers.

- Efforts for authorities

In general, most of the efforts are related to the review of environmental information and the final decision-making. The case studies show a relatively large effort during the scoping stage proved to require relatively less effort during the stage of final decision-making. Based on information from the case studies, the following assumptions were made for the purposes of this report:

- Screening: 3 % of total EIA cost
- Scoping: 8 % of total EIA cost
- Review of information on environmental impacts and decision-making: **89 %** of total EIA cost.

- Efforts for developers

The GHK study contains more information on the cost incurred by developers than by authorities. The case studies show that developers put most of their effort in the preparation of the EIA report. In some cases, effort is also put in preliminary studies (rather limited) and in additional technical assessments after the decision phase. These additional technical assessments and the development of mitigating measures can be significant and often surpass the entire EIA budget borne by the developer. This information is used during the impact assessment of the various policy scenarios, but costs related to additional assessments are not taken into account for the breakdown of costs. Table 20 illustrates the assumptions made for the purposes of the report, on the basis of the breakdown of costs reported by GHK.

Stage of the EIA process	Share of total EIA cost*	Cost (€) per EIA stage**
Preliminary studies (prior to the initiation of the EIA)	1 %	425
Screening and scoping	2 %	850
Information on environmental impacts	80 %²²⁷	32.715
Revision of EIA report (if needed)	17 %	7.010
	100 %	41.000

* Median values were then adjusted to give a total of 100 %.

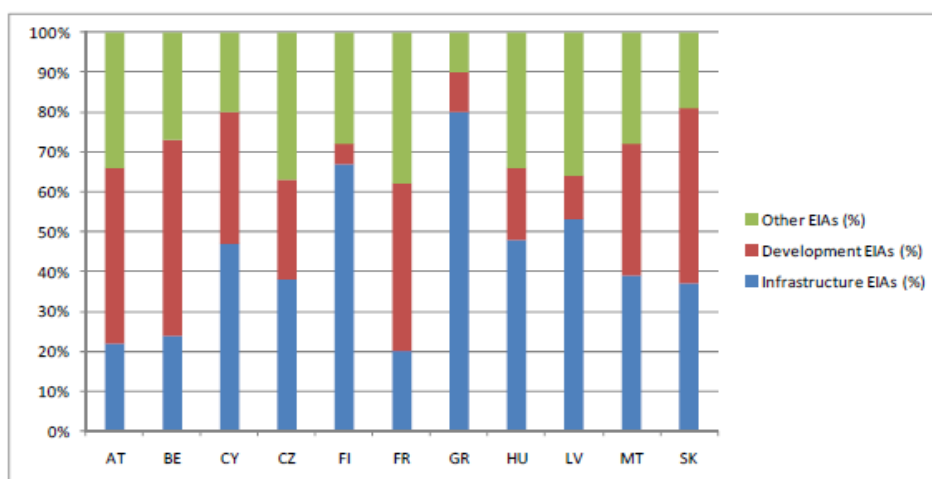
**The total cost of an EIA for developers is further discussed in Section 3.1.3.

²²⁷

According to a study (JRC (2010), The Use of Spatial Data for the Preparation of Environmental Reports in Europe), the average time needed by environmental consultants to complete an EIA report is between 1 and 3 months.

10.4.4.2. Main categories of projects subject to EIA

The GHK study provides a breakdown of projects into three broad categories, for 11 Member States²²⁸: ‘infrastructure’ (covering energy, transport, water management and waste management); ‘development’ (covering urban and industrial development); and ‘other’ (covering everything else). This is illustrated in below. These results were then extrapolated by GHK in order to estimate missing data²²⁹. According to the GHK analysis, the results appear to suggest that the new Member States and some Cohesion Member States (Greece and Portugal) are undertaking a significantly higher proportion of infrastructure-based projects. The analysis suggests that around 35-55 % of EIAs conducted within the ‘newer’ Member States are for infrastructure projects. This contrasts with the older Member States, which mainly exhibit higher rates of development projects relating to urban and industrial development. It was not possible to find a more detailed breakdown of EIAs by project category nor to identify the share of projects subject to requirements of both the EIA Directive and the IED²³⁰.



10.4.5. Number and size of actors involved in EIA processes

Public authorities

The number of authorities involved in the EIA process can have an influence on the level of efforts required to transpose new or modified EU legal requirements into domestic legislation, to train civil servants dealing with EIAs, etc. According to the GHK study, the average number of staff employed by the Member States to process EIAs is 52 persons²³¹ (based on responses from 10 Member States). Hence the total number of persons affected by a modification of the Directive can be estimated at some 1.400 persons at EU level. However, the GHK study does not specify whether

²²⁸ The 11 Member States for which data were available are: Austria, Belgium, Cyprus, Czech Republic, Finland, France, Greece, Hungary, Latvia, Malta, Slovakia.

²²⁹ This was done using a NordRegio study for DG Regional Policy in 2009. This grouped each of the 27 Member States into one of six ‘development paths’.

²³⁰ It is known that most activities covered by the IED are also covered by the EIA Directive, but the annual number of EIAs concerning projects that are also subject to the EID remains unknown.

²³¹ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, p.17.

this figure is measured in terms of Full Time Equivalents or just in terms of persons involved in the process. The large deviation on this parameter suggests that respondents may have interpreted this question in a different way, for example by answering the question for their organisation and not for the Member State as a whole. Hence, it has to be used and interpreted with caution.

Developers

Developers can be private parties or the public authority (e.g. in the case of public infrastructure). The number of developers involved in EIA processes can have an influence on economic impacts of a change to the EIA Directive (e.g. on the overall costs incurred by those developers to be trained on the application of new or modified provisions of the EIA Directive). However, no data is available on the total number of developers involved in EIAs.

The only information reported by GHK is a breakdown of EIAs undertaken by type of developer (SME, large companies or public authorities), available for 6 Member States, as presented in Table 21. However, GHK concluded that no specific pattern could be derived from these values²³².

Share of EIAs per type of developer (2008)			
Member State	SME (0-249 employees)	Large company (> 250 employees)	Public authority
FI	30 %	50 %	20 %
LV	67 %	33 %	n/a
SK	18 %	47 %	35 %
BE (FL)*	n/a	n/a	14 %
CY	76 %	8 %	16 %
GR	10 %	5 %	85 %

*No information provided for the other Belgian regions. Flanders region stated that 13 of 96 EIAs were undertaken by public authorities, but did not provide any further detail.

Environmental consultancy firms

The number of environmental consultancy firms involved in EIA processes can have an influence on economic impacts of a change to the EIA Directive (e.g. on the overall costs to obtain a possible accreditation for preparing EIA reports), however no data is available on the total number of these firms at EU level.

According to a study by JRC²³³, it appears that the majority of consultancies involved in EIA/SEA reports across Europe are medium-sized companies, whose annual turnover is normally below € 100.000; only a few outliers were noted, with annual turnover over € 1 million. The majority of these organisations carry out up to 5 EIAs or SEAs per year. The same study showed that such consultancies usually employ less than 5 full time equivalent (FTE) staff involved in the preparation of EIAs/SEAs.

²³² GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, p.16.

²³³ JRC (2010), The Use of Spatial Data for the Preparation of Environmental Reports in Europe.

10.5. Annex 5: Detailed description of specific aspects of the problem

The identification of the specific aspects of the problem is based on the information contained in the Communication Reports on the application and effectiveness of the EIA Directive (in particular the one published in July 2009), the COWI report and the outcomes of the public consultation on the review of the EIA Directive. Each specific aspects of the problem may have one or several underlying causes, some of them being common to several problems. The listing of specific problems is not primarily organised by types of underlying causes (drivers). Instead the specific problems have been categorised in the following areas: (a) issues related to screening; (b) issues related to quality and completeness of information for the EIA process; (c) issues related to consistency with other policies and legal requirements; (d) issues related to public participation and timing of EIA processes. The chosen categorisation appears to be more suitable for presenting the specific aspects of the problem the review of the EIA Directive is supposed to tackle, as it corresponds to the main phases of the EIA process.

Each problem may have one or several underlying causes, some of them being common to several problems. The listing of specific problems is not primarily organised by types of underlying causes (drivers). Instead the specific problems have been categorised in the following areas: (a) issues related to screening; (b) issues related to quality of the EIA process; (c) issues related to consistency with other legal requirements; (d) issues related to the time-frames of the EIA process. An overview of the problem issues per problem area is presented below in the Table 22 below:

Table 22: Overview of the general and specific problems

General problem	Problem area	Specific issue
Regulatory failures	Screening	Issue n°1: Discrepancies in screening procedures
		Issue n°2: Salami-slicing/cumulative effects
	Quality of the EIA process	Issue n°3: Poor quality of information and analysis
		Issue n°4: Poor consideration of project alternatives
		Issue n°5: Unclear justification of final decision
		Issue n°6: Insufficient post-EIA impact monitoring
		Issue n°7: Incomplete scope of EIA reports
Risks of inconsistencies	Inconsistency with other policies and legal requirements	Issue n°8: Overlaps in information and procedural requirements
		Issue n°9: Inconsistency with other legislation/international conventions
	Time-frame of the EIA process	Issue n°10: Unclear time-frame for public consultation
		Issue n°11: Lengthy decision-making processes

10.5.1. Issues related to screening

Failures to correctly transpose or apply the requirements of the EIA Directive with regard to the screening process provide for one of the most significant problems. On the basis of the Commission's experience in the implementation of the EIA Directive, screening appeared to be a problem in 69 % of the infringement cases initiated by the Commission and related to the EIA Directive (incorrect transposition or bad application). This represents a total of 178 cases to date. Most of these cases were solved without any referral to the Court, however, in some cases the Commission decided to bring the matter before the Court. Data shows that 80 % of the infringement cases brought before the ECJ by the Commission concerning the EIA Directive were related to the screening provisions²³⁴.

10.5.1.1. Issue n°1: Discrepancies in screening procedures

(a) Description

The screening procedure, i.e. the decision to require an EIA for a project listed in Annex II or not, is not implemented in a harmonised way among Member States. Screening criteria are interpreted in various different ways by competent authorities. Implementation and case-law show that, when establishing thresholds, Member States often exceed their margin of discretion, either by taking account only of some selection criteria in Annex III or by exempting some projects in advance. This practice results in large differences in the total number of EIAs carried out from one Member State to another: from fewer than 10 to 4000 per year even when comparing Member States of a similar size.

It is therefore likely that, in some Member States, certain projects with significant environmental impacts escape the EIA requirement, leading to the absence of mitigation measures for significant environmental impacts and a lack of a well informed decision process. On the contrary, in other Member States, some projects with minor environmental impacts may be subject to EIAs, while the benefits of such EIAs are limited when compared to the administrative burden generated for developers and authorities.

The existence of such a margin for interpretation in the screening procedure also generates a lack of certainty for developers. It also results in excessive litigation cases where screening decisions made by competent authorities are challenged by developers or third parties: currently the vast majority of infringements resulting in court ruling with regard to the EIA Directive's implementation are related to projects covered by Annex II categories but for which competent authorities did not require an EIA.

(b) Potential drivers

The EIA Directive gives Member States broad scope to determine whether an EIA is required for projects listed in Annex II, while the screening criteria provided in

²³⁴ The above figures are based on a research in the Commission's Infringement Database, which includes the investigations carried out by the Commission services concerning compliance with the EU legislation (date of search: 8/8/2011).

Annex III are not very specific. This process, which is based on the principle of subsidiarity, has resulted in a wide variation in the types and levels of thresholds or criteria set by Member States. The degree of decentralised implementation of some Member States can be an additional factor leading to wider variation, even within the same country. In addition, the definitions of certain project categories are not clear, e.g. ‘integrated chemical installations’²³⁵.

Guidance was issued by the EC (guidance on screening in 2001; guidance on interpretation of definitions of certain project categories in 2008), but no significant improvement of the situation has been observed. The cause of the problem therefore seems to be more related to the design of the EIA Directive itself than its implementation and transposition.

10.5.1.2. Issue n°2: Salami-slicing/cumulative effects

(a) Description

Some projects with significant environmental impacts (e.g. infrastructure and larger construction projects) escape the EIA requirement by being divided into two or more separate entities or sub-projects to avoid thresholds that would trigger an EIA (‘salami-slicing’ practices). This can happen through splitting of territory, dividing the project into sub-projects where developers are nonetheless closely related, stretching activities over time or doing several smaller rounds of project modifications. This problem has been to a certain degree overcome in old Member States, as several court rulings in Member States have ruled this practice to be unacceptable. However, it is still frequently observed in new Member States, where in the majority of cases respective national regulations to prevent this practice is not in place or where respective regulation and guidance is not properly followed on a local level²³⁶.

(b) Potential drivers

Annex III of the EIA Directive requires that cumulative effects with other projects should be taken into account. The Commission has also issued a guidance document on how to assess cumulative impacts of projects²³⁷ and relevant court rulings exist. Despite these ‘salami-slicing’ is still frequent in new Member States, although the magnitude is difficult to assess. Causes are both a lack of specific provisions in national law transposing the EIA Directive and inadequate enforcement of existing provisions, which may also be influenced by insufficient capacities and skills on the side of responsible public authorities²³⁸.

²³⁵ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

²³⁶ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009 (see Table 7-7, which contains various examples).

²³⁷ EC (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions.

²³⁸ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

10.5.1.3. How would the situation evolve without policy changes?

In the absence of future policy changes, issue n°1 is unlikely to be solved as it mostly relates to the design of the EIA Directive. Future interpretation issues will continue to trigger legal proceedings. Without modifications to the EIA Directive, the jurisprudence will continue to develop and the Directive will be more and more difficult to interpret, which would probably enlarge the screening problem.

With regard to issue n°2, improvements could occur in the future as a result of increased experience gained in the new Member States and better enforcement of the Directive. Improved guidance from the Commission, as requested by some Member States could contribute to limiting the extent of the problem without however resolving it. The implementation experience shows that the use of guidance can not completely solve problems.

10.5.2. *Issues related to quality and completeness of information for the EIA process*

10.5.2.1. Issue n°3: Poor quality of information and analysis

(a) Description

As reported by previous studies and the public consultation, poor quality of information and analysis is one of the main criticisms made by EIA experts from Member States as well as NGOs. EIAs are often found to be too descriptive and lacking focus. Moreover, there appears to be a frequent problem with interpreting what is meant by ‘significant’ environmental effects (Article 2(1) of the EIA Directive). Some EIAs also lack relevant quantitative data to characterise environmental impacts.

For instance, although Article 3 of the EIA Directive refers to both ‘direct and indirect’ effects of a project, in practice the environmental impacts described in EIAs are mostly related to direct impacts (e.g. emissions of pollutants and wastes from the construction and operational phases of the project), while indirect impacts and life-cycle impacts are rarely covered in detail (e.g. depletion of natural resources due to the use of certain products and materials, greenhouse gas emissions from transportation activities induced by the project, environmental impacts of products manufactured or services provided).

As a result, the decision-making process is not properly informed and environmental concerns are sidelined. However, the ability to make valid decisions depends on the quality of the information used in the EIA documentation and the quality of the EIA process. Quality is therefore a crucial element for the effectiveness of the Directive.

Furthermore, a poor information quality can lead to additional administrative burden and increasing costs for authorities, stakeholders and developers alike. This is particularly the case when additional information needs to be requested from developers and new versions of the report need to be reviewed again. The time needed for these procedural iterations increases costs for all concerned parties; such extra costs could be avoided through a better following of EIA reporting guidelines, which could be incentivised through clearer guidance and better enforcement options.

(b) Potential drivers

The EIA Directive lays down essentially procedural steps; it does not establish obligatory environmental standards. The competent authorities are obliged to take into consideration the results of consultations and the information submitted by developers and to provide specific information at the end of the development consent procedure (Articles 8 and 9), but they are not obliged to draw specific conclusions from the findings of the EIA. Ensuring quality control in an EIA is largely left to the national competent authorities.

Drivers of the problem identified seem to be both related to the content of the EIA Directive itself as well as its practical application by national authorities (e.g. see the case C-50/09) and by developers and consultants.

With regard to the content of the EIA Directive, no quality standards are imposed by the EIA Directive in terms of the environmental information to be submitted by developers. In addition, the scoping procedure, which could streamline the information to be submitted, is only optional under the EIA. This leads to significant discrepancies in the quality of reports submitted by developers. In some Member States, improper scoping processes have a knock-on effect in terms of preventing a more focused approach targeting the main environmental issues. Several Member States also reported that competent authorities may in some cases be reluctant to provide clear decisions on the content, extent and methods of the environmental assessment; this may result in the development of EIA procedures without any distinction between significant impacts and trivial impacts.

The guidance on scoping²³⁹ includes several checklists which are supposed to serve the function of quality insurance tools. The guidance is being applied, although Member States argue that it needs updating.

Some Member States consider that the lack of adequate technical skills of the authors of EIA reports may be an obstacle to good quality EIA reports. Additionally, in some of the new Member States, a lack of human resources among competent authorities to review EIA reports has been noted, as well as a lack of experience of authorities and developers in the application of the EIA requirements. To address these issues, Member states have implemented mandatory accreditation procedures for authors of EIA reports (e.g. Belgium) or created organisations in charge of quality control (e.g. independent agency in the Netherlands or internal committees in France, Italy and recently Greece).

Some of the quality issues may also result from the difficulty for developers and consultants to access reliable data required to prepare an EIA report. According to a survey of the JRC²⁴⁰, between 11 and 20 different types of spatial data are used in order to prepare an EIA or SEA report and practitioners undertaking EIAs in Europe still face difficulties in finding and accessing data of the quality needed for their purpose. The availability and accessibility of environmental data is an issue which

²³⁹ EC (2001), Guidance on EIA - Scoping (<http://ec.europa.eu/environment/eia/eia-guidelines/g-scoping-full-text.pdf>).

²⁴⁰ JRC (2010), The Use of Spatial Data for the Preparation of Environmental Reports in Europe.

affects the implementation of the EIA Directive, however it is a much broader issue which cannot be solved only through a modification of the EIA Directive.

10.5.2.2. Issue n°4: Poor consideration of project alternatives

(a) Description

In most of the Member States there is a legal obligation to consider alternatives, taking into account the envisaged objectives of the project subject to the development consent²⁴¹. However, the number and types of alternatives assessed vary significantly across the Member States and, in many cases, project alternatives are not described and assessed in detail by the developers and there is no cost-benefit analysis to justify the final choice. This does not properly inform the decision process for delivering consents and does not provide the opportunity to adjust the project in its early development stages in order to minimise environmental impacts. As reported in a case study reviewed by GHK²⁴², the ability to assess different alternatives of a project is seen as the main added value of an EIA process, especially for infrastructure projects, because it makes a real comparison possible.

At present time, this part of the EIA tends to be considered more as a formality than a real opportunity to adjust the project design. However, non-consideration of reasonable project alternatives can lead to delays with the overall project implementation as failing to account for reasonable alternatives often leads to resubmission of EIA reports and court litigation.

Besides, the lack of a systematic and detailed assessment of reasonable alternatives induces some inconsistencies with the SEA Directive (where it is also applicable to the project) and with the text of the Espoo Convention²⁴³.

(b) Potential drivers

The EIA Directive only requires ‘an outline of the main alternatives studied by the developer’ (Article 5 and Annex IV) and there is no guidance specifying on the types of alternatives to be studied, which leaves a lot of discretion to the competent authorities, as well as to the developers.

In the absence of more specific provisions in the EIA Directive, competent authorities do not tend to require further assessment of alternatives from the developers.

10.5.2.3. Issue n°5: Unclear justification of final decision

(a) Description

²⁴¹ EC (2003), Report on the application and effectiveness of the EIA Directive.

²⁴² GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Annex 7, Britned Connector, Netherlands.

²⁴³ Article 5 of the SEA Directive requires that *"reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated"*, while Appendix II of the Espoo Convention requires the assessment of the *"zero alternative"*.

Certain projects where the EIA demonstrates significant adverse environmental impacts are granted development consent with no clear justification of the reasons and the conditions associated with the decision. In such instances, it is difficult to ensure that the decision process has been well informed and that a high level of environmental protection is warranted once the project is developed. This increases the risk of court proceedings from third parties challenging the authorities' decision.

(b) Potential drivers

Currently Article 8 only requires the results of the consultations (with the public and the authorities) and the information gathered to be taken into consideration in the development consent procedure. This requirement is not specific enough to ensure environmental protection is warranted especially when projects with significant adverse environmental effects are granted development consent.

10.5.2.4. Issue n°6: Insufficient post-EIA impact monitoring

(a) Description

The issue of projects generating more significant environmental impacts and damages than what was initially assessed in the EIA, because of erroneous assumptions and predictions and/or because mitigation measures described in the EIA report have not been put in place by the developer, has been widely discussed in EIA-related literature. This situation contravenes the overarching goal of the EIA Directive which is to ensure environmental considerations are taken into account in project development.

Competent authorities often do not engage in proper ex-post impact monitoring, hence the actual implementation and effectiveness of measures described in the EIA report is not systematically checked by the authorities. This issue is of particular relevance for projects that are not already subject to environmental monitoring requirements (e.g. under the Directive on Industrial Emissions (IED) or as part of voluntary environmental management systems).

(b) Potential drivers

The key reason for the lack of systematic ex-post impact monitoring is the lack of an appropriate regulation in the EIA Directive itself. Procedures imposed by the current EIA Directive do not require authorities to take into account the management of impacts once the development consent is granted. Another reason is that such a systematic monitoring is resource-intensive. Responsible authorities, and particularly those in the new Member States, do not always have sufficient means to undertake such monitoring in the absence of clear requirements from the EIA Directive.

10.5.2.5. Issue n°7: Incomplete scope of EIA reports

(a) Description

The required scope for EIA reports is not adequately considering environmental issues which have arisen over the last 20 years. Projects can be identified, which have a strong potential for adverse effects in relation to those issues but are not incorporated in the EIA Directive yet. This is in conflict with the policy objectives of

EU legislation. This concerns in particular climate change, disaster risks, biodiversity, the marine environment and the use of natural resources. The EIA Directive is seen as an important policy instrument available to achieve EU environmental goals related to these five key issues. However, while the potential for adverse effects in relation to these issues can be significant when projects are developed or modified, they are not sufficiently covered in current EIA reports. This restricts the potential for the EIA Directive to contribute to achieving EU's environmental goals with regard to these five key issues.

Impacts related to climate change

At present, EIA reports do not look at the contributions from projects to the causes of global climate change (in terms of directly and indirectly inducing GHG emissions) as well as the contributions to impacts from a changing climate on human-wellbeing (health concerns), environment (i.e. water scarcity, floods, droughts, etc.) or key infrastructures and economic activities in sectors (urban infrastructure, transport infrastructure, agriculture energy, etc.). With the adoption of the 'Climate and Energy Package', the EU has committed to transforming itself into a highly energy-efficient, low carbon economy. In a Communication from 26 May 2010²⁴⁴, the Commission has stated that 'arresting the rise in global temperature remains one of the biggest challenges facing this generation'. Accordingly, the Commission has proposed a new long-term roadmap for moving towards a low-carbon Europe's economy²⁴⁵.

Adaptation to climate change is also a significant challenge, as climate change poses new threats to project activities in various economic sectors; the EU approach in this regard is presented in the White Paper on Adaptation²⁴⁶, which recognises that 'climate change will lead to significant economic and social impacts with some regions and sectors likely to bear greater adverse effects' and that adaptation measures are needed. As climate change is being mainstreamed in EU policies and cooperation programmes and the EU adaptation strategy is being developed, systematic climate risk assessment (such as climate variability, hazard forecasting) or 'climate proofing' is important in this regard.

Transportation is a significant aspect in the fight against climate change and is also an important aspect of many projects subject to EIAs. The EU's vision for 2020, as stated in the EC Roadmap to a Resource Efficient Europe, is that 'transport will use less and cleaner energy and (...) reduce its negative impact on the environment and key natural assets like water, land and ecosystems'.

Impacts related to disaster risks

Recent years have witnessed marked increase in the number and severity of natural and man-made disasters which have underlined the importance of effective risk prevention and preparedness measures to avoid and reduce potential economic and environmental damages and raise public awareness. 92 % of disasters last year were

²⁴⁴ COM(2010) 265, Analysis of options to move beyond 20 % greenhouse gas emission reductions and assessing the risk of carbon leakage.

²⁴⁵ COM (2011)112, A roadmap for moving to a competitive low carbon economy.

²⁴⁶ COM(2009)147, White paper - Adapting to climate change : towards a European framework for action.

climate-related and the current policy approaches and actions for adaptation and disaster prevention are complementary. On the other hand, there are other natural and man-made disasters which can have impacts on projects, but are not climate-related such as earthquakes, technological and industrial accidents. The EU risk prevention policy is framed in the 2009 Communication ‘A Community approach on the prevention of natural and man-made disasters’²⁴⁷ which points to ‘*progressively growing vulnerability to disasters partly as a consequence of increasing intensive land use, industrial development, urban expansion and infrastructure construction*’.

Disaster risks are not considered in the current EIAs, although projects are among the underlying drivers for the increasing vulnerability of the associated factors (material assets, human beings, flora, fauna etc.). At the same time, they can be also exposed to serious disaster risks (e.g. earthquakes, floods, technological hazards) which could significantly impede the activities and objectives of the project and have adverse effects. In the 2009 Prevention Communication, the Commission has committed itself to mainstream disaster prevention concerns in the EU legislation and in particular in the EIA Directive. It is important to ensure that new projects and investments are disaster-proof through procedures which require risk assessment and risk management of potential hazards, as envisaged in the EU Internal Security Strategy²⁴⁸ aiming to “*increase the security and build resilience to natural and man-made disasters*”.

Impacts of projects on biodiversity

At present, the analysis of Member States’ experience in implementing Article 6 of the Habitats Directive²⁴⁹ shows that the protection of biodiversity under the Habitats Directive only covers projects that directly have a negative impact on Natura 2000 sites, whereas biodiversity in general may not be efficiently covered by EIA requirements outside Natura 2000 sites²⁵⁰, but the information base is thin. EIAs are quite often not based on appropriate methodologies to account for the impacts of projects on biodiversity, and are not coordinated with relevant biodiversity policies. The EU has missed its 2010 target of halting biodiversity decline and it is recognised that efforts to protect biodiversity should be enhanced. The new EU Biodiversity Strategy²⁵¹ has reiterated the target of halting biodiversity loss by 2020 and recognises that biodiversity loss is “*the most critical global environmental threat alongside climate change*”.

Impacts of projects on marine environment and on maritime issues

The marine environment holds economic opportunities in a wide range of sectors and provides key ecosystem services; pressures on these systems, including from the discharge into the sea of pollutants in freshwater, are still severe²⁵². Following

²⁴⁷ COM(2009)82.

²⁴⁸ COM(2010)673.

²⁴⁹ Article 6(3) requires that any plan or project likely to have a significant effect on a Natura 2000 site should be subject to an “appropriate assessment”.

²⁵⁰ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

²⁵¹ COM(2011)244, ‘Our life insurance, our natural capital: an EU biodiversity strategy to 2020’.

²⁵² COM(2011)571, ‘Roadmap to a Resource Efficient Europe’ (Chapter 4.7).

adoption of the Marine Strategy Framework Directive (2008)²⁵³, some projects within the marine territory have become subject to EIA, therefore impacts on the marine environment will become an important aspect of in EIAs of such projects. The Roadmap to a Resource Efficient Europe²⁵⁴ recognises "*the lack of coherent management of sea space which is already affecting our possibilities to benefit from maritime activities*". The EU's objective is to achieve 'good environmental status of all EU marine waters by 2020. In this light, there is a need for a better coordination between the requirements of the EIA Directive and the marine and maritime EU policy.

Impacts of projects on the use of natural resources (depletion risks, resource use considerations)

The EIA Directive does not require a systemic checking for impacts of projects on the overall use and depletion of natural resources. However, the EU has started to develop a comprehensive approach to the sustainable use of natural resources, which needs to be better reflected in the EIA Directive.

The Thematic Strategy on the Sustainable Use of Resources²⁵⁵ points out that '*if current patterns of resource use are maintained in Europe, environmental degradation and depletion of natural resources will continue*' and emphasises the importance of integrating environmental concerns into other policies that affect environmental impacts of natural resources use. The need to address the challenge of the unsustainable use of resources has been recognised in several high level policy documents (Sixth Environment Action Programme²⁵⁶, EU 2020 Strategy²⁵⁷, EU Sustainable Development Strategy²⁵⁸, Thematic Strategy on the Sustainable Use of Natural Resources²⁵⁹). This issue is also identified as a priority in the Roadmap to a Resource Efficient Europe²⁶⁰; the roadmap itself contains an objective for the Commission to 'include broader resource efficiency considerations in the review of the EIA Directive' (Chapter 4.6 of the roadmap).

(b) Potential drivers

Since the adoption of the EIA Directive 25 years ago, new environmental challenges have arisen, which are not specifically covered by the Directive, as they have not been taken on board in previous rounds of revision of the Directive. This concerns in particular climate change, increased frequency and intensity of disasters, biodiversity, marine protection and the efficient use of natural resources. These issues are not expressly referred to in the list of environmental topics covered by the Directive (Article 3 and Annexes III and IV). 'Climate' is mentioned in Article 3 however it does not specifically refer to 'global climate change'. Effects of projects on 'human beings, (...), material assets, etc.' are mentioned in Article 3, but the

²⁵³ Directive 2008/56/EC of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

²⁵⁴ COM(2011)571, 'Roadmap to a Resource Efficient Europe'.

²⁵⁵ COM(2005) 670, 'Thematic Strategy on the sustainable use of natural resources'

²⁵⁶ Decision 1600/2002/EC.

²⁵⁷ COM(2010)2020.

²⁵⁸ COM(2001) 264.

²⁵⁹ COM(2005) 670.

²⁶⁰ COM(2011)571 final, 'Roadmap to a Resource Efficient Europe'.

specific risks due to the changing climate and other man-made or natural disasters are not specifically mentioned. Article 3 also mentions ‘fauna and flora’; however this is more restrictive than the concept of ‘biodiversity’ that is now widely used. Hence, there is little incentive for developers and competent authorities to account for the impacts of their projects in these areas.

With regard to biodiversity, the analysis of Member States’ experience in implementing Article 6 of the Habitats Directive shows that the protection of biodiversity under the Habitats Directive only covers projects that directly have a negative impact on Natura 2000 sites, whereas biodiversity may not be efficiently covered by EIA requirements outside Natura 2000 sites²⁶¹.

10.5.2.6. How would the situation evolve without policy changes?

In the absence of policy changes at EU level, the quality and completeness of EIA reports may continue to improve across the EU, due to several factors:

- Increased experience in EIA in the new Member States.
- Possible future strengthening of national EIA legislation which may occur in some Member States (e.g. in France, opportunities for developing accreditation criteria for EIA consultants have been explored recently).
- Updated guidance documents issued by the Commission.

However, it is unlikely that future improvements would be significant enough to address the issues related to quality and completeness. Even if the situation improves in some Member States, significant discrepancies across the EU would probably remain and would probably lead to an unequal implementation of the Directive. This situation would adversely affect EIAs for transboundary projects in particular.

As regards issue n°7, increased environmental awareness of stakeholders involved in EIAs, in particular with regard to additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use) may be expected, but discrepancies would still remain.

10.5.3. *Issues related to consistency with other policies and legal requirements*

10.5.3.1. Issue n°8: Overlaps in information and procedural requirements

(a) Description

At EU and Member State levels, various legislative acts set forth requirements related to environmental assessment. Legal requirements often overlap but are not synchronised, leading to a duplication of efforts (and associated costs) for developers and for public authorities, as similar information may have to be provided up to three times to the authorities. Additionally, synergies between these various environmental assessments are not necessarily exploited (e.g. conclusions from one type of environmental assessment may reinforce the conclusions of another

²⁶¹ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

assessment). The most significant issues raised by previous studies and the public consultation are as follows:

- Some of the information required to be submitted in EIAs is also needed as part of permit application files required by the Industrial Emissions Directive (IED).
- Some of the information required to be submitted in EIAs is also needed as part of the ‘appropriate assessment’ required by the Habitats Directive.
- In the case of projects which are part of wider plans/programmes subject to a SEA, there can be overlaps in the information requirements.

Moreover, different permitting and reporting requirements under different Directives also lead to a fragmentation of administrative responsibilities in the Member States, as different authorities deal with different Directives. In the absence of measures aiming to streamlining administrative procedures under the EU environmental law, this can increase uncertainty and costs for developers as they have to deal with different authorities and need to invest time to sort out competencies.

(b) Potential drivers

Article 2 of the EIA Directive suggests the possibility to implement a single procedure to fulfil the requirements of the EIA and IED Directives ("*Member States may provide for a single procedure...*"); however to date most Member States have not followed this suggestion and have not improved the coherence of their policy implementation. Article 12(2) of the IED makes it clear that where information supplied in accordance with the EIA Directive (or a safety report under the Seveso Directive) or other information produced in response to other legislation fulfils any of the permit application requirements, such information can be included in or attached to the permit application.

Some Member States have linked the EIA Directive and the Habitat Directive requirements in their national approaches to environmental assessment, sometimes formally, sometimes informally through standards of good administrative practice. Some Member States have established both informal and formal links between the EIA Directive and the Habitats Directive (adopted in 1992), however the EIA Directive does not specifically require that the assessment under the Habitats Directive be included in EIAs.

Part of the problem is that the requirements of the EIA Directive have not been harmonised with the respective requirements for environmental assessment in other relevant Directives, particularly the SEA Directive (adopted in 2001) and the IED.

10.5.3.2. Issue n°9: Inconsistency with other legislation/international conventions

(a) Description

For some activities listed in both the EIA Directive and the Industrial Emissions Directive (IED), thresholds differ, resulting in a lack of overall coherence in the legislation. For example, the threshold for thermal power stations in the EIA Directive (Annex I) is 300 MW, while in the IED it is 50 MW. However, as indicated

in the Commission's proposal for the IED made in 2007 and its accompanying impact assessment, combustion plants with a rated thermal input of 50 MW or higher are significant contributors to pollution and must therefore be covered by a permit to operator and to control emissions accordingly. The difference in the thresholds used maybe explained by the different approaches and requirements laid down by the two Directives.

Additional activities have been added to the Espoo Convention through its 2004 amendment²⁶² as well as the ratification of the SEA Protocol²⁶³; however, these activities are not listed in the EIA Directive, resulting in a possible lack of coherence between the EIA Directive and the latest modifications to the Espoo Convention. This concerns deforestation of large areas, offshore hydrocarbon production and major installations for the harnessing of wind power for energy production.

For some projects, often related to land use, there may be some doubts for developers and competent authorities as to whether either an EIA or a SEA, or both, are required (e.g. large projects made up of sub-projects; projects that require changes to land use plans; plans and programmes which set binding criteria for the subsequent development consent of projects; hierarchical linking between SEA and EIA).

Certain types of projects tend to become more frequent in the EU and may be associated with significant environmental impacts, for example solar farms, and desalination plants. They are not explicitly covered by the current EIA Directive, therefore their potential environmental impacts may not be systematically assessed and mitigated, which may represent a threat for the environment.

(b) Potential drivers

The project categories of the EIA (Annexes I and II) have not been significantly adapted since 1997²⁶⁴. In the meantime, a number of policy and technical evolutions have emerged, such as:

- The thresholds for projects subject to an EIA are not harmonised with the ones of the IED. However, this could be partly explained by the differences in approaches between the two Directives.
- The modifications to the Espoo Convention (second amendment adopted in 2004, SEA Protocol entered into force in July 2010) have not been taken into account.
- Some new types of projects which are becoming more and more frequent and may have adverse environmental effects are not explicitly covered by the EIA Directive.

²⁶² Decision III/7 – Second amendment to the Espoo Convention, adopted in 2004 (http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/2nd_amendment_en.pdf).

²⁶³ Espoo Convention, Protocol on Strategic Environmental Assessment (<http://live.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>).

²⁶⁴ The only exception is the addition of projects related to the transport, capture and storage of carbon dioxide in 2009 by the Directive 2009/31/EC.

Besides, the definitions of certain project categories, which often relate to land use, are not clear and this might create confusion with the SEA Directive's requirements (e.g. although the Court provided clarification in cases C-295/10 and C-43/10).

10.5.3.3. How would the situation evolve without policy changes?

Without policy changes at EU level, it is unlikely that the issue n°8 would be addressed in the future. In Member States where some environmental assessment processes are already conducted jointly (e.g. EIA and IED-related processes in France), national legislation is likely to be modified in the future to take into account any changes to EU legislation concerning environmental assessments and any possible synergies. However, in Member States where environmental assessment processes have not been coordinated to date, there is no evidence why the situation would change.

Concerning the issue n°9, the EU has ratified the SEA Protocol to the Espoo Convention as well as the second amendment of the Espoo Convention. Both texts form an integral part of the legal order of the EU and take precedence over secondary legislation. The Member States are therefore bound by the above Conventions and have to take all necessary measures to comply with them. Hence, the risks of incoherence with the Convention are more limited and there is no urgent need to reflect these changes in the Directive.

10.5.4. *Issues related to public participation and timing of EIA process*

10.5.4.1. Issue n°10: Unclear time-frame for public consultation

(a) Description

Durations for the public consultation vary considerably among Member States, from 2 weeks in certain Member States up to 2-3 months in others. Two weeks does not seem to be a reasonable time-frame for public participation, as it seldom does enable the public to familiarise itself with the consultation documents and hence effectively participate in the project-related decision-making process. This may contravene the aim stated by the EIA Directive and the Aarhus Convention to give the public "*effective opportunities to participate in the environmental decision-making process*". On the other hand, a very long duration for the public consultation phase may generate additional costs and uncertainties for the developer.

Besides, unspecified durations for public consultation in the EIA Directive may prevent a good coordination with other processes carried out in parallel, such as environmental assessments required by other Directives, and in the case of transboundary EIAs. This may generate additional burden and costs for developers and public authorities.

(b) Potential drivers

The EIA Directive states that 'reasonable time-frames' for the different consultation phases should be provided, but it does not regulate them further. This provision is interpreted in different ways by the Member States. Most Member States have chosen to set forth defined time limits (often by way of minimum requirements) for participation. Other Member States have employed similar qualitatively defined

criteria in legislation and thus leave it to the competent authority to decide what the ‘reasonable’ time limit is in individual cases. Overall, this results in a very incoherent approach to organising the time available for public consultation in EIA process.

10.5.4.2. Issue n°11: Lengthy decision-making process

(a) Description

In some cases, the time taken by the authorities to issue their decisions on screening and on the development consent generates significant uncertainty and delays for the developers, which may lead to additional costs. The average duration of an EIA procedure was estimated to be 11.3 months but figures range from 5 to 27 months²⁶⁵.

(b) Potential drivers

The analysis of case studies²⁶⁶ shows that lengthy EIA processes are due to various factors, including in particular: the complexity, large scale and/or sensitive location of some projects; the transboundary nature of some projects; the difficulty in collecting environmental data; the poor quality of information submitted by the developer (resulting in requests for additional information by the authorities); issues raised by local stakeholders; as well as excessive time taken by the authorities in the decision-making process. Overall, it appears that the responsibility for delays is shared between the authorities involved in the EIA process, the developers and other possible actors, such as local stakeholders, or is due to other external factors.

In the case of delays attributable to public authorities, various drivers were identified²⁶⁷ such as: political unwillingness to consider the project; inadequate staff resources of the competent authority; uncertainty over the applicability of thresholds as part of the screening process; and lack of agreed timetables and/or failures to respect agreed timetables for different stages. With regard to the last driver identified, the EIA Directive does not specify a maximum time-frame for each of the steps of the EIA process nor for the whole EIA decision process, which may result in lengthy decision-making processes in some instances, and also delay the general development consent (permitting) process.

10.5.4.3. How would the situation evolve without policy changes?

In the absence of policy changes at EU level, the situation is unlikely to change in the future and the above issues (n°10-11) are unlikely to be addressed. This would adversely affect EIAs for transboundary projects in particular.

²⁶⁵ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

²⁶⁶ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

²⁶⁷ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Chapter 3.3.4.

10.6. Annex 6: Detailed description of the policy options discarded

10.6.1. Non-regulatory options

Non-regulatory policy options are not adequate and consistent with the main objectives (i.e. harmonisation of national measures) of the EIA Directive. The implementation of the EIA shows the inadequacy of means other than the current regulatory ones. Non-regulatory measures are not appropriate given the variety of industries affected by the EIA and the variety of projects and environmental issues covered. The existing framework has already resulted in different EIA regimes in the Member States (e.g. as regards the screening). Hence, a greater prescriptiveness of the EIA legislation is likely to reduce this deviation, whereas a lesser prescriptiveness is likely to increase it. Non-regulatory options would result in even greater deviation of practice in EIA, leading to potential distortions of the internal market and negative consequences for Europe's environment, thus generating greater costs than savings. In addition, the use of non-regulatory options would increase the risk of non-compliance of the EU with its international obligations. For these reasons, such options have been discarded from the analysis.

10.6.2. Merging the SEA and EIA Directives – Option 3

This option would aim to redefine the borders of assessment both at plan/programme and project levels and would imply the amendment of both Directives. A sole assessment of plans and projects would address the problems related to the quality of the EIA process, which would benefit from several amendments (e.g. assessment of reasonable alternatives, monitoring of significant effects, consideration of environmental issues at an early stage); in addition, a joint assessment of plans and projects would strongly simplify the permitting procedures and would accelerate the implementation of projects. However, this option is not feasible for the following reasons:

Firstly, although joint assessments procedures are allowed by the SEA Directive²⁶⁸, the information available²⁶⁹ shows that joint assessment procedures of plans and projects are not used in the Member States. A vast majority of Member States underlined that the SEA and the EIA processes should be distinguished, as these are related but complementary processes that should not be directly linked.

Secondly, merging the two Directives at this stage is not a viable option, due to the specificities of the EIA and SEA processes and the limited experience in applying SEA²⁷⁰. The reports conclude that better coordination and coherence could be achieved by covering the inconsistencies between the provisions of the two

²⁶⁸ According to Article 11(1) and (2) of the SEA Directive, Member States may provide for coordination and joint procedures in situations where an obligation to carry out assessments of the effects on the environment arises simultaneously from the SEA Directive and other Community legislation. Hence, the Member States can choose to coordinate SEA and other assessments or introduce a form of joint procedure with one single assessment fulfilling the requirements of both Directives.

²⁶⁹ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

²⁷⁰ See the Commission reports on the application and effectiveness of the EIA and the SEA Directives (COM(2009)378 and COM(2009)469).

Directives and by clarifying the definitions of problematic project categories in the EIA Directive.

Thirdly, a merger of both Directives would also require a full revision of the SEA Directive. This would entail significant institutional and procedures changes in the Member States for a Directive which applies as from July 2004. Member States stressed that more experience is needed before amending the SEA Directive. Hence, such an option is not efficient.

Fourthly, such an option would not solve the problems related to the screening criteria and the scope of the EIA, as it would be difficult to assess the concrete environmental effects of projects at a strategic/planning level. Hence, the effectiveness of such an option is quite limited.

Fifthly, this option is not favoured by any of the categories of stakeholders. The public consultation found 29 % being in favour of this option, 50 % against and 21 % not having an opinion.

Based on the above, this option will not be taken forward as part of this assessment, as it is not a feasible and efficient one. However, some aspects of the possible impacts of merging the EIA and SEA Directives will be addressed as part of the coordinated or joint procedures for the EIA process and other environmental assessments.

10.6.3. Adopting new legislation on environmental assessment – Option 4

This option would aim to tackle all the problems identified, since the EIA Directive would be repealed and a new piece of legislation would be developed, to harmonise implementation of the provisions and integrate environmental assessment requirements resulting from the different instruments (e.g. IED, Habitats Directive, SEA Directive, etc.) and therefore ensure a level playing field. This option would further require a thorough evaluation and fitness test of the existing legislation and would inevitably involve repealing and replacing assessments and/or permit provisions included in other environmental legislation. All the amendments described in Annex 10 would be envisaged as part of this policy option.

However, while such an option could potentially bring certain benefits, the objective of reconsidering all environmental assessments and permitting processes embedded in other EU legislation goes beyond the scope of the EIA Directive revision. Such an initiative would require various and considerable changes in the scope and content of a number of other relevant pieces of EU legislation, and the merger of some of them, and would certainly lead to important institutional and administrative changes in EU and national procedures. Such an option ideally would have to be developed through transparent discussion, using appropriate processes allowing for time progressivity. However, this would postpone the benefits of actions possible under the other policy options (e.g. options 1 and 2). Instead of this far-reaching option, the inclusion of provisions for better coordination/integration with other legislation, which is envisaged under option 2, appears as more realistic and practical, at this stage.

A broad change of existing EU legislation in the context of the present initiative would be disproportionate especially in view of the fact that some of the Directives which would need to be modified have been adopted very recently (e.g. the IED

adopted in November 2010 following a long revision and discussion process); it would be counterproductive to trigger a revision of these legislative pieces at present without a solid justification. For example, the ongoing implementation process of the IED in Member States would be put into question thereby creating not only legal uncertainty but most likely also having negative financial repercussions. The public consultation found that, of all respondents, 26 % were in favour of this option²⁷¹.

Based on the above analysis, this option has not been taken forward, as it goes beyond the objectives of the revision of the EIA and is not feasible at this stage, but should rather be considered in the context of a future and more strategic initiative.

10.6.4. *Transforming the EIA Directive in a Regulation*

As some of the challenges in the application of the EIA Directive can be attributed to the wide margin of discretion allowed for Member States, the use of a Regulation could be a relevant instrument. In general, a Regulation has advantages over a Directive²⁷² and is often used to achieve a high degree of harmonisation of legislation at national level. However, to achieve its potential, a Regulation should contain sufficiently clear, specific and precise provisions, which would limit the margin of discretion of Member States and would not require national implementing measures. It is uncertain that the use of a Regulation in the case of the EIA would achieve the added value that this instrument provides because of the following specific considerations:

- Member States have already transposed the EIA Directive in a variety of ways into their national legislation (often at regional and local levels). These differences are not the cause of the earlier mentioned deviations, but rather a choice by the Member States to transpose the EIA Directive in a way that corresponds best to the overall nature of their political, institutional and administrative systems and traditions. The variety of transposition arrangements, in particular the integration of the EIA into the wider permitting procedures, is also likely to limit the harmonisation objective.
- The variety of environmental issues to be considered is a factor which would impede reaching a high degree of harmonisation. For instance, the absorption capacity of the natural environment, the existing land use or the considerations on climate change and disaster risks vary from one Member State to another or even between regions within the same Member State.
- The multiplicity of projects and the diversity of project-related circumstances (geographic, demographic, social, economic, political and technological) justify, to some extent, the degree of flexibility granted to Member States. In this regard, a Directive is the most logical choice.

²⁷¹ 61 % were against and 13 % had no opinion. Individual citizens and public authorities provided the greatest support for this option (31 % and 29 % respectively); NGOs and businesses/private companies were strongly opposed (only 15 % and 17 % respectively were in favour of this option).

²⁷² No transposition needed, direct applicability and effect, speed of application, efficient and consistent implementation, level playing field.

Transforming the EIA Directive in a Regulation would take considerable time to determine the scope, the detailed level and the ambit of the provisions of the new framework which should cope with national conditions and needs, and also be suitable for effective implementation (e.g. defining EU screening thresholds to determine for Annex II projects). An EIA Regulation would also require considerable changes by Member States in order to adapt their national systems. A Regulation in the case of the EIA would very likely require national implementing measures (often at regional and local levels), such as the reorganisation of responsibilities between competent authorities, and would generate high costs. The use of an EIA Regulation would therefore create a situation where already existing national legislation on EIA would be repealed, potentially creating more confusion on the implementation of the EIA legislation. This is also not consistent with the proportionality principle. In addition, in those Member States having transposed the Directive in a more stringent way, a (binding in its entirety) Regulation could possibly lead to withdrawing the previously higher environmental standards. It is questionable whether the benefits of replacing the EIA Directive with an EIA Regulation heavily outweigh the benefits that can be achieved with a revision and better implementation of the EIA Directive. It should also be noted that 64 % of respondents to the public consultation were against such a change²⁷³.

Taking into account the objectives of the EIA revision and the specific circumstances linked to the implementation of the EIA, at this stage, a Directive would be better suited than a Regulation (e.g. for providing Member States with the possibility to coordinate and integrate various environmental assessment procedures as some of them have already done).

Consequently, the use of an EIA Regulation will not be considered further, as it is not the most appropriate instrument for the present initiative, which has started with a simplification initiative, i.e. the codification of four Directives. Instead, the inclusion of provisions aiming at a higher degree of harmonisation will be further analysed under the following section.

²⁷³ 23 % were in favour and 13 % had no opinion (based on all responses). Only 14 % of businesses/private companies supported this option; the greatest support (31 %) comes from individual citizens.

10.7. Annex 7: Environmental benefits related to EIAs in the baseline scenario

All Member States have established comprehensive legal frameworks and implement the EIA in a manner which is largely in line with the Directive's requirements. In many cases, Member States have built on the minimum requirements of the Directive and have gone beyond them, by introducing more stringent provisions (on the basis of Article 193 of the EU Treaty), which aim to ensure better environmental protection and more transparency. Many Member States have also developed their own guidance on good practice on specific project categories and issues.

The EIA Directive has also brought overall environmental benefits by giving environment a higher standing and clearer position in the decision-making process when determining development consent. It contributes to **environmental awareness** of the population and has raised the profile of the environment, which may also indirectly result in better environmental protection at a larger scale. The overall positive role played by the EIA directive is confirmed by the results of the public consultation on the review of the EIA Directive²⁷⁴.

Environmental benefits **cover a wide range of areas**, in line with the main aspects listed in Article 3 of the Directive: population, fauna, flora, soil, water, air, climate, landscape, material assets and the cultural heritage. Environmental aspects to be described in an EIA cover in particular those resulting from: the existence of the project, the use of natural resources and the emission of residues and pollutants resulting from the construction and operation of the proposed project, the creation of nuisances and the elimination of waste (see also Annex IV).

Previous studies and surveys related to EIA costs and benefits **have not quantified or monetised** the environmental benefits (in terms of the environmental improvement or prevention of environmental damage) that can be attributed to the EIA procedure. Nevertheless, there is widespread consensus that the EIA Directive has already provided significant environmental benefits, even if these do not carry an explicit price tag²⁷⁵. Responses to the GHK survey in 2010 indicate that all Member States believe there are significant environmental benefits from the EIA Directive. Moreover, during the public consultation on the review of the EIA Directive, respondents agreed on the fact that the EIA Directive is an efficient instrument to address environmental concerns in the design of projects²⁷⁶.

The major benefit of the current implementation of the EIA Directive is that it ensures **environmental considerations are taken into account as early as possible in the decision-making process**²⁷⁷. This contributes to making projects more environmentally sustainable by preventing, mitigating or compensating

²⁷⁴ Almost all respondents (97 %) agreed on the fact that the EIA Directive contributes to effective protection of the environment and the quality of life.

²⁷⁵ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

²⁷⁶ This is always or often the case for 63 % of the respondents and this is sometimes the case for 34 %.

²⁷⁷ Commission Report on the application and effectiveness of the EIA Directive (COM(2009) 378); GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

environmental damages²⁷⁸. Benefits also include the enabling of detailed modelling and evaluation of impacts to be undertaken.

Environmental benefits can result from decisions taken by developers:

- *During* the EIA process, through discussions with authorities, consultants and the public consultation; and/or
- *Prior to the application*, by anticipation of the EIA requirements.

With regard to changes made *during* the EIA process, the literature reviewed in the IVM study of 2007 shows that project modifications are very frequent. For example, Denmark reported that according to an evaluation of the work related to EIA in the Danish counties for the Ministry of Environment (2003)²⁷⁹, it is found that more than 90 % of projects submitted for an EIA are altered in favour of the environment. The evaluation also concludes that the EIA screening mechanism is flexible and that many project changes are introduced prior to the application of or during the screening process. Benefits are identified in terms of e.g. higher standards of mitigation and project relocation or re-design to spare environmentally sensitive areas.

Benefits (and costs) of the screening procedure for projects listed in Annex II of the EIA Directive were investigated by Nielsen *et al*²⁸⁰. Even though only 3 % of these projects are actually subject to an EIA, the screening instrument is considered effective in terms of securing an environmental optimisation of the projects. Almost half of the investigated projects were changed and the changes were primarily preventive measures. Effectiveness was judged by not only the capacity of screening to change the project, but also by the fact that the authorities use very few resources.

Environmental improvements decided *prior to the application* are likely to be more substantial than those decided during the EIA process, however they are much more difficult to identify. Having been in force for more than 25 years, the requirements of the EIA process are now well known by many developers who tend to anticipate these requirements before submitting their file. The Commission's experience from the assessment of projects co-funded under the EU Regional Policy, in particular major projects, shows that EIAs have improved the projects' design from an environmental perspective reference²⁸¹.

As reported by IVM, at least in Germany the sole existence of EIA leads to an anticipation of its requirements early on in project planning so that project modifications due to the EIA are very rare. Therefore, using the number or extent of

²⁷⁸ For instance, through changes in the technical design and spatial design of projects (e.g. route selection for transportation infrastructure, location selection for industrial facilities) or through implementation of mitigation and compensation measures.

²⁷⁹ Christensen P., Kørnøv L. and Nielsen E.H. (2003) The advantages of EIA – Evaluation of EIA in Denmark, (Udbyttet af VVM—Evaluering af VVM i Danmark, hovedrapport) Ministry of the Environment, Denmark Landsplanafdelingen.

²⁸⁰ Nielsen, E., P. Christensen, and L. Kørnøv (2003), Are screening processes effective instruments and what are the environmental benefits? Department of Development and Planning, Aalborg University.

²⁸¹ See the report on the application and effectiveness of the EIA Directive (COM(2009) 378).

project modifications as an indicator to assess environmental benefits is clearly limited.

A Danish study²⁸² reveals that the screening mechanism of the EIA procedure in itself seems to have a positive effect on projects that are screened out of the EIA procedure. The study examined a vast number of screening decisions searching for data on whether the applicant did in fact change his/her project in the light of screening requirements. The study found that a majority of the projects were in fact changed already prior to the screening procedure for the purpose of avoiding the project being subjected to the EIA procedure as a result of a screening decision. Thereby documentation is produced so that even the screening procedure in itself may have environmental protection as a built-in feature regardless of whether screening results in a negative decision or not.

Some examples of environmental benefits related to EIAs, as identified in the case studies of the GHK study, are provided below:

Examples of environmental benefits related to EIAs based on case studies:

1. Transmission line of 400 kV between Hévíz and Szombathely, Hungary (Case Study 5): Measures included the minimisation of possible harm on local forests, rivers and streams (e.g. planting new forests) and the local landscape; the protection of local birds and other protected species (e.g. setting up artificial nests); and taking extra care during construction in Natura 2000 areas.

2. D1 Highway – Section Prešov West-Prešov South), Slovakia (Case Study 8): The EIA recommended 44 measures to avoid, minimise or compensate for environmental damage. This included: installing noise barriers, emissions capture devices and a closed drainage system, employing technology and construction methods to minimise soil erosion and risk of soil collapsing, fencing to keep animals away, timing of construction works to minimise impact on animals and other living species, waste management during construction.

3. High-pressure gas pipeline, Germany: Protected areas where no environmental impacts are allowed (e.g. Natura 2000) were seen to significantly influence routing decisions (e.g. decision to circumvent these areas unless exemptions can be made). Conditions on construction methods (horizontal directional drilling rather than cut-and-burial techniques) were also set to achieve prevention and mitigation of environmental aspects.

4. Development of a new quarry, Germany: The impact on water resources including surface and groundwater was assessed during the procedure. In this area the EIA was seen to have had the main impact because it led to the preservation of a watercourse, which was rerouted. The impacts on nearby residential developments were a particular issue and formed a significant part of the consultation and decision-making process; this included noise, dust and vibrations from explosions, which were addressed through conditions on the operations of the quarry (e.g. restricted hours during which explosions can take place). Because of its location in an area of environmental and recreational value, impacts on nature and landscape were another important part of the assessment; these were addressed through mitigation and compensation measures, covering recreational use of areas around the quarry, e.g. through changes in the pathway systems and planting of trees.

²⁸²

Nielsen H. et al. (2005), EIA screening in Denmark: a new regulatory instrument?, Journal of Environmental Policy, Assessment, and Management, vol. 7 no. 1.

5. Planned unit development in Le Garoussal, France: The development of the area was expected to lead to a rise in impermeable surfaces of up to 20 %. The problem of run-off was planned to be resolved through the creation of retention tanks.

6. Reconstruction of Wyzkow Ring Road, Poland: The construction project included environment protection facilities, among which: passages for animals under the road; storage and filtering reservoirs with installations for pre-treatment of rain water including separators; parking lots outside forest areas; a durable game fence visible for animals, isolating road from the forest; and non-transparent noise screens.

There are, however, a number of limitations to those environmental benefits:

- It may be argued that, in a number of cases, changes to the project mostly consist in adding mitigation/compensation measures rather than reviewing the design of the project in order to prevent the impacts from occurring, which would be much more beneficial from an environmental point of view. Although Annex IV of the Directive mentions that measures to be described shall include ‘*measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment*’, it does not specify any hierarchy between these different options (i.e. it is not specified that prevention should be preferred over mitigation).
- In some Member States, the EIA process is considered by developers more like an administrative formality than an opportunity to integrate environmental impacts into the project’s design. Some project developers tend to use EIAs more as juridical insurance than as decision-making tools²⁸³. Literature reviewed during the IVM study shows that project modifications during the EIA application are very often identified but most of the changes seem to be minor. For example, according to a Danish study²⁸⁴, changes were made to 90 % of projects subject to EIA reviewed in the study, but only 15 % of those changes could be considered as major or radical changes resulting in significant mitigation of environmental impacts; such major changes are often observed in infrastructure projects.
- The extent of environmental benefits is partly linked to the quality of the EIA report and of the EIA process (in particular, the levels of capacity and competence of public authorities to advise and negotiate during the EIA process and the quality of the public consultation). As there is no clear framework defined in the EIA Directive, quality is considered very unequal from one EIA to another and there is room for improvement²⁸⁵.
- It is very difficult to evaluate the actual environmental benefits once the project has been developed, due to a lack of post-EIA monitoring activities in most cases (as this is not required by the EIA Directive).

²⁸³ See for example the French case study in the IVM report.

²⁸⁴ Christensen et al. (2003) The advantages of EIA – Evaluation of EIA in Denmark, main report (Udbyttet af VVM—Evaluering af VVM i Danmark, hovedrapport) Ministry of the Environment, Denmark Landsplanafdelingen.

²⁸⁵ See also the problem definition in Section 3.2.2.

- When the EIA Directive was adopted 25 years ago, certain environmental issues such as climate change, disaster risks, resource efficiency or biodiversity were not yet identified as priority issues. As a consequence, EIAs tend to focus on ‘traditional’ environmental topics (e.g. emissions to air/water/soil and waste management), while these more recent topics are addressed in a superficial manner.
- It is difficult to distinguish between the environmental benefits resulting from the EIA Directive itself and from the need to comply with other environmental legislation which has to be taken into account in the planning process. The EIA Directive does not provide environmental performance standards but gives strong incentives to developers to anticipate possible compliance issues with other environmental legislation at an early stage.

10.8. Annex 8: Methodology for calculating direct administrative costs in the baseline scenario for public authorities and developers

The administrative costs per EIA for public authorities can be measured by the effort in terms of number of hours to process an EIA multiplied by the average gross labour cost. The GHK study²⁸⁶ shows that the average number of days to process an EIA is estimated at 32 man-days. There is, however, a large deviation between Member States (e.g. ranging from 5 days in Czech Republic to 100 days in Denmark) and between types of projects.

The EU Standard Cost Model contains average costs for administrative work, the costs being calculated according to the full cost principle. These hourly wages are based on standardised ESTAT data (the four-yearly labour cost survey and the annual updates of labour cost (ALC) statistics). They cover both wage and non-wage labour costs. They reflect 2006 prices and include a standard proportion of so-called overheads costs (i.e. 25 %) linked with individual employees and borne by organisations but not included in their salaries: fixed administration costs such as premises, telephone, heating, electricity and IT equipment. The 2006 prices were corrected for inflation using the Labour Cost Index published by Eurostat. For some Member States these data are missing, in which case a general inflation rate was used: the harmonised inflation rate based upon the harmonised consumer price index (HICP, published by Eurostat to compare inflation in European countries).

The total cost of the entire EIA process per Member State depends on the labour cost and the number of EIAs processed by each Member State. Under the assumption that an average working day contains 7.5 working hours, the time spent in processing the EIAs results in an overall administrative cost for public authorities of approximately **€146 million to €215 million in 2010 for the EU**²⁸⁷.

The GHK study does not take into account time spent on negative screenings (i.e. screenings that do not result in an EIA). Assuming that a negative screening takes on average 1 hour (including time for informing the parties concerned)²⁸⁸, the additional cost would amount to € 0.45 to 1.2 million per year for the EU²⁸⁹. This is therefore negligible compared with the cost associated with the other steps of the EIA process.

In order to check the validity of the above estimates, these results were confronted with quantitative data on the number of staff involved in the EIA process in the Member States. The GHK study states that on average 52 persons per Member State are employed by the authorities to deal with the screenings and EIA dossiers. This means that, in the EU, 1.404 staff members (not necessarily full time equivalents) are involved in the EIA process.

²⁸⁶ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Table 2-8.

²⁸⁷ The low estimate is based on the GHK study, while the high estimate is based on questionnaires of the GHK study.

²⁸⁸ Based on verbal information provided by UK authorities in charge of EIA Directive's implementation.

²⁸⁹ The low estimate is based on the GHK study, while the high estimate is based on questionnaires of the GHK study.

If the outcome of both calculation models is divided by the number of staff, this results in an average full cost (both wage and non wage costs and including 25 % overhead) of approximately € 105.000– € 153.000 per administrative staff member. This outcome seems to be realistic and indicates that the above range is a good estimate of the actual situation. Taking into account the increase in the number of EIAs and the outlook for inflation²⁹⁰, these figures will evolve in future, as illustrated in the Table 23.

Table 23: Estimation and projection of administrative costs for public authorities

Administrative burden for authorities to process EIA dossiers in EU	
2010	146 to 215 million €/year
Medium-term (2017)	173 to 255 million €/year
Long-term (2037) ²⁹¹	269 to 396 million €/year

The average cost **for developers** depends on the size of the project and is estimated at 1 % of the total project cost or approximately € 53.550 per EIA²⁹², corresponding to the average of values reported by 12 Member States. The total annual cost for developers can first be calculated by multiplying this average cost of € 53.053 by the total number of EIAs. Since there are two outliers (SK, NL), an alternative method is to use the median value of costs reported for these 12 respondents, which gives an estimate of approximately € 35.000 per EIA. Also, when extrapolating data from the respondents to Member States that did not respond as part of the GHK study, the use of the median or average cost of an EIA for the EU does not take into account differences in wages across Member States. If figures were adjusted for differences in wages, the average cost for developers would be **approximately € 41.000 per EIA**.

Table 24: Estimation and projection of administrative costs for developers				
		Administrative costs for developers		
		Method 1 (based on an average cost of € 53.053 per EIA)	Method 2 (based on a median costs of € 35.000 per EIA)	Method 3 (adjusted for wage differences and actual values of respondents € 41.000 per EIA)
2010	Overall costs for EU (€/year)	845.727.456	557.941.322	654.236.265
	Cost per EIA (€)	53.053	35.000	41.041
Medium-term (2017)	EU (€/year)	902.144.249	595.166.570	669.662.757
	Cost per EIA (€)	55,541	36.642	41.228
Long-term (2037)	EU (€/year)	1.365.337.126	900.746.211	1.029.144.373
	Cost per EIA (€)	82.531	54.448	62.209

²⁹⁰ Based on International Monetary Fund, World Economic Outlook Database, April 2011 for the period 2011-2016 and based on the assumption that for the period 2017-2037 the inflation remains constant at 2 % per year.

²⁹¹ A long term forecast using method 2 cannot be made due to the uncertainty about a reliable forecast for the evolution of the number of EIA (method 2 is based on the assumption that there is no correlation between the number of EIA and socio-economic parameters such as GDP).

²⁹² GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Table 2-8.

The results of these different calculation methods used are given in the Table 24. It is considered that the most likely values are obtained by the third calculation method. Overall, the EIA costs for EU developers are estimated at **€558 to 846 million per year**. This means that the average cost for an EIA procedure is about four times higher for the developers than for the authorities.

10.9. Annex 9: Description of wider socio-economic impacts in the baseline scenario

The wider socio-economic impacts associated with the current implementation of the EIA Directive cover in particular:

- (1) Economic impacts (functioning of the internal market and competition; competitiveness, trade and investment flows; costs related to legal disputes; avoided risk of environmental damages and cost savings through better integration of environmental aspects; costs related to delays).
- (2) Social impacts (employment and labour markets; governance, participation, good administration and access to justice; public health, safety and the quality of life). Other social impacts were considered (e.g. on poverty or distribution of incomes), but no significant impacts are expected.

Given the nature of these impacts, the information presented here is essentially of qualitative nature but is accompanied by illustrative examples when possible.

10.9.1. *Functioning of the internal market and competition*

While the implementation of the EIA Directive has contributed to harmonising environmental assessment practices among the Member States (compared with the situation prior to 1985), the Directive gives significant flexibility to the Member States with regard to implementation. Consequently, after more than 25 years of implementation, a wide range of practices can be observed across the Member States. In particular, many Member States have implemented requirements going beyond the minimum provisions of the Directive. Differences in the practical implementation of the EIA Directive from one country to another, or even from one region to another in the same country, can be an obstacle to the proper functioning of the internal market and may create unfair competition in certain cases.

Beyond the overall administrative costs for developers and authorities to comply with the EIA Directive, these costs weigh differently on small and medium developers (SMEs) and on larger companies involved in the development of projects, thus potentially creating an uneven playing field between companies. The GHK study²⁹³ indicates that in several countries there are general costs for developers which can be regarded as fixed costs of complying with the EIA procedure. The higher the share of fixed costs in overall costs related to EIAs, the higher the relative impact on SMEs compared to larger developers. Therefore, smaller developers, with limited financial capacity compared with large developers, are likely to be more vulnerable to an increase in procedural requirements or a change in the scope of the Directive (for example, lowering thresholds leading to a higher proportion of small and medium size projects in the total number of EIAs). In the baseline scenario, as no change is assumed in the Directive, both the proportion of small and medium developers and the share of EIA related costs in overall project development costs will remain stable over the horizon of this impact assessment.

²⁹³ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

10.9.2. Competitiveness, trade and investment flows

By obliging developers to assess environmental impacts, the EIA Directive contributes to improving the environmental profile of the project initiator. As put forward by a study commissioned by the European Commission in 1996²⁹⁴, significant benefits related to the enhancement of the developer's environmental credibility can be observed. A good **environmental reputation** can have a positive influence on the perceived value of the company and may contribute to increasing the attractiveness for potential clients (potentially resulting in higher market shares).

Although these positive impacts are very likely and can be confirmed by market or consumer surveys, in a qualitative way, the magnitude of these benefits is difficult, if not impossible, to quantify. In this baseline scenario it is safely assumed that the level of environmental awareness among consumers and producers will continue to increase gradually over the horizon of the impact assessment. This is likely to have two contradictory effects on the benefits for developers related to environmental reputation. On the one hand, a rise in environmental awareness means that clients (national and local authorities, companies, households, etc.) will attribute a higher value to the companies that comply with environmental regulations, thus increasing the potential benefits that developers might obtain from increased environmental credibility. On the other hand, assuming no changes to the EIA Directive's requirements, both in terms of content and scope, the value that the society allocates to the meeting of specific environmental regulations would decrease as expectations of the society regarding environmental protection rise. As a result, it is reasonable to assume for the baseline scenario that reputational benefits related to environmental credibility and profile of developers brought by the EIA Directive would remain broadly the same.

Through the obligation to anticipate environmental impacts of their projects and identify measures to prevent and mitigate these impacts, the EIA Directive provides **incentives for developers to find innovative and implement design and pollution abatement technologies and processes**. Innovation may also influence the choice between different alternatives, in particular when exploring different technologies and project designs come into play from the developer. Increased innovation and research²⁹⁵ is in turn likely to translate into higher competitiveness for companies that benefit from more cost-effective production processes thus contributing to Europe 2020, by promoting Resource Efficiency and low-carbon economy objectives. This potential increase in R&D and innovation together, with related co-benefits and spill-over effects for the rest of the economy, can lead to economic benefits in terms of improving the competitive position of EU developers on international markets, everything being held equal (especially environmental regulations in foreign countries). The potential increase in innovation due to policy intervention can be illustrated by looking at, for example, the policy area of energy using products (EUPs) in the EU in which policy intervention has caused an increase in the degree of innovation for these types of products²⁹⁶. This can also be illustrated

²⁹⁴ EC (1996), Environmental Impact Assessment in Europe - A Study on Costs and Benefits.

²⁹⁵ This impact falls under a separate category in the IA Guidelines but since innovation and research is closely related to competitiveness, grouping these categories seemed appropriate.

²⁹⁶ Impacts of Innovation on the Regulatory Costs of Energy-using Product Policy, Final Report for DEFRA (2010), p. 21.

by a case study of the GHK study concerning a German high pressure gas pipeline²⁹⁷ project in which specific technical design and construction methods have been implemented as part of the EIA process. It must be noted, however, that in the light of this case, it is generally difficult to distinguish genuine innovation from the use of already existing technologies ENTR particularly those not mainstreamed. It is also difficult to distinguish the extent to which innovation is the result of the EIA Directive itself or whether it is driven by other environmental legislation that the developer has to comply with.

Again, as no change in the EIA Directive is assumed in the baseline scenario, it can be assumed that benefits brought by the Directive in terms of increased innovation and research and its effect on competitiveness would remain the same. In this light, a difference must be noted between businesses/developers in the old and the new Member States regarding the level of innovation or process improvement due to the incentives given by the EIA Directive. For businesses in the new Member States it can be presumed that the incentive to innovate as a result of the obligations laid down in the EIA Directive is higher due to the fact that these countries have been exposed to the Directive for a shorter period of time and there is more to gain in terms of innovation and efficiency. This is less the case for businesses in the old Member States, as they have been exposed to the EIA Directive, therefore incentives for further innovation mainly come from more recent and more stringent environmental legislation.

At present, costs to comply with the EIA Directive are not likely to affect the competitiveness of EU developers: it was demonstrated that EIA costs only represent 1 % on average (between 0.01 % to 2.37 % in some exceptional cases) of the total costs of projects, i.e. a relatively modest part of total development costs²⁹⁸.

10.9.3. *Costs related to legal disputes*

The EIA Directive, through its multiple requirements and provisions, gives ground to legal disputes on the basis of environmental aspects linked with project development. These legal proceedings can involve multiple stakeholders such as the public authorities from different administrative entities, developers and the general public.

The implementation of the EIA Directive has given rise to a significant number of court proceedings. A large share of the disputes is related to screening decisions made by the authorities and challenged by developers or third parties²⁹⁹. Such costs may affect public authorities and developers as well as third parties. No statistics on national EIA-related court proceedings are available, however a search of the European Commission's Infringement Database revealed that at least 18 % of existing compliance dossiers with environmental Directives (representing 1.486 dossiers starting from 1984) relate to the 'Impact' sector which includes the EIA

²⁹⁷ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive – Annex 7.

²⁹⁸ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

²⁹⁹ Based on previous studies and data from the Commission's Infringement Database.

Directive, as amended, and the SEA Directive³⁰⁰ (other dossiers concern sectoral environmental legislation on nature, waste, etc. which may also include some EIA-related issues). Of these 1.486 dossiers related to the 'Impact' sector, approximately 17 % gave rise to an EIA-related infringement procedure initiated by the Commission (i.e. the Commission decided that there was a problem of incorrect transposition or bad application linked with the EIA Directive), 69 % of which were related to screening. Most of these cases were solved without referral to the ECJ (because the Member State changed its legislation (national/regional) or because an ex-post-EIA was carried out or because the project was abandoned); however, in some cases, the Commission decided to bring the matter before the Court. Of the 258 infringement cases concerning the EIA, 45 were brought before the Court, 80 % of which were related to screening. Numbers of EIA-related infringement procedures was stabilised, but it started increasing after the 2004 enlargement and the amendments introduced by the 2003/35/EC Directive (applicable as from 2005).

The costs of legal proceedings primarily include the court fees and the fees for legal representation. It is difficult to give a clear overview of these costs at a European-wide level as the court fees that have to be paid to bring a case before a judge differ substantially from one Member State to the other³⁰¹.

In addition to average fees related to procedures, an overall quantification of costs and benefits regarding this aspect for the baseline scenario would require information on the number of court proceedings related to EIAs in the EU as well as on the length of these procedures. As such information is largely unknown, no reliable quantification of overall procedural costs can be given at this stage.

In the baseline scenario, it is assumed that both the proportion of court proceedings per EIA and the proportion of costs related to legal disputes in overall project costs would remain stable over the horizon of this impact assessment. This assumption is a compromise between two contradictory effects: on the one hand, increased awareness for environmental protection is likely to lead to more legal disputes; on the other hand, as no change to the Directive is assumed, both developers and authorities would get more and more used to the legal environment surrounding the Directive and would improve their practical understanding of its requirements, leading to reduced risk of legal disputes.

10.9.4. *Avoided risk of environmental damages and cost savings*

The EIA Directive contributes to reducing the risk of significant damages to environment and human beings, which can be valued in economic terms through avoided costs of reparation by operators or public authorities. Such reparation costs can be very significant in the case of heavy contamination of soil and groundwater (up to several million Euros for certain 'orphan contaminated sites') or in the cases

³⁰⁰ This database includes the investigations carried out by the Commission services concerning compliance with the EU legislation. Figures from this database can be used as an indicator of the Commission's experience in the implementation of the EIA Directive. Date of search: 8/8/2011.

³⁰¹ For example, in Sweden the court fees in first instance for natural persons do not exist whereas in Spain the fee for bringing a case before a judge in first instance starts at €120 and can go up depending on certain variables (Justice&Environment, 2009). In the UK, the hourly wage for legal representation is in the order of £60 in certain cases related to EIA (The Town and Country Planning (Environmental Impact Assessment) Regulations 2010, UK Department for Communities and Local Government).

of damages to material assets caused by large natural or man-made disasters. They can – to a certain extent – be avoided or reduced by integrating prevention measures in the design of the project, such as proper storage and handling conditions for hazardous substances and restrictions in the amounts of hazardous substances to be used. The EIA Directive contributes to such benefits, together with other legislation such as the Industrial Emissions Directive (2010/75/EU) or the Environmental Liability Directive (2004/35/EC). For Member States, the costs of undertaking an EIA are seen as ‘negligible’ in comparison with the potentially high costs of unanticipated environmental issues or liabilities which may arise at a later stage. In this context, the EIA Directive can be seen as a cost-effective instrument in the field of environmental policies. In the baseline, these benefits would remain the same over the horizon of the impact assessment, in line with our assumption of no change to the EIA Directive.

When environmental considerations are taken into account early in the project development and when prevention measures are given priority over end-of-pipe solutions, environmental benefits may translate into additional cost savings, although these are difficult to quantify due to methodological limitations. Potential cost savings may include in particular:

- Resource savings (materials, water, energy) for developers and operators of the projects;
- Reduced waste management costs for developers and operators of the projects, due to reduced waste quantities produced and identification of options to recover valuable waste materials;
- Reduced urban wastewater treatment costs for municipal authorities, resulting from a reduced level of pollutants emitted by the projects.

10.9.5. *Costs related to delays*

Delays caused by lengthy EIA processes are one of the main issues raised by developers. During the public consultation on the review of the EIA Directive, about 21 % of respondents (all categories) found that the EIA ‘*always*’ causes considerable delays in the approval of projects and about 25 % found that it ‘*sometimes*’ causes considerable delays.

The IVM study (2007)³⁰² concludes, however, that estimates of the costs related to possible delays in the EIA process vary widely but are in general not very significant. It also appears that delays in the development of projects can occur for many reasons unrelated to the EIA process itself³⁰³. However, where environmental data is not sufficiently available, or where several authorities requesting additional information oblige the project developer to initiate new assessments, for instance when specific vegetation periods have to be covered, delays may occur. In general, delays are more likely to occur in the case of transboundary projects and in relation to the public consultation stage of the EIA process. Costs of delays are primarily felt by the

³⁰² IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

³⁰³ EC (1996), EIA in Europe – A study on costs and benefits; GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

project initiators and developers themselves in the form of capital costs and revenues foregone.

10.9.5.1. Delays in transboundary projects

In transboundary projects, the obligation to provide information to foreign authorities, and potentially to translate the documents, may cause delays in the EIA procedure and additional expenses for the developer (and possibly for the authorities involved too). Delays make up for an increase in costs, which at the same time means a loss in revenue for developers (direct negative influence on business operations) and also results in opportunity costs³⁰⁴. The argument of opportunity costs would also be valid for the authorities involved in the EIA procedure as they have to devote their time to inform the foreign authority on the EIA project and related issues. This prevents authorities to deal with other administrative tasks. The number of transboundary EIAs in the EU is estimated at around 0.1 % of the total number of EIAs³⁰⁵, i.e. 173 EIAs for 2008.

Furthermore, transboundary EIAs can bring about extra costs due to additional requirements or different (legal) procedures which relate to differences in national EIA procedures³⁰⁶, differences in the time-frames for public consultation between the Member States. Member States that are smaller and/or are land-locked may be disproportionately affected by this, as their share of EIAs that have a transboundary character may be much higher than in coastal Member States or in Member states with larger territories. This impact can be seen as a distributional impact between the different Member States to the disadvantage of the smaller/landlocked Member States.

In the baseline scenario, the proportion of transboundary projects is assumed to remain at the current level. The additional costs associated with these projects in proportion to overall EIA-related costs would also remain stable. These costs are included in the overall administrative cost estimates provided in Section 3.1.3.

10.9.5.2. Delays due to the public participation process

The average duration of public consultation during the EIA procedure is approximately 1.6 months according to the GHK study findings. These public consultation procedures may result in delays in the EIA procedure, leading to additional costs for public authorities and developers. One case study analysed by GHK, concerning the development of a German quarry in the Ruhr conurbation, which was delayed due to a lengthy public participation process³⁰⁷, is a good illustration. These costs lead to an increase in the direct administrative burden related to the EIA Directive but also to wider, more indirect, socio-economic costs such as increase in opportunity costs for developers. Given the projected growth in the number of EIAs and the growing population of the EU27, and assuming that the

³⁰⁴ Opportunity costs usually relate to a loss of revenues due to the fact that a business cannot create revenues from working on other projects.

³⁰⁵ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

³⁰⁶ Report on the application and effectiveness of the EIA Directive (COM(2009) 378).

³⁰⁷ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, Annex 7.

public participation process would remain unchanged, the potential number of stakeholders involved in the public participation process of EIAs would probably increase in the baseline scenario. It is assumed that the potential number of conflicts and additional costs related to delays would also increase in the baseline scenario (it must be noted that conflicts do not necessarily entail court proceedings as conflicts may also include issues that are solved via administrative appeal). It is not possible, however, to give an order of magnitude of this likely increase in delays-related costs, given the lack of precise information.

10.9.6. Employment and labour markets

Member State	Number of days to process an EIA	Number of staff (national and regional levels)	Number of EIAs per staff
Belgium	22	30	6
Czech Republic	5	80	1
Denmark	100	45	3
Estonia	25	19	4
Finland	-	15	3
France	8	-	-
Germany	10	-	-
Greece	30	160	3
Ireland	7-35	-	-
Latvia	30	22	6
Malta	80	3	3
Poland	-	290 (50 at national and 240 at regional level)	-
Slovakia	-	90	7
Average for respondents	32	75	4

The implementation of the EIA Directive provides benefits in terms of employment in the field of environment. The average number of staff working on EIA issues on behalf of the authorities was estimated at approximately 75 by the GHK study³⁰⁸, with a large variation across Member states (for example, in Poland, up to 290 persons are involved in the EIA process). It must be noted that these people mentioned do not necessarily work full-time on EIA matters.

In order to comply with the requirements of the EIA Directive concerning the preparation of EIA reports in particular, technical and legal expertise is generally required. This has led to the creation or to the preservation of jobs in public authorities to conduct screenings and to process EIA dossiers as well as jobs in environmental consultancy companies to provide support to developers in the preparation of EIA reports (this includes environmental consultants and possible specialised contractors in charge of conducting environmental measurements such as air/water sampling, noise monitoring, ecological assessment, etc.). In the case of large developers, specific jobs dedicated to EIAs may also have been created internally. The jobs that have been created as a result of the EIA Directive are mostly high-skilled jobs. In the baseline scenario, it can be assumed that these benefits would probably remain similar (in new Member States, productivity gains within public authorities, developers and consultancies for tasks related to the EIA Directive

³⁰⁸ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, section 2.5.

could be expected as more experience is gained over the years; however, environmental legislation is becoming increasingly stringent which tends to increase the complexity of EIA reports that have to be produced). Again, in the absence of quantified information, for example on the evolution of the number of persons involved in the EIA process, it is not possible to provide a quantitative estimate.

It can however be argued that, in some cases, the implementation of the EIA Directive may lead to delays in the creation of employment associated with new projects, due to long and burdensome EIA processes. Job opportunities are rarely lost because of EIAs, as the purpose of the EIA is not to stop projects (even the ones which are negative for the environment).

10.9.7. *Public health, safety and the quality of life*

Environmental benefits from the current implementation of the EIA Directive, as described above, also result in health benefits due to avoided emissions of pollutants and avoided nuisances, e.g. noise, odours, vibrations, dust (some concrete examples were presented in Annex 7). The associated costs, in terms of avoided health damages for the general population and for the population living in the neighbourhood of the projects, are likely to be significant; however such costs are difficult to quantify and no data is available at present.

Besides, assessing the impacts of projects on human health as part of EIAs is a requirement in most Member States. In some Member States, formal guidance documents and methodologies to cover this aspect have been developed and National Health Authorities are consulted as part of the EIA process. For some types of projects (e.g. chemical industry) and in some Member States (e.g. France), assessment of human health impact can represent a significant part of the EIA report.

Other social benefits include the preservation of quality of life through the preservation of landscape and cultural heritage, avoided nuisances, etc. These might be important concerns for the public, especially in the case of major projects, such as transport or energy infrastructure construction (road construction, high-speed railways, wind turbines, etc.) The benefits brought by the EIA Directive are difficult to quantify but are likely to be present, given the reference values that can be associated with these different environmental externalities. The avoided impact on the quality of life can be illustrated by looking at the willingness to pay (WTP) for specific environmental aspects and ecosystem services. For example, the value given in the specific case of woodlands in the UK was estimated to be around € 2.1 million on an annual basis³⁰⁹. Another example is the value people in Sweden have given to the preservation of the wolf, which ranged between € 70 and € 90³¹⁰. This indicates that there is a cultural benefit of taking these considerations into account in the current EIA Directive as the society values the preservation of the environment.

In the baseline scenario, the impacts on public health, safety and quality of life from the current EIA Directive are expected to remain the same over time. However, in

³⁰⁹ Willis et al. (2003), *Social & Environmental Benefits of Forests in Great Britain*.

³¹⁰ Sara Sundberg and Tore Söderqvist, Swedish Environmental Protection Agency, *Naturvårdsverket* 2004.

absolute terms the benefits (avoided costs) would increase as the number of EIAs would also increase as it has been stated earlier on.

10.9.8. Governance, participation, good administration and access to justice

10.9.8.1. Public participation

There are several provisions on public participation laid down in the EIA Directive³¹¹, according to which Member States shall inform and consult the public about projects that fall under the EIA procedure and give the public the right to challenge final decisions made by the authorities concerning the delivery of development consents.

These provisions were strengthened by the introduction of Directive 2003/35/EC whose provisions derived from Articles 6 and 9 of the Aarhus Convention³¹². Minimum requirements for the public participation procedure were set, leaving the adoption of more detailed wide-ranging and innovative national measures to the Member States. Some guidance as to how this may be done is set out in examples, such as giving information by bill posting or publication in local newspaper, ensuring consultation by receipt of written submissions or by the holding of public enquiry. However, the Directive requires that reasonable time-frames shall be provided allowing sufficient time for each of the different stages of participation provided in the Directive.

Time-frames for public consultation in the current situation are described in detail in the COWI report³¹³. The majority of the Member States have laid down specific time-frames in their legislation. Other Member States use the unspecified phrasing of the Directive (or a phrasing with a corresponding meaning) such as ‘reasonable time-frames’, ‘sufficient time’ or ‘in good time and to an appropriate extent’. A third group of Member States uses a combination of both. The stipulated time-frames set a minimum time-frame for public consultation. The time-frames applied in the Member States in the consultation phase on the EIA information range from 14 days as the shortest time-frame (Bulgaria, Estonia) to 60 days as the longest time frame (Italy). Most Member States apply a time-frame of 30 days.

As shown in the previous paragraph, public consultation can lead to potentially costly delays and in some cases to legal disputes. Even if these economic costs do exist and may be significant in specific cases, it is likely that they are outweighed by potential benefits. The review conducted by IVM (2007)³¹⁴ shows that benefits of EIA in terms of public involvement and participation in decision-making procedures relating to projects with potentially significant environmental impacts are widely mentioned in the literature. Evidence of such benefits is also reported from countries that used to have a tradition of little transparency (such as Bulgaria), so that EIA may be said to have contributed to the development of ‘civil society’³¹⁵. However, IVM

³¹¹ Article 6 (2) to (5), Article 8, Article 9 and Article 10a.

³¹² UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, 25th of June 1998.

³¹³ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive.

³¹⁴ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

³¹⁵ Almer and Koontz (2004) Public hearings for EIA in post-communist Bulgaria: do they work? Environmental Impact Assessment Review 24, pp. 473-493, as cited by IVM (2007).

also mentions that in some cases the civil society participation through the institutionalised EIA procedure is not without problems: a Finnish case study³¹⁶ shows that only a few active groups participated in the EIA process and there were signs of ‘elitist political networks’. During the public consultation on the review of the EIA Directive, a large majority of respondents agreed with the fact that the EIA Directive contributes to the support of projects by the civil society³¹⁷ and that, in practice, the opinions expressed by the public influence the final design of the project³¹⁸.

It is expected in this baseline scenario that benefits related to public participation will continue to be observed. Given the nature of these benefits and the lack of quantitative information, a quantitative estimate, even partial, cannot be provided.

10.9.8.2. Good administration

The Commission’s experience from the assessment of projects co-funded under the EU Regional Policy, in particular major projects, shows that EIAs have improved the decision-making process. In particular, the participation of environmental authorities and the involvement of the public has led to an increased transparency in environmental decision-making and, consequently, social acceptance³¹⁹ of the EIA procedure. The EIA process also formalises public participation, allowing the public to contribute to the design of the project, which generally increases the acceptability of large-scale projects. Eventually, this also limits the potential for conflicts and/or court proceedings at a later stage (issues can be discussed and possibly resolved at an earlier stage), as explained previously.

Additional positive impacts related to good administration can result from the higher level of cooperation between national authorities of different Member States in the case of transboundary EIAs. The cooperation between authorities can improve the procedure for forthcoming EIAs. As the number of transboundary EIAs is expected to increase in line with the total number of EIAs, so will the opportunities for cooperation between authorities from different Member States, potentially leading to better governance and administration of environmental regulations. This higher level of cooperation would also result in additional benefits from cooperation related to other issues than EIAs (positive spill-over effects). This impact can be related to good administration and increased efficiency in other bureaucratic procedures, as both national authorities will benefit from closer cooperation.

10.9.8.3. Access to justice

With the implementation of the EIA Directive, the public has had a legal instrument at its disposal that allows third parties to challenge the legality of decisions made by the authorities. This ability enhances legal certainty and reinforces the rights of the public. This right to have access to justice has been reinforced by the ECJ in the

³¹⁶ Hokkanen P et al. (2004) Effectiveness of Environmental Impact Assessment in Finland – Presentation of the EFEIA Project (paper presented at the 25th IAIA Annual Conference, Boston, Massachusetts, 31 May-3 June, 2005).

³¹⁷ 84 % of all respondents agreed with this statement.

³¹⁸ 92 % of all respondents agreed with this statement.

³¹⁹ Report on the application and effectiveness of the EIA Directive (COM(2009) 378).

Djurgården (C-263/08) and the Trianel (C-115/09) rulings, in which the ECJ confirmed that the members public concerned are to have access to a review procedure. In the baseline scenario, the assumption is that access to justice related to the EIA procedure would remain the same, i.e. as defined by the jurisprudence of the Djurgården and the Trianel rulings.

10.10. Annex 10: Detailed description of possible amendments to the EIA Directive

The thirteen possible amendments considered for analysis are listed in Table 25. The table illustrates how each of the possible amendments is linked with the problems identified and the objectives of the review.

Table 25: List of possible amendments and their links with problems and objectives

Possible amendments	Corresponding problems	Link with objectives	
		Introduce and/or strengthen the quality related elements of the Directive	Enhance policy coherence and synergies with other EU/international law and simplify procedures
Adaptation of Annexes I and II	Projects with significant environmental impacts escape EIA	✓	
Alternative procedure for Annex II projects	Projects without significant environmental impacts are subject to EIAs	✓	✓
Modification of Annex III	Projects with significant environmental impacts escape EIA	✓	
Justification of negative screening decisions	No justified decisions on screenings	✓	
Mandatory scoping	EIA reports not focusing on the most significant impacts	✓	✓
	EIA reports with poor quality of environmental data and analysis		
Quality control of the EIA information	EIA reports with poor quality of environmental data and analysis	✓	
Mandatory assessment of reasonable alternatives	Insufficient consideration of impacts of project alternatives	✓	
Justification of final decision	No justified decisions on development consent	✓	
Mandatory post-EIA monitoring	Potential gaps between predicted and actual impacts	✓	
Additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use)	EIAs do not cover new environmental topics	✓	✓
Specific time-frame for public consultation	Too short or too long public consultation	✓	✓
Maximum time-frame for decision-making on screening and EIA decision	Excessive time for the processing of EIAs by public authorities		✓
Coordinated or integrated/joint procedure (EIA 'one-stop shop')	Overlaps with other EU environmental assessments	✓	✓
	Inconsistencies between EIA and other EU laws		

10.10.1. Adaptation of Annexes I and II

As demonstrated in the problem definition, the whole screening mechanism should be simplified and clarified. It has also been acknowledged that the project categories are in need of an update as they do not sufficiently cover projects with significant impacts on biodiversity and climate change. There is also a legal obligation for the project categories to reflect those established in the SEA Protocol, such as those of deforestation of large areas and offshore hydrocarbon production.

Changes to the content of the Annexes covered under this option include:

- Changing thresholds and project categories for Annex II projects to become Annex I projects
- Adding new projects to Annex I and Annex II, including project categories addressing impacts on biodiversity, resource consumption, marine environment and climate change to Annexes I and II.

On the basis of information received from Member States, a previous report for DG ENV already suggested a number of categories that ought to be included to or removed from Annex I and Annex II³²⁰. It is safe to assume that these suggestions are either based on practical experience or reflect well-researched topics, and hence it is likely that additional information on the possible impacts of these additions is available for an indicative, qualitative assessment. It is not within the scope of this study to suggest specific categories to be included or removed or additional thresholds to be set.

This option would also address potential overlaps and the needs for improved coordination between screening criteria and other environmental legislation, such as the IED Directive, which could become more closely interlinked. For instance in Romania EIA legislation ensures that projects meeting the thresholds provided for by the IED are automatically subject to an EIA³²¹.

10.10.2. Alternative procedure for Annex II projects

This option involves the introduction of alternative procedures for Annex II projects, such as having to conduct a ‘mini EIA’ for projects instead of going through the screening process. A number of Member States have adopted alternative EIAs for small-scale projects and activities³²², which are often carried out by SMEs. Some examples are presented below. These tend to be used in combination with moving Annex II projects to Annex I and at the same time wanting to ensure that no projects with potential environmental impacts escape an EIA. Hence, these alternative EIAs can be required for projects well below the thresholds and criteria for Annex II projects, such as the approach taken in Greece.

Examples of alternative Annex II procedures in the Member States

In **Italy** there are separate procedures for State EIAs and Regional EIAs. However, the regional screening criteria for Annex II projects go beyond the provisions of the EIA Directive. It includes all modifications or extensions that have ‘*significant negative effects*’ and does not set a threshold for the size of modifications or extensions for screening.

³²⁰ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009, p.103-106.

³²¹ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

³²² Of the 12 project categories listed in Annex II, 9 are related to industrial activities (e.g. in the field of extraction, energy, and production and processing of metals, minerals, chemicals, food, rubber, textile, wood).

In **Austria** there is a simplified procedure (which meets all criteria of the EIA-Directive) for some types of projects that usually might cause impacts on just a few environmental media.

In **Denmark**, an electronic model has been developed for intensive animal farming projects in which the developer simply, by inserting required data in a calculation sheet, may get a clear picture of whether the proposed project will result in an EIA procedure or not. The model even encourages developers to alter their entries for the purpose of trying out what particular elements in their projects that may be altered with the effect that an EIA procedure is no longer relevant. It is noted that this Danish example has previously been reviewed by the European Commission and Member States and was found to be of limited applicability to the circumstances in other Member States. However, it could be argued that the idea of the model and its principles could be subject to further development in other Member States for the purpose of assessing the sustainability of idea and principles.

Sweden adopted an approach where it is decided whether Annex II projects require an EIA according to the EIA Directive, or a 'mini EIA'. The argument for the 'mini EIA' is that one does not know whether an EIA is needed until the EIA is done. The main criterion for deciding if a 'mini EIA' or a proper EIA is required is the potential for significant environmental impacts. There are thousands of 'mini EIAs' taking place but there is no detailed information on the costs and benefits of these. However, it seems that many of the 'mini-EIAs' are just pro-forma exercises with marginal benefits for the environment. Sweden is currently revising its EIA and SEA legislation and considering removing the requirement of 'mini EIAs'³²³.

Within the context of this study it is not possible to develop and specify criteria (thresholds, etc.) for an alternative procedure for each of the Annex II project. However, similar approaches being undertaken by Member States provide useful information. For instance, in Denmark, an electronic model has been developed for intensive animal farming projects in which the developer simply, by inserting required data in a calculation sheet, may get a clear picture of whether the proposed project will result in an EIA-procedure or not. Also a majority of the EU-10 Member States employ a combination of ad-hoc screening and adopted thresholds. The combination of these two approaches is often employed in a manner where applications falling below adopted thresholds are subjected to an ad-hoc screening decision³²⁴.

This option primarily addresses concerns related to the efficiency of the EIA process, as it simplifies the existing procedures. Such an amendment would ensure that EIAs are carried out only for projects that would have significant environmental effects, avoiding unnecessary administrative burden for small-scale projects. This amendment also needs to be considered in parallel with the amendment of setting maximum time-frames for authorities to make their final decisions.

10.10.3. Modifications of Annex III

Annex III defines the criteria on which thresholds and/or case by case assessments are to be set by Member States for Annex II projects. This amendment would update the set of criteria along the same lines as the update of criteria for Annex I and

³²³ Correspondence with Professor Lars Emmelin, Chair of Environmental Assessment at the Swedish School of Planning, Blekinge Institute of Technology (October 2011).

³²⁴ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

Annex II projects (see Section 3.3.1.1), i.e. setting criteria that better consider the impacts of projects on biodiversity, the marine environment, climate change, disaster risks and resource consumption, as well as the impacts of a changing climate and disasters on projects.

This amendment is closely linked to other amendments discussed in this section, such as the alternative procedure for Annex II projects as well as moving projects from Annex II to Annex I. The only case of national modification of Annex III is the case of Hungary, which has set more detailed selection criteria than in Annex III.

This amendment would reinforce the effectiveness of the EIA process and would improve its coherence with other environmental policies. This option was supported by 44 % of all respondents to the public consultation.

10.10.4. Justification of negative screening decisions

So far, only the decisions, but not their reasoning has to be made publicly available. Authorities do not need to include the reasoning behind the decision itself and are not obliged to link their decision to the relevant Annex III used. This constraint is not coherent with the spirit of the EIA Directive, which aims to increase the transparency of decision-making. Hence, this option requires public authorities to make the reasoning behind negative screening decision public, similarly to Article 3.7 of the SEA Directive.

Such an option remains disputed. The ECJ (Case-C-75/08) recently ruled that the reasons for a negative decision do not have to be made publicly available. However, the ECJ also concluded that the public authority should make this information available to the public if a particular request is being forwarded. In addition, the Court (Case C- 87/02) further stated that a negative screening decision must contain or be accompanied by all the information that makes it possible to check that it is based on adequate screening, carried out in accordance with the requirements of the EIA Directive.

This amendment would primarily contribute to the effectiveness of the EIA process. It can only be realised via the amendment of Article 4(4). This option was supported by 62 % of all respondents to the public consultation.

10.10.5. Mandatory scoping procedure

The scoping stage sets the coverage and level of detail of the EIA report, based on the information specified in Annex IV. Scoping evaluates which impacts and issues should be considered and to what level of detail they should be analysed, so that the EIA report provides all the relevant information. This option requires the competent authority to specify in writing what information is required for submitting an appropriate application for development consent, regardless of any requests from the developer. By having this information available, the developer can avoid potential delays later on in the process as well as ensure a better quality assessment. Information which has not been requested by the authority within the scoping procedure could only be requested to the developer under significantly new circumstances.

This option requires amending Article 5(2) of the EIA Directive to introduce a mandatory scoping procedure. This would also involve the update and improvement of the existing Commission guidance on scoping³²⁵, which includes in particular several check lists supposed to serve the function of quality insurance tools (this assumption is already part of the baseline scenario). The mandatory scoping procedure would also require that the competent authority takes initial advice from other authorities involved in the EIA process to identify all relevant information needed for the EIA. In particular, the mandatory scoping process will have to ensure that the following aspects are specified in writing to the developer:

- Environmental impacts of the projects that should be considered as ‘significant’, for which a detailed analysis is required and a monitoring plan should be proposed
- Reasonable project alternatives to be considered
- Specific methodologies for the analysis of possible new environmental issues to be covered by the EIA Directive (impacts on and from climate change and disasters, impacts on biodiversity, impacts on natural resources)
- Suggestions on public data sources that may be useful in the preparation of the EIA report (based on the initial consultation with other authorities involved in the EIA process).

In accordance with the above points, mandatory scoping has strong links with other amendments, in particular the ones related to ‘Assessment of reasonable alternatives’ and ‘Additional environmental issues’.

In approximately half of the Member States, the competent authority is required to provide this information regardless of any requests from the developer (mandatory scoping) and public consultation occurs during the scoping stage³²⁶. Scoping is mandatory in EU-10 Member States with the exception of Cyprus and Slovenia. In some Member States, scoping is only mandatory for certain types of projects (e.g. in Poland, scoping is obligatory for Annex I projects which are likely to have significant transboundary effects and for all Annex II projects).

Mandatory scoping is primarily linked to the objective of an improved quality of the EIA, but it can also improve the coherence with other policies (e.g. those related to additional environmental issues) and streamline the EIA process, as the developer can rely on having appropriate information at hand early on in the process.

37 % of all respondents to the public consultation supported mandatory scoping, which was also a highly recommended measure to optimise EU permitting procedures in a recent study carried out for DG ENER³²⁷.

³²⁵ EC Guidance for EIA - Scoping. June 2001.

³²⁶ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

³²⁷ Roland Berger Strategy Consultants (2011) Permitting procedures for energy infrastructure projects in the EU : evaluation and legal recommendations.

10.10.6. *Quality control of the EIA information*

Many Member States point the fact that lack of sufficient quality in data employed in EIA reports and poor data analysis is a problem. In general, the quality of EIA reports is uneven and may lead to the granting of development consent on the basis of inadequate information. It is also recognised that the level of complexity in the preparation of EIA reports is continuously increasing, partly because of the increasing complexity of environmental challenges that need to be taken into account (e.g. biodiversity) and the increasing complexity of environmental legislation that needs to be well understood when assessing possible mitigation measures.

In order to take into account the various quality control measures that have already been put in place in some Member States and to allow some flexibility in the implementation of such changes, two main possibilities are envisaged in this study: a relatively easy-to-implement sub-option (use of accredited consultants) and a more complex one ('quality control committee' at the national level). Besides, these two possibilities could be implemented simultaneously with the aim to achieve an even greater level of quality in EIA reports.

Use of accredited consultants

A first possibility to address the issue of poor quality is therefore to require EIA reports to be prepared or verified by accredited consultants able to demonstrate a minimum level of expertise in the subject areas. Under this sub-option, developers would need to hire an accredited consultant either to prepare their report or to verify the report they would have prepared themselves. In practice, a large majority of developers already hire specialised consultants to prepare EIA reports given the technical and specialised nature of this work. Only some of the larger developers have internal staff dedicated to the preparation of EIA reports.

This requirement already exists in some of the old Member States (e.g. in the Flanders region of Belgium, where the accreditation is valid for 5 years³²⁸, as well as in other Belgian regions) or is being envisaged (e.g. in France, a recent report prepared for the Ministry of Environment recommended that criteria for a future certification of environmental consultants involved in EIAs be developed³²⁹).

In practice, even in the absence of an accreditation process in a number of Member States, some competent authorities have established unofficial 'black lists' of consulting companies having produced poor quality reports in a recurrent manner; at the request of developers, some of them also provide lists of 'recommended' consultants to prepare EIA dossiers. An accreditation process would be a way to officialise such practices and would help developers in the selection of adequate contractors.

³²⁸ GHK (2010) Collection of information and data to support the IA study of the review of the EIA Directive, Report for DG ENV- Annex 6, Case study 1.

³²⁹ Conseil Général de l'Environnement et du Développement Durable CGEDD (2011) Competencies and professionalisation of consultancies with regard to EIAs – Report for the French Ministry of Environment, http://portail.documentation.developpement-durable.gouv.fr/documents/cgedd/007411-01_rapport.pdf (in French).

While this option would require an accreditation process to be put in place at the national level, the details of the qualification criteria for obtaining the accreditation could be left to the discretion of the Member States (e.g. based on CV, past experience, references, evaluation test, etc.).

Other possible mechanisms for quality control

Another way to address the concerns about quality of EIA reports is to have an expert committee at national level in charge of checking the quality of EIA reports and providing advice to the competent authority before this competent authority issues its final decision. Different examples currently exist in some Member States. In the 12 new Member States, it is a legal requirement that a competent authority or an expert committee is responsible for evaluating the quality of the EIA documentation; different processes have been implemented for this purpose³³⁰.

France: An environmental authority ('Autorité Environnementale') was created in 2009 to provide advice on the quality of certain EIA reports, when the project/programme developer is the Ministry of the Environment or a public organisation under its supervision (e.g. large infrastructure projects) or when the final decision is taken by the Ministry itself (e.g. nuclear installations)³³¹. The main purpose of this measure was to provide a guarantee for impartiality but also a guarantee for quality and transparency towards the public. This authority includes 17 persons, 12 of which are part of the evaluation services of the Ministry of the Environment (CGEDD) and 5 are external qualified experts.

Italy: A technical EIA consultation committee was created in 2007 to review the quality of EIA reports (Commissione Valutazione Impatto Ambientale). It is comprised of 50 members nominated by the Ministry of Environment³³².

Greece: A quality control committee within the Ministry of Environment was recently created.

Netherlands: A specific agency, the Netherlands Commission for Environmental Assessment (NCEA), which is independent from the Ministry of Environment, provides advice to the competent authority on the quality of EIA reports, upon request from the competent authority³³³. The NCEA is composed of a pool of 700 experts, working for governmental organisations, research institutes or universities and private companies. They are hired on a project-by-project base. For every EIA/SEA, a working group is created, usually counting 3-6 experts. The Commission for EIA is lump sum funded by central government.

Both variants would primarily contribute to the objective of an improved quality of the EIA process. The implementation of a mechanism to ensure the quality of the

³³⁰ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009.

³³¹ More information at: <http://www.cgedd.developpement-durable.gouv.fr/presentation-r169.html>.

³³² Further information available at the following website: http://www.minambiente.it/home_it/menu.html?mp=/menu/menu_ministero/&m=Comitati_e_Commissioni.html|Commissione_Valutazione_Impatto_Ambientale.html&lang=it

³³³ Further information available at: http://www.eia.nl/netherlands/default.asp?type=en_process.

environmental information supplied by the developer was supported by 53 % of all respondents to the public consultation.

10.10.7. Mandatory assessment of reasonable alternatives

This amendment requires a mandatory assessment of, at least, the ‘zero alternative’ and one ‘reasonable’ alternative, based on an appropriate approach to assessing the costs and benefits of project alternatives. The ‘reasonable’ alternative(s) could be of a technical or spatial nature or could be related to the timescale for construction and operation. This goes beyond the current provisions of the EIA Directive, which only require ‘an outline’ of the main alternatives studied. In this context, the impact of technological, spatial and ‘zero-alternatives’ would need to be part of the appraisal.

Mandatory assessment of reasonable alternatives should be clearly specified so as to avoid diverging interpretations between Member States and achieve a level-playing field. Accordingly, the EIA Directive would be updated to include information on what is to be considered as a ‘reasonable’ alternative for different types of projects (in terms of technological alternatives and/or also more structural options related to different project designs and planning, etc.) and the degree to which the environmental impacts of that reasonable alternative need to be considered. Respective stipulations of the EIA Directive would need to be underpinned by appropriate guidance by the Commission in the form of suitable documents (which is already assumed in the baseline scenario).

Half of the Member States have already introduced a legal obligation to consider specific alternatives (including the ‘zero-alternative’ in some cases): BG, DE, DK, EE, ES, GR, FI, IT, LT, NL, PL, RO, SK; however, the assessment of these alternatives by developers generally remains of poor quality³³⁴.

Introducing a requirement to assess reasonable alternatives would imply the amendment of Annex IV, as well Article 5(3) of the EIA Directive (to make the assessment mandatory).

This amendment would primarily improve the effectiveness of the EIA process, while also improving coherence with the SEA Directive and with the Espoo Convention. This option was supported by 55 % of all respondents to the public consultation.

10.10.8. Justification of final decisions

Article 8 of the EIA Directive only requires the results of the consultations and the information gathered pursuant to Articles 5, 6 and 7 to be taken into consideration but there are no structured requirements on how this might be done. Existing studies provide little information on whether such types of requirements have already been implemented in some Member States. In France, a recent law (2010)³³⁵ introduced a similar requirement as the one proposed in this option.

³³⁴ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive, June 2009, as well as the Commission Reports on the application and effectiveness of the EIA Directive (in 1997 and 2003).

³³⁵ ‘Grenelle 2’ law no 2010-788 of 12 July 2010.

This amendment is primarily reinforce the effectiveness of the EIA process and would have to be implemented in conjunction with options on ‘Mandatory assessment of reasonable alternatives’ and ‘Mandatory monitoring’, since it refers to both of these additional requirements.

10.10.9. Mandatory post-EIA monitoring

This requirement is linked with the policy option concerning the modification and reinforcement of Article 8 of the EIA Directive.

Monitoring of significant impacts identified and predicted in EIA reports is first relevant to ensure that the impacts from the construction and operation of projects do not exceed impacts initially predicted in the EIA report, take account of additional relevant information on the impact, e.g. due to climate change and necessary remedial measures are taken as early as possible. It is also relevant to assess which methods are sufficiently robust to predict actual impacts from future projects, with a view to improving the characterisation of impacts in future EIA reports. Finally, it brings some consistency with Article 10 and Annex I of the SEA Directive. The International Association for Impact Assessment (IAIA) indeed considers that ‘*EIA has little value unless follow-up is carried out because without it the process remains incomplete and the consequences of EIA planning and decision-making will be unknown*’³³⁶.

Monitoring is the first component of what is usually referred to as ‘EIA follow-up’. EIA follow up is a wider concept which consists of 4 main stages:

- Monitoring (collection of activity and environmental data)
- Evaluation (appraisal of the conformity with standards, predictions or expectations as well as the environmental performance of the activity)
- Management (making decisions and taking appropriate action in response to issues arising from monitoring and evaluation activities)
- Communication (informing the stakeholders about the results of EIA follow-up in order to provide feedback on project/plan implementation as well as feedback on EIA processes).

For this amendment the term ‘monitoring’ implicitly includes evaluation and management aspects as defined above.

This option first involves that suggestions for monitoring measures covering significant environmental impacts of the project be described in the information submitted by the developer (i.e. in the EIA report), taking into account monitoring requirements arising from other legislation applicable to the project (e.g. EID and/or sectoral legislation on air, water, etc.) or from other standards and best practice codes that the developer aims to comply with. Discussions with authorities at the scoping stage would inform the design of these monitoring measures. All possible synergies

³³⁶ IAIA (2007) EIA Follow-Up – International Best Practice Principles, <http://www.iaia.org/publicdocuments/special-publications/SP6.pdf>.

with monitoring requirements arising from other EU or national legislation and guidance as well as voluntary initiatives should be taken advantage of, especially in relation to potentially lengthy phases such as data collection and the development of indicators. Based on the monitoring measures proposed in the EIA report, monitoring requirements for developers are to be set by the competent authorities and defined in the development consent (e.g. requirement to be added to Art. 9 of the Directive). Developers and/or project operators will only be required to monitor the negative significant environmental impacts of projects identified during the EIA process, once projects are implemented, and to keep the results available for competent authorities. They will be required to evaluate the results and take any measures required to correct deviations from the expected effects. The monitoring procedure (parameters, frequency, methods, etc.) will be specified in the development consent. Monitoring results will also be evaluated by the competent authorities (e.g. during random inspections) and any remedial action considered necessary will be imposed to the developer of the project. The public will have the right, upon request, to access the monitoring results and any information on possible decisions made by the competent authorities following the evaluation of the results.

The types and number of environmental parameters to monitor and the monitoring frequency would be defined by the authorities on a case-by-case basis, depending on the expected environmental impacts of the project, the level of uncertainty on predictions made in the EIA report, the sensitivity of the local environment, etc.

In practice, the EIA reports often propose monitoring as a mitigation measure and such requirements are included in the development consent. Furthermore, a number of projects requiring an EIA are already subject to mandatory monitoring requirements on the basis of other EU or national legislation, or voluntarily as a good practice:

- Projects also subject to the IED have mandatory monitoring requirements as part of their permitting conditions³³⁷.
- Projects with significant effects on biodiversity, where monitoring is usually carried out as a standard good practice, in accordance with several Commission guidance documents³³⁸.
- Projects where it is planned to implement an Environmental Management System (e.g. to obtain ISO 14001 or EMAS certification), as environmental monitoring activities are part of such management systems.

³³⁷ No information was available on the actual share of EIAs concerning projects that are also subject to the IED, at EU level. However, a significant proportion of EIA project categories in Annexes I and II overlaps with the IED (see the IMPEL report on the interrelationship between IPPC, EIA, SEVESO Directives and EMAS Regulation, 1998, <http://ec.europa.eu/environment/eia/eia-studies-and-reports/impel-full-text.pdf>).

³³⁸ Guidance document on Article 6(4) of the ‘Habitats Directive’ 92/43/EEC (http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/guidance_art6_4_en.pdf); EU Guidance on wind energy development in accordance with the EU nature legislation (http://ec.europa.eu/environment/nature/natura2000/management/docs/Wind_farms.pdf); EC Guidance on undertaking new non-energy extractive activities in accordance with Natura 2000 requirements (http://ec.europa.eu/environment/nature/natura2000/management/docs/nee_i_n2000_guidance.pdf).

Hence, the monitoring requirements would only apply to those projects where monitoring is not already foreseen as a disguised mitigation measure, or is not already legally required by other EU or national legislation, or is carried out voluntarily as a good practice. In the absence of adequate data, it is not possible to estimate accurately the proportion of projects that would be concerned by this mandatory monitoring option. However, given the above considerations and for the purpose of this impact assessment, it has been roughly estimated, on the basis of a conservative assumption, that approximately 50 % of projects subject to EIA would be concerned (as they would not otherwise be subject to any other monitoring requirements).

Monitoring must be commensurate with the anticipated environmental effect. As each project is unique in terms of specific design, location and affected stakeholders, monitoring programmes should also be tailored to the proposed activity, its stages and dynamic context. Monitoring results can be benchmarked against the EIA report expectations, consent decision specifications and legal standards.

Ideally, the monitoring would require a harmonised approach to indicators, not only for EIAs but also for SEAs, enabling a streamlined approach to monitoring, data availability and the use of this information for broader evaluation purposes.

The extent of these benefits is dependent on the effective implementation of the monitoring procedure, especially:

- The definition of relevant and sufficiently ambitious targets in the EIA report and their validation by the competent authority
- The existence (at reasonable cost) of appropriate data and methodologies to construct relevant monitoring impact indicators on which to base the assessment (this can be challenging with regard to biodiversity impacts)
- The possibility to implement effective mitigating measures, at reasonable cost, once the project has been developed. For some projects – e.g. large infrastructure projects – profound and potentially very costly mitigation measures are likely to be needed to reduce significantly the overall environmental impacts.

Monitoring data collection and evaluation activities should be sufficiently frequent such that the information generated is useful to stakeholders, but not so frequent as to be a burden to those implementing the process. For the purposes of this study, it has been assumed that monitoring would be required on an annual basis during the 5 years following the development of the project, covering 1 or 2 key environmental parameters.

Only the Netherlands are known to have implemented mandatory monitoring requirements³³⁹. In France, a recent law (adopted in 2010)³⁴⁰ introduced a requirement for EIAs to include a description of how the effectiveness of the main preventing/mitigating/offsetting measures would be monitored; it also introduced the

³³⁹ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

³⁴⁰ 'Grenelle 2' law, n°2010-788 of 12 July 2010.

possibility for developers to be inspected in order to check that such measures have actually been implemented.

Introducing a comprehensive monitoring approach will require adding a specific article on monitoring to the EIA Directive and modifying Annex IV. This amendment would make the EIA process more effective, would reinforce links with other policies (i.e. related to new environmental issues) and would improve coherence with the SEA Directive. It was supported by 47 % of all respondents to the public consultation.

10.10.10. *Additional environmental issues*

This option consists in adding the following issues to the list of environmental topics to be covered by EIA reports: impacts on global climate change; impacts on the severity of natural or man-made disasters (e.g. by increasing exposure and vulnerability to disasters); impacts due to climate change (on materials assets, human beings, flora and fauna); impacts due to increased frequency and intensity of natural or man-made disasters (on materials assets, human beings, flora and fauna); impacts on biodiversity; impacts on the marine environment; impacts on the availability of natural resources. At present, these issues are not specifically mentioned in the relevant sections of the EIA Directive (Article 3, Annexes III and IV)³⁴¹.

Article 5(1) stipulates that information listed in Annex IV is to be provided by developers only as far as the Member State considers it relevant to a given stage of the consent procedure, to the characteristics of the proposed project and to the environmental features likely to be affected, and reasonable having regard to current knowledge and methods of assessment. Thus, the extent of information to be provided depends on national law, subject to the minimum requirements set out above. Member States can either lay down uniform guidelines or provide some discretion to competent authorities as to exactly how much information they require a developer to provide. This practice will be harmonised under this option, building on the different experiences made in the Member States.

With regard to **climate change**, a climate risk assessment would be included into the EIA procedure covering both mitigation and adaptation measures. At present, such assessments tend to cover only impacts of projects on climate change, therefore the scope of current assessments would be extended to cover adaptation issues as well. In particular:

Article 3 of the Directive would also address ‘direct and indirect effects of *climate change on a project*’. Article 5 could be also modified as an option to ensure that important information on climate change risks is required from the developer. Annex IV would clearly describe what information has to be provided on climate risk assessments. This would include information on impacts on greenhouse gas emissions and climate change impacts on a project. Annex III of the Directive would explicitly address climate change as one of the screening criteria. For example, characteristics of projects could include greenhouse gas emissions and vulnerability

³⁴¹ Article 3 refers to environmental factors to be considered in EIAs, Annex III provides screening criteria while Annex IV contains an indicative list of information to be provided by the developer.

to climate change risks. Location of projects could include exposure of geographical areas to climate change risks.

With regard to **disaster risks**, an assessment of the potential natural and man-made disaster risks would be included in the EIA procedure, covering also appropriate risk management planning and preparatory measures for emergencies to ensure compliance with existing minimum prevention standards.

With regard to biodiversity, the scope of the assessment to be carried out as part of EIAs would be slightly extended as it would not only cover '*fauna and flora*' (as required by the current EIA Directive) but would consider biodiversity as a whole.

With regard to the **marine environment**, EIAs are currently required for a number of projects subject to Maritime Spatial Planning³⁴² but the use of Maritime Spatial Planning is expected to increase in the future, in particular in offshore cross-border areas. By better covering impacts to the marine environment in EIAs, the coherence with Maritime Spatial Planning will be improved. Coherence with the EU's Integrated Maritime Policy and with the Marine Strategy Framework Directive would also be improved.

The EIA Directive would, however, not define the level of assessment required and the methodologies to be used to cover each of these additional issues. This should be specified by the competent authorities at the scoping stage as it is too complex for being regulated at the EU level. Guidance would be provided by the competent authorities on how to assess climate risks. Several guidelines are also foreseen at the EU level including guidance on addressing climate change in the EIA process, guidance on climate proofing vulnerable investments and other.

Introducing additional environmental issues into Annexes III and IV could be done through technical adaptation (only to some extent) or amendments of the main provisions (Articles 3, 5(1) and 5(3) of the EIA Directive). This amendment would make the EIA process more effective and more coherent.

10.10.11. Specific time-frame for public consultation

As previously mentioned, durations for the public consultation vary considerably among Member States, from two weeks up to two to three months. Under this option, the Directive would be amended to include specifications of a minimum and a maximum time-frames for the public consultation phase, based on Member States' experiences. As reported by GHK³⁴³, the average duration of the public consultation phase is estimated at 1.6 months. The proposed time-frames associated with this policy option are a minimum duration of 1 month and a maximum duration of 2 months (as a cumulated duration for all stages of the consultation process, in cases where it is split into several stages). However, these new provisions would allow the

³⁴² Maritime Spatial Planning is a tool for improved decision-making. It provides a framework for arbitrating between competing human activities and managing their impact on the marine environment. Its objective is to balance sectoral interests and achieve sustainable use of marine resources in line with the EU Sustainable Development Strategy (EC Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU, COM(2008)791).

³⁴³ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

competent authorities to extend this time-frame provided that this is duly justified; this could be the case of projects requiring the assessment of complex environmental issues, as in such cases the public may need more time to gain sufficient knowledge of the environmental stakes.

The aim would be to ensure an effective opportunity to participate is given to the public, while avoiding delays caused by lengthy consultation processes for developers. Another advantage of having a clear time-frame is the possibility to better coordinate with other processes carried out in parallel, such as environmental assessments required by other Directives, and in the case of transboundary EIAs.

This amendment would contribute to the effectiveness and efficiency of the EIA process; it requires an amendment of Article 6 of the EIA Directive.

During the 2010 public consultation on the EIA Directive's review, respondents generally favoured the introduction of minimum and maximum time-frames for public consultation³⁴⁴.

10.10.12. *Maximum time-frame for decision-making on screening and EIA decision*

This amendment would specify a maximum duration for the two main stages where delays are reported to most problematic for developers: the screening stage and the final decision stage. The Directive would therefore specify a maximum duration for the competent authorities to issue their screening decision and their final decision, once all the required information has been submitted by the developer, mainly the information identified at the scoping stage.

According to the GHK report³⁴⁵, the average duration of the screening stage is 1.2 month (based on 13 Member States replies) but this can range from 0.1 to 3 months depending on the Member State; the average duration for issuing the final decision is 2 months, ranging from 1 to 3 months depending on the Member State.

The following time-frames could be established:

- 1.5 month for the screening stage (from the moment that all relevant information has been submitted by the developer)
- 2 months for the final EIA decision stage (from the moment that all necessary information as identified in the scoping stage has been provided by the developer and the public consultation is completed).

An extension of the time-frames could be possible, when new circumstances arise and provided that adequate justification is given (e.g. in order to make sure that a lack of resources would not jeopardise the capacity of competent authorities to make a well-informed decision).

The aim of this option would be to reduce uncertainty and delays for the developers – when such delays are deemed to be the responsibility of public authorities – and

³⁴⁴ Maximum timeframes: 51 % yes vs. 43 % no; minimum timeframes: 49 % yes vs. 46 % no.

³⁴⁵ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

reduce any costs associated with such delays. This could also provide an incentive to public authorities to better coordinate their internal consultation processes during the EIA procedure.

Another advantage of having a clear time-frame is the possibility to better coordinate with other processes carried out in parallel, such as environmental assessments required by other Directives, and in the case of transboundary EIAs.

The maximum time-frame for screening is closely linked with other amendments of the screening process, as improving clarity would help decrease the decision-making time for the authorities. This amendment would strongly contribute to the efficiency of the EIA process. The introduction of a maximum time-frame for the screening decision was supported by 69 % of all respondents to the public consultation. A similar policy measure was also recommended as a highly relevant measure to optimise EU permitting procedures in a recent study for DG ENER³⁴⁶.

10.10.13. *Better coordination/integration with other legislation (EIA ‘one-stop shop’)*

To address the recognised need to better coordinate the assessment related requirements under EU law, this option aims to strengthen the coordination and integration of the EIA process with the requirements of other relevant EU legislation. Under this option Member States are supposed to develop and implement a coordinated administrative procedure to deal with environmental assessment requirements required under the EIA Directive and other Directives (IED, Habitats, etc.). In an advanced format this can also take the form of an integrated/joint procedure (EIA ‘one-stop shop’). This procedure can be designed in a soft, rather optional format (‘EU Member States may create a coordinated administrative procedure’) or in a more binding, obligatory format (‘EU Member States shall create a coordinated administrative procedure’).

This option has a strong horizontal element, since there are opportunities for addressing potential overlaps and inconsistencies between environmental assessment legislation in several of other possible amendments.

However, the main focus of this study is the sort of ‘EIA one-stop shop’, that is the co-ordination or integration of information flows related to these environmental assessment legislations and avoiding possible inconsistencies.

All amendments are relevant to enable better coordination, but the format of an EIA one-stop shop offers distinct advantages in terms of administrative simplification and streamlining of processes compared to a formless coordination approach. In a similar vein and in light of the observed discrepancies in Member States with regard to implementing key requirements of the EIA Directive, an approach that enables a more coherent implementation in Member States via a more binding provision for the set-up of administrative procedures appears more promising in view of reaching the objectives of the EIA Directive’s review. As part of the EIA one-stop shop we are looking at the options of coordinating or integrating the EIA and the other environmental assessments.

³⁴⁶ Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations.

10.11. Annex 11: Details of the methodology for assessing the impacts of policy options

This annex provides further details the methodology followed to assess the impacts of policy options for the review of the EIA Directive.

10.11.1. Geographical scope of the assessment

The geographical scope of the assessment is the European Union consisting of 27 Member States (referred to as the EU). While it is possible that the number of Member States may continue to increase over the time period used for the analysis and that enlargement of the EU would have an impact on several cost drivers (such as the number of authorities and EIAs to be performed), these costs and benefits can be seen as an impact of the enlargement and not as an impact of a change in the current environmental legislation.

10.11.2. Available data for the impact assessment

The assessment was based on existing information collected through previous studies as well as during the public consultation. The main sources of information available for this study are as follows:

- A report by COWI (2009) on the implementation of the EIA Directive³⁴⁷. This report provides an assessment of strengths and weaknesses in the implementation of the EIA Directive. It also describes approaches in the Member States going beyond EU requirements and corresponding to some of the ‘amendments’ analysed in the present study (e.g. mandatory scoping). It provides qualitative information on the impacts associated with such additional requirements in some Member States.
- A report by GHK (2010) on ‘Collection of information and data to support the IA study of the review of the EIA Directive’ for DG ENV³⁴⁸. This report provides estimates of key parameters (number of EIAs, number of screenings, costs for developers, etc.), based on data obtained from several Member States and some extrapolations. The report also includes several case studies, which provide additional data and information on case proceedings, hourly costs for different categories of staff involved and qualitative information of specific aspects of the process.
- A report by IVM, BIO, IEEP, IEP and Ecologic (2007) on ‘Costs and benefits of the EIA Directive’ for DG ENV³⁴⁹. This report summarises available information on costs and benefits in the current status. The study is based on a broad literature study and on interviews with experts in several Member States. The report contains estimates on the costs for authorities to process EIA

³⁴⁷ COWI, 2009, Study concerning the report on the application and effectiveness of the EIA Directive, (http://ec.europa.eu/environment/eia/pdf/eia_study_june_09.pdf).

³⁴⁸ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive, (http://ec.europa.eu/environment/eia/pdf/collection_data.pdf).

³⁴⁹ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

dossiers and the costs for developers to prepare an EIA report, however the rest of the information is mostly of qualitative nature.

- The results from the public consultation on the review of the EIA Directive carried out in 2010³⁵⁰, in the context of the Impact Assessment procedure. The consultation covered aspects such as: number of EIAs, number of screenings, cost of EIA process, duration of EIA process and opinions on problems with the current EIA Directive and on possible policy options to revise the EIA Directive.

In addition to the above sources, a number of reports addressing specific aspects of the EIA process in some Member States have been reviewed. They are referenced in the text of the present report and in Annex 3.

Existing data can be found on key variables, such as:

- The average annual number of EIAs undertaken in each of the 27 Member States: part of this data has been collected through the consultation of Member States and part has been estimated by GHK (2010).
- The average annual number of screening decisions in each of the Member States (raw and estimated data) and the average annual share of screenings requiring an EIA (from GHK study, 2010).
- A sectoral breakdown of EIAs (development/infrastructure): raw data and estimates for most of the Member States (from GHK study, 2010).
- A breakdown of the EIAs undertaken by type of developers (SMEs, large companies and public authorities) for 6 Member States (from GHK study, 2010).
- Regarding information on costs and potential proxies of costs for developers and authorities, data has been gathered for a significant number of Member States on: the average number of days to process an EIA; the average cost for developers for the whole process; the average number of staff involved in the process; the average duration of the entire EIA process, broken down according to the main steps of the procedure (screening, scoping, environmental information preparation and review, public consultation and final decision).

10.11.3. Data limitations

General data issues

There are a number of limitations in the accuracy and completeness of the IA conducted in this study, due to some issues related to data availability and quality. The main issues encountered are as follows:

- Some data is lacking (e.g. data has not been provided in previous studies for each Member State).

³⁵⁰ All results are available at: <http://ec.europa.eu/environment/consultations/eia.htm>.

- Data from different sources is contradictory or there is a lot of deviation from the mean in several instances, indicating very different situations across the Member States without clear reason for such differences.
- In studies and reports, data sources are not completely documented, consequently the data source cannot be checked for its validity and thus may not be reliable.
- Data that is available is often reported for different years or is based on different calculation methods or definitions.
- There are some general uncertainties related to the extrapolation of past trends to estimate future data.

Different impacts across Member States

The impact of amendments to the current EIA will differ across Member States. This is due to differences in political, legal and administrative contexts which have influenced the speed and quality of the transposition and implementation of the EIA Directive. The way authorities in Member States have organised the EIA process differs across Member States. It was not possible to find data regarding the application of the EIA at regional level.

These differences have an impact on the investment costs that are necessary to implement a certain amendment. For instance, some Member States have already integrated different types of assessments or have conferred on the regions the responsibility for giving effect to the EIA. Hence, the Member States will not be impacted in the same way by changes to the EIA Directive.

The transposition of a Directive into domestic law does not necessarily require the provisions of the Directive to be enacted in precisely the same words in a specific, express provision of national law and a general legal context may be sufficient if it actually ensures the full application of the Directive in a sufficiently clear and precise manner. International benchmark studies (Ramboll Management, 2006) of the administrative burden of the application of a number of EU Directives in various Member States indicate that the administrative burden can also vary significantly between Member States, according to the way EU legislation has been transposed into national legislation (this phenomenon is also referred to as ‘gold-plating’). Member States have large discretion when implementing EC Directives related to environmental issues. They may increase reporting obligations, add procedural requirements, or apply more rigorous penalty regimes.

10.12. Annex 12: Detailed description of the environmental impacts

10.12.1. Adaptation of Annexes I and II

Such modifications would imply moving Annex II projects to Annex I and/or adding project categories to Annexes I or II. It should be noted that the extent of the environmental impacts will depend on the one hand on the implementation of Annex III (for Annex II projects) and, on the other hand, on the quality of the EIA process (for Annex I projects). Consequently, this amendment is somehow subordinated to other amendments related to the screening procedure and the quality of the EIA process.

- Moving project categories of Annex II to become Annex I

A higher level of mandatory assessments of Annex II projects would have a positive impact on the environment. However, the concrete degree of change is dependent on the details of the proposed changes. Given that there is a very diverse approach among Member States in their transposition of Annex I and Annex II projects into their national legislation, many Member States already have moved project categories of Annex II to Annex I, considering that, on the basis of the national circumstances, such projects are likely to have significant negative environmental effects. Hence, the EIA Directive revision would only consolidate this practice and would lower positive environmental impacts. The Box below presents such examples.

National approaches to transposing Annex I and II

For instance the **new Member States** are divided as to whether they apply thresholds (Hungary, Lithuania, Latvia, Malta, Poland, Slovakia, Slovenia and Czech Republic) or a case-by-case evaluation (Hungary, Lithuania, Latvia, Malta, Cyprus, Romania, Czech Republic, Poland, Bulgaria and Estonia) or a combination of both in order to determine whether a project shall be made subject to an EIA. Seven new Member States use exclusive thresholds for certain project categories (Cyprus, Estonia, Latvia, Malta, Poland, Slovakia and Slovenia), three use indicative thresholds (Czech Republic, Malta, Slovakia) and three Member States use a combination of both approaches to determine whether a project shall be made subject to an EIA (Latvia, Malta and Slovakia). **Ireland** has set mandatory national thresholds for each of the project classes in Annex II. These thresholds were set with due account of the particular Irish circumstances, including the general nature, size and location of projects as well as the conditions of the environment. Thresholds are reported to be set at a quite low level leaving the relevance of carrying out EIAs for projects below the thresholds set virtually not relevant. A National Guidance document was designed to assist authorities in deciding screening procedures for sub-level development projects. In terms of Annex III criteria, the guidelines emphasise that all criteria should be taken into consideration in the specific context of each case, but that much depends on the exercise of best professional judgment.

In **Denmark** some of projects listed under Annex II of the Directive are listed under the Danish Annex I. In addition, 48 % of screenings between 1999 and 2002 were for livestock farming projects, which led Denmark to develop specific legislation for livestock farming (Annex II of the Directive) and to address their mostly unified impacts.

As shown in the Box, there is a wide range of approaches to transposition of Annex I and Annex II projects and many Member States already treat Annex II projects as Annex I projects in their national legislation. The type of project categories where

voluntary mandatory EIA have been set nationally also reflects national circumstances, as shown in the case of livestock farming in Denmark. The variation in the type of projects subject to EIA in Member States, an overview of which is shown in Annex 4, will also have an influence in assessing any impacts of adding new project categories.

Consequently, there are a several issues, as discussed above, that needs to be taken into consideration when assessing the environmental impacts of moving some or all project categories from Annex II to Annex I.

- Adding new projects to Annexes I and II

Concrete environmental impacts of adding new projects to Annex I and Annex II are difficult to assess, as it depends on the final selection of projects and the level of implementation. Moreover, the fact that the EU Member States have already added new project categories in the Annexes, limits the environmental impacts of this amendment. Consolidating and expanding the provision of the EIA Directive in this regard will help to ease pressures on the environment nonetheless.

The majority of Member States have already added a number of additional project categories to the Annexes (mainly Annex II), such as installations working with Genetically Modified Organisms (GMOs), golf courses, masts for radio and telecommunications, underground electricity cables, etc. The number of additional project categories is also high in the new Member States. The inclusion of additional project categories to the Annexes will have a positive impact on the environment. For example in Scotland there are examples where the EIA has contributed towards eco-friendly golf courses³⁵¹.

10.12.2. Alternative procedure for Annex II projects

As shown in Annex 10, there are several versions of alternative procedures, which have evolved from specific national circumstances and are also dependent on other aspects of the EIA Directive, such as how Annex II projects have been transposed.

For example, in Denmark, an electronic model has been developed for intensive animal farming projects in which the developer simply, by inserting required data in a calculation sheet, may get a clear picture of whether the proposed project will result in an EIA procedure or not. The model even encourages developers to alter their entries for the purpose of trying out what particular elements in their projects that may be altered with the effect that an EIA procedure is no longer relevant. It is noted that this Danish example has previously been reviewed by the European Commission and Member States and was found to be of limited applicability to the circumstances in other Member States. However, the idea of the model and its principles could be subject to further development in other Member States for the purpose of assessing the sustainability of idea and principles. In Sweden, many of the ‘mini-EIAs’ carried out were reported to be just pro-forma exercises with marginal benefits for the

³⁵¹ The Telegraph, 10 October 2008, *Eco-friendly golf course to open in Scotland* (<http://www.telegraph.co.uk/earth/earthnews/3353152/Eco-friendly-golf-course-to-open-in-Scotland.html>).

environment (Sweden is currently revising its EIA and SEA legislation and considering removing the requirement of ‘mini EIAs’³⁵²).

During the Conference on the 25th Anniversary of the EIA, such alternative procedures were presented and it has been concluded that they can be very relevant³⁵³.

The actual environmental impact of any uniform alternative EIA procedure for all Member States would also depend on what other aspects are required or not. On balance, it is estimated that the environmental impact of this option would be more or less neutral.

10.12.3. Modifications of Annex III

Annex III sets the criteria based on which thresholds and/or case-by-case assessments are to be set by Member States for Annex II projects. **This amendment is crucial as it has a major impact on whether an EIA will be carried out for a project.** The effects of the other options related to screening will depend on the clarity, specificity and adequacy of the Annex III criteria.

A Danish study³⁵⁴ examined a vast number of screening decisions in Denmark, searching for data on whether the applicant did in fact change his/her project in the light of screening requirements. The study found that a majority of the projects were in fact changed already prior to the screening procedure for the purpose of avoiding the project being subjected to the EIA procedure as a result of a screening decision. Hence the screening mechanism of the EIA procedure in itself seems to have a positive effect on projects that are screened out of the EIA procedure.

As the modification of Annex III criteria would address the issue of salami-slicing and the assessment of cumulative effects, this will have positive environmental impact. Any update to Annex III, that improves the consideration of projects on biodiversity, the marine environment, climate change and resource consumption, as well as the impacts of a changing climate and other types natural and man-made of disasters on projects, will inevitably have additional positive environmental impact.

10.12.4. Justification of negative screening decisions

This option may have a positive environmental impact by avoiding negative screening decisions that may not be fully justified. This requirement would restrict the number of cases where the knowledge of the lack of transparency, in not having to justify a negative screening decision, would influence authorities to make a negative screening decision.

³⁵² Correspondence with Professor Lars Emmelin, Chair of Environmental Assessment at the Swedish School of Planning, Blekinge Institute of Technology (October 2011).

³⁵³ All presentations are available at <http://ec.europa.eu/environment/eia/conference.htm>.

³⁵⁴ Holm Nielsen, et al. in Journal of Environmental Policy, Assessment, and Management, vol.7 no.1 March 2005.

10.12.5. *Mandatory scoping*

The overall majority of the new Member States considers scoping as an important feature of an adequate EIA regime and beneficial in improving the quality of the EIA³⁵⁵. For those Member States where scoping is not yet mandatory (approximately half of them³⁵⁶), introducing such a policy option would likely result in environmental benefits.

By clarifying what environmental issues should be covered by the EIA report, identifying which environmental impacts are likely to be the most significant, specifying preferred methodologies for the assessment of impacts and advising on relevant information sources, the EIA report is likely to be of better quality, i.e. providing robust and complete evidence for future decision-making. Mandatory scoping would prevent any significant gaps in the environmental information provided to the authorities, would ensure an adequate level of detail for those impacts considered to be the most significant and could also lead to more robust and comparable assessments.

10.12.6. *Quality control of the EIA information*

The impacts of this option would concern some of the old Member States. Indeed, all new Member States have already implemented provisions in this regard, as a means to ensure better quality of EIA reports and better informed decisions.

Use of accredited consultants

Use of accredited consultants to prepare EIA reports or to verify EIA reports prepared by developers could bring environmental benefits, by ensuring that EIA reports are prepared or verified by staff having sufficient experience and expertise. The assessment of environmental issues and the evaluation of measures required to prevent, mitigate or offset the impacts would be more robust and objective. In practice, external consultants hired by developers to prepare their EIA reports also provide developers with useful advice on how to minimise environmental impacts of their projects and how to comply with legal requirements.

However, it could be argued that public authorities, developers and consultants in old Member States have more practical experience in the preparation and review of EIAs than in new Member States³⁵⁷, therefore the need for such an accreditation process or other mechanism for quality control would probably be less critical in the old Member States than in the new Member States.

In addition, the extent to which this option would provide environmental benefits depends on the quality of the accreditation procedure itself and its capacity to discriminate truly experienced and qualified consultants from the others. In this sense, detailed accreditation criteria would have to be established (most likely at Member State level, since some Member States have already developed such criteria), as well as some provisions on the duration of its validity and some

³⁵⁵ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive.

³⁵⁶ COWI (2009), Study concerning the report on the application and effectiveness of the EIA Directive.

³⁵⁷ As suggested by the COWI report (2009).

cancellation criteria (e.g. if several EIA reports of poor quality are identified by the authorities, they could recommend the cancellation of the accreditation).

In the Walloon region of Belgium, the accreditation procedure seems to have been effective in improving the overall quality of EIAs. Even if not all EIAs are of good quality, the process works well at cancelling or modifying the accreditation of consultants which would have produced unsatisfactory work³⁵⁸.

For the most complex projects, it is unlikely that one single consultancy company would have the expertise to cover all types of environmental aspects. In practice, certain parts of the EIA are often subcontracted to specialists, e.g. biodiversity experts or noise/vibration experts. It would probably be relevant for the accreditation requirement to only concern consultancy companies in charge of coordinating and managing the preparation of EIAs, allowing for some aspects of the EIA to be subcontracted to specialist companies under the supervision of the coordinating consultancy.

National 'quality control committees'

Similarly, the review of EIA reports by national 'quality control committees' would bring environmental benefits, as it would involve a panel of environmental assessment experts able to provide a critical and objective opinion on the quality of EIA reports.

10.12.7. Mandatory assessment of reasonable alternatives

A more complete assessment of project alternatives, including reasonable alternatives and the zero option, would provide better information for future decision making and reinforce the quality of the EIA process. If the assessment includes a cost-benefit analysis considering the potential costs of environmental and public health damages that may be associated with different project alternatives, this would provide more objective insight into the overall costs for society in different scenarios. The requirement to assess costs and benefits associated with the zero option would oblige developers to assess (even in a very rough manner) aspects such as the value of ecological services of undeveloped areas for example, and this would contribute to better environmental awareness of the general public and would improve the final decision. The assessment of the risks the project could be vulnerable to (as part of the additional environmental issues to be considered³⁵⁹) could also better inform the analysis and the assessment of the reasonable alternatives. In the longer term, this requirement is likely to induce improvements in the environmental design of projects at an early stage (even before EIA application), through increased awareness of developers.

³⁵⁸ CGEDD (2011) Competencies and professionalization of consultancies with regard to EIAs – Report for the French Ministry of Environment (in French) (http://www.cgedd.developpement-durable.gouv.fr/IMG/pdf/007411-01_rapport_cle28ab54.pdf).

³⁵⁹ See section 10.12.10.

10.12.8. Justification of final decisions

This option is likely to have a positive environmental impact by avoiding final decisions that may not be duly and fully justified. This requirement would oblige public authorities to better motivate the decisions granting development consent to projects with significant negative effects and demonstrate how consultations and the findings of the EIA information were taken into consideration in a concrete manner.

10.12.9. Mandatory monitoring

The environmental benefits of post-EIA monitoring have been widely discussed in EIA-related literature, mainly in generic terms³⁶⁰. Ultimately it is not the predicted impacts, but rather the real effects of projects that are relevant for protecting the environment. Monitoring enables EIA practitioners and stakeholders to move from a mainly theoretical perspective on a proposal to the actual understanding and knowing of the real situation once projects are implemented.

This requirement would provide a higher level of environmental protection, by checking whether actual impacts are similar to impacts predicted in the EIA report and by enabling learning from experience to occur. For new types of projects, it is sometimes difficult for developers to estimate the magnitude of environmental impacts and various assumptions have to be made which may not be fully robust. In the event of actual impacts being more significant than expected, monitoring activities would enable early identification of the problem, thus allowing better mitigation of environmental damages.

Such a requirement would also contribute to improved quality of EIA reports, by incentivising developers to make sure impact predictions are reliable enough and by identifying which impact assessment methodologies are sufficiently robust to predict actual impacts from future projects. In specific cases, knowledge gathered or lessons learnt through EIA follow-up may be transferred into future developments, as illustrated by a case study in the UK³⁶¹ (see box below).

Case study on the benefits of EIA follow-up at BaT windfarm, UK

The Beinn an Tuirc (BaT) windfarm, situated on Scotland's Mull of Kintyre, is now one of the UK's most productive windfarms. However, initial scoping studies established that this upland site formed part of a golden eagle's range. To mitigate against the risk of eagle collision and to improve the overall prey availability for the eagles, Scottish Power designed, through the EIA process, an innovative habitat-management plan that sought to increase prey availability at alternative sites, diverting the eagles from the windfarm's terrain.

³⁶⁰ For example see: Dipper, B., C. Jones and C. Wood (1998) Monitoring and Post-Auditing in Environmental Impact Assessment: A Review. *Journal of Environmental Planning and Management* 41 (6), November; Arts J (1998) EIA Follow-up. On the Role of Ex Post Evaluation in Environmental Impact Assessment. PhD thesis, Geo Press, Groningen; Morrison-Saunders A, Baker J and Arts J (2003) Lessons from practice: towards successful follow-up. *Impact Assessment and Project Appraisal*, volume 21, number 1, pages 43–56; Morrison-Saunders A and Arts J (2004) Exploring the Dimensions of EIA Follow-up. Presented at: IAIA'04 Impact Assessment for Industrial Development Whose Business Is It? (IA Follow-up stream), 24th annual meeting of the International Association for Impact Assessment, 24-30 April 2004, Vancouver, Canada.

³⁶¹ Marshall, R. (2005) Environmental impact assessment follow-up and its benefits for industry. *Impact Assessment and Project Appraisal* 23 (3), pp. 191-196.

Scottish Power, in its analysis of EIA ecological data pre- and post-construction, recognised the singular value of EIA follow-up at BaT and its future application in developing other upland windfarm sites. The decision was therefore made to extend ecological and eagle EIA follow-up monitoring programmes for an additional five years. The BaT windfarm has effectively become an extensive open-air laboratory, with the BaT EIA follow-up data now directing the siting and development of new schemes.

10.12.10. *Additional environmental issues*

Providing additional information in EIA reports on projects' impacts on global climate change, on disaster risks, on biodiversity, on marine environment and on natural resource use, as well as on impacts from climate change and other disasters on projects, would increase the quality of EIA reports and allow better decision making. Adequate prevention, mitigation and offsetting measures would have to be considered. This is likely to contribute to a reduction in greenhouse gas emissions, resilience to disasters, a reduction of environmental damages due to climatic events, a reduction in the loss of biodiversity, an increased protection of the marine environment and savings in the use of natural resources. In the longer term, these new environmental issues would be better taken into account at an early stage of project design (before EIA application). This amendment would also contribute to increased overall environmental awareness of the public concerning these environmental issues. More specific benefits per policy area are presented below:

Climate change

Integrating a climate assessment in EIA reports, with proposals for adequate mitigation and adaptation measures, would oblige developers to better anticipate climate risks and decide on possible measures to address them. In this sense, this amendment would – to some extent – contribute to the achievement of EU objectives of becoming a 'highly energy-efficient, low carbon economy', of reducing greenhouse gas emissions by 20 % by 2020³⁶² and by 80-95 % by 2050³⁶³ and of improving 'the EU's resilience to deal with the impact of climate change'³⁶⁴.

As part of the climate assessment, depending on the character of the project, in some cases not only direct greenhouse gas emissions (e.g. from on-site combustion of fossil fuels) would have to be assessed, but also indirect impacts of the projects on climate change. For example, for transport infrastructure this could include increased or avoided carbon emissions associated with energy use for the operation of the project, as well as costs of pollutions and nuisances and possible benefits for the society at large³⁶⁵; for a commercial development this could include carbon emissions due consumer trips. Member States have legally binding greenhouse gas reduction targets and many Member States have also defined greenhouse gas reduction targets at the local level (main cities, regions, etc.), so the EIA could assess to what extent projects contribute to the achievement of these targets and could

³⁶² Member States have committed themselves to reducing greenhouse gas emissions (GHG) by 20 %, increasing the share of renewables in the EU's energy mix to 20 %, and achieving the 20 % energy efficiency target by 2020 (EU Climate and Energy Package, 2008).

³⁶³ Greenhouse gas reductions by 80 to 95 % by 2050 (COM(2011)112, A roadmap for moving to a competitive low carbon economy in 2050).

³⁶⁴ COM(2009) 147, White Paper, Adapting to climate change: Towards a European framework for action.

³⁶⁵ For example, such a requirement is already included in the French legislation concerning EIAs.

identify relevant mitigation and/or offsetting measures that would need to be implemented. It could also help identify possible measures to better exploit some opportunities offered by the natural environment e.g. use of a locally abundant source of renewable energy. Such information is especially important for the projects that will not be covered by the EU Emissions Trading Scheme (ETS).

The climate risk assessment would also cover impacts of a changing climate on projects. Outputs of a climate assessment could include information on: types of climate related hazards that a project is exposed to, scenarios of climate change impacts on a project and foreseen adaptation measures to prevent these impacts. This would involve assessing the impacts of more severe and more frequent extreme weather events (floods, droughts, storms, etc.), as well as slower climate change impacts (such as temperature and sea level rise, etc.), on the project's infrastructure and the associated consequences for the environment, the neighbouring population and the economy. The EIA would also assess the extent to which the proposed project may contribute to an increase or, on the contrary, reduction of the overall population's vulnerability to the effects of climate change. Vulnerability, hazard and risk maps could be developed and adaptation measures would need to be foreseen. Where needed, adaptation measures could include for example:

- Measures to strengthen the project's and project partners' adaptive capacity e.g. building early warning and disaster risk reduction mechanisms, diversification of income sources, improved access to financial services including insurance, capacity-building
- Measures to improve the project's ability to operate under identified constraints e.g. choice of most water-efficient or energy-efficient production options.

Disaster risks

The need to build '*resilience to natural and man-made disasters*' and invest in risk prevention is envisaged in several EU strategies and proposals³⁶⁶. An integrated assessment of the major disaster risks and hazards that the project could be vulnerable to (both natural and man-made, e.g. earthquakes, floods, landslides, technological hazards) would ensure that the project is disaster-proof and resilient. This multi-risk approach should also cover the *climate related* hazards discussed above in the climate change topic.

The disaster risk assessment will help identify the potential risks and their impacts and thus inform the decision-making on the possible prevention measures or the reasonable alternatives the developer has to provide (e.g. choice of project location to reduce exposure to natural disasters). The assessment of the risks could also raise the awareness of the developers as to the expected future impacts of the project and contribute to the monitoring activities following the implementation of project.

After the major natural and man-made risks have been identified and assessed, measures to control and manage their significant impacts should be taken, e.g. to

³⁶⁶ E.g. the EU Internal Security Strategy COM(2010)673, the Commission's proposal for the Cohesion fund for 2014-2020 COM(2011)612, the Commission's Communication on the prevention of natural and man-made disasters COM(2009)82.

ensure compliance with existing minimum prevention standards, safety requirement, building codes, improved land use planning etc. These could be integrated into a coherent risk management plan, including also sufficient preparedness and emergency planning measures to ensure an effective response to disasters or the risks of accidents.

Overall, this requirement would ensure a higher level of environmental protection and it would contribute to a more sustainable growth since disasters can have very detrimental consequences for the environment, human life and the economy. At the same time, by reducing or avoiding the potential risks developers will generate economies of preventive action instead of post-disaster damages and losses and avoid risks that could hamper the smooth and successful implementation of the project.

Biodiversity

At present, EIAs tend to cover impacts on Natura 2000 sites while the species protection provisions tend to be neglected. Obliging developers to assess impacts on biodiversity (rather than just the impacts on fauna and flora and/or the impacts on Natura 2000 sites), would be in line with some of the actions of the 2006 EU Biodiversity Action Plan³⁶⁷ requiring that '*all EIAs should take full account of biodiversity concerns*'. It should contribute to reducing biodiversity loss at the local level, and therefore also contribute to achieving the objective of the new EU Biodiversity Strategy³⁶⁸ which has reiterated the target of halting biodiversity loss by 2020.

Marine environment

Integrating the marine environment into the scope of the EIA, in an explicit manner, would contribute to achieving the objectives of the Marine Strategy Framework Directive³⁶⁹, i.e. reaching a good environmental status of the EU's marine waters by 2020, ensuring that the capacity of marine ecosystems to respond to human-induced changes is not compromised while enabling the sustainable use of marine goods and services by present and future generations. This would be of particular relevance for projects such as offshore energy infrastructure, which are becoming more and more frequent.

Specific criteria defining a good environmental status of marine water have been specified by a Commission Decision in 2010³⁷⁰; such criteria could be used as a basis for the assessment of impacts. These include, in particular: biological diversity, minimal impacts of non-indigenous species, fish population characteristics, quality of marine food webs, minimisation of eutrophication, sea-floor integrity, minimal concentrations of contaminants in water and in fish, quantities of marine litter and lack of nuisance from energy input including underwater noise.

Resource use

³⁶⁷ SEC(2006)621.

³⁶⁸ COM(2011)244, 'Our life insurance, our natural capital: an EU biodiversity strategy to 2020'.

³⁶⁹ Directive 2008/56/EC of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

³⁷⁰ Commission Decision 2010/477/EU of 1 September 2010 on criteria and methodological standards on good environmental status of marine waters.

By assessing impacts of projects on the availability of natural resources and by identifying ways of improving an effective and efficient resource use, the risks related to the degradation and depletion of natural resources would be better taken into account in decision-making. This would contribute to the EU objectives of improving resource efficiency and reducing the negative environmental impact of resource use³⁷¹.

10.12.11. Clear time-frame for the public consultation process

In Member States where the public consultation phase can be considered as being too short to ensure ‘effective public consultation’, an increase in the minimum duration of this consultation phase could provide environmental benefits. Indeed, this would give additional time for debating on potential environmental impacts of projects, on possible alternatives and on possible mitigation measures. Moreover, this would lead to better integration of environmental considerations in the project’s development while ensuring the final decision of the authorities is well informed.

According to available information, if the minimum time-frame is set at 1 month for the consultation on the EIA information submitted by the developer, this will mean an increase in the minimum duration of public consultation phase for in six Member States (EE, LT, LV, MT, PL, UK).

10.12.12. Maximum time-frames for decision-making (screening and EIA decision)

As long as this amendment provides a possibility to extend the maximum standard duration of the final decision stage (i.e. 2 months) in the case of particularly complex projects, no negative environmental impacts are expected.

10.12.13. Better coordination/integration with other legislation

In Austria, all projects requiring a permit (such as those covered by the IED, the Habitats Directive or the water, waste and air legislation) undergo an integrated assessment procedure. The environmental coordination and integration of EIAs and other environmental assessments and permits is likely to have a positive impact on the environment as it has enabled a more comprehensive information base for decision-making. Also, the provisional authority responsible for permitting is also responsible for the different stages of the EIA procedure. This is to ensure that the coordinated or joint assessment procedures do not become detached from the EIA process itself, something identified as a problem in Sweden, where responsibilities are dispersed between different authorities.

10.12.14. Summary of environmental impacts

Based on the qualitative description of environmental impacts presented in the above sections, a comparative overview of environment impacts associated with the different amendments is presented in Table 26. For each of the four groups of amendments, all environmental impacts identified are actually positive or neutral. The analysis does not distinguish between short term and long-term impacts, as there is no reason why environmental impacts would differ significantly over time, once

³⁷¹ COM(2005) 670, ‘Thematic Strategy on the sustainable use of natural resources’.

the amendments are in place. The levels of benefits (limited, moderate, high) are based on the qualitative assessment contained in this chapter.

Table 26: Summary of environmental benefits of the possible amendments	
Amendments related to screening	Environmental benefits
1) Adaptation of Annexes I and II	Limited to High*
2) Alternative procedure for Annex II projects	Limited
3) Modification to Annex III criteria	High
4) Justification of negative screening decisions	Limited
Amendments related to quality and completeness of EIAs	Environmental benefits
5) Mandatory scoping	Moderate
6) Use of accredited consultants or mechanism for quality control	Moderate
7) Mandatory assessment of reasonable alternatives	High
8) Justification of final decisions	Moderate
9) Mandatory post-EIA monitoring	High
10) Additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use)	High
Amendments related to time-frames	Environmental benefits
11) Specific time-frame for public consultation	Limited
12) Maximum time-frame for decision-making on screening and EIA decision	Zero
Amendments related to better coordination/integration with other EU legislation	Environmental benefits
13) Coordinated or integrated/joint procedure (EIA 'one-stop shop')	Limited
*Depending on the nature of changes performed (e.g. number and types of projects moved from Annex II to Annex I, new thresholds, new projects added to Annexes, etc.) and the Member States concerned (the effects will be limited for those Member States which imposed stricter criteria and have gone beyond the classification of the Directive and high for those Member States which have not gone beyond the classification of the Directive).	

10.13. Annex 13: Detailed description of the direct administrative costs

The present annex assesses the changes in administrative burden between the baseline scenario and the situation after the amendment has been implemented. Orders of magnitude of the estimates provided for each amendment can be compared with costs for conducting EIAs in the baseline scenario, i.e. 146 to 215 million €/year for public authorities and 558 to 846 million €/year for developers in 2010 (see Section 3.4).

The type and size of the project is an important factor determining the cost of the EIA process. In addition, the analysis of the baseline scenario showed that there are considerable differences between Member States in the way they have transposed the EIA and have organised the EIA process. These factors undoubtedly lead to significant differences in administrative burden between Member States, even for comparable projects. In some countries (e.g. Germany, Belgium, Austria, Italy and Spain) differences might even occur between regions. These differences between regions and Member States are difficult to quantify due to the lack of data in the information sources for this study. Therefore, quantification of administrative burden only provides orders of magnitude of the potential impacts of an amendment at EU level; it can however be used to rank the impact of different amendments.

The fact that Member States have transposed the EIA in different ways also means that some amendments analysed in this study are already in place (partially or completely) in some of the Member States; hence, for those Member States there will be no additional administrative burden. This is taken into account when estimating the overall impact of amendments at EU level.

For each of the amendments, the impacts on direct administrative costs for affected parties are discussed below. Quantitative estimates provided in the sections below correspond to *long-term* costs and benefits associated with the implementation of the amendments (i.e. not taking into account possible one-off costs for the transposition and implementation of the legislative changes). Given the limited data available, the possible evolution of impacts over time has only been assessed in a qualitative manner, where relevant.

10.13.1. Adaptation of Annexes I and II

A shift of projects from Annex II to Annex I would decrease the number of screenings to be carried out. Under the assumption that only the projects most likely to be subject to an EIA would be subject to the shift from Annex II, it would not significantly affect the number of EIAs. Consequently, there would be no impact on the total cost for authorities and developers reported in the baseline scenario, as the effort for positive screenings was already included in this baseline cost.

Additional thresholds or additional types of projects to be included in Annexes I and II would cause an increase in costs for both authorities and developers, unless:

- Member States have already imposed similar thresholds and similar additional project categories.
- Such projects were already subject to a positive screening and an EIA.

The voluntary inclusion of golf course as part of Annex II in Scotland can be mentioned as an example. There have been 11 EIA applications for golf courses between 1994 and 2004 based on data compiled in 2006. There is no exact information on the specific costs that the introduction of golf courses to Annex II has had in Scotland. However, the Scottish Government has estimated that direct EIA costs falling to the developer for EIA applications generally range between £ 30.000 - £ 150.000 for a project requiring planning permission.

The average marginal cost of processing one extra EIA in those Member States which did not impose any thresholds so far is in the order of € 11.000 for the authorities and € 41.000 for developers. It is difficult to calculate the overall impact of this amendment without specifying in detail which types of projects would be concerned and what new thresholds would be imposed. If 10 % of the projects undergoing a screening are moved to Annex I and are subject to an EIA, the costs for public authorities and developers would be quite high compared to the baseline (approximately 17-20 %) ³⁷²; the costs can be very high, if 15-20 % of the projects undergoing a screening are subject to an EIA.

Whilst the costs of undertaking EIA are expected to represent a small proportion of the overall project budget, the relative burden of costs is likely to be proportionately higher for smaller scale developers (SMEs), which may include golf courses. Additional costs associated with screening, scoping, and reviewing of Environmental Statements fall to the decision-making authority and statutory consultation bodies, which are more difficult to quantify ³⁷³.

10.13.2. *Alternative procedure for Annex II projects*

A number of Member States have adopted alternative procedures for small-scale projects of Annex II. Such procedures are therefore particularly relevant for SMEs. For example, in Austria, approximately half the projects submitted to the authorities undergo a 'simplified' EIA procedure. The duration of such a simplified process is estimated to be 50 % of the duration of a normal procedure ³⁷⁴. Besides, any IT approaches making the screening process clearer/more accessible would provide additional socio-economic benefits. There are no data available about the impact of a simplified EIA on the effort per EIA step for authorities and developers.

The overall impact of this amendment can only be calculated on a case-by-case basis per Member State and would also depend on what other aspects are required, such as moving more Annex II projects to Annex I or modifying Annex III criteria. As an example, thousands of 'mini EIAs' for Annex II projects are conducted in Sweden but there exists no detailed information on their costs and benefits ³⁷⁵.

³⁷² If these the average costs of processing one extra EIA (€ 11.000 for the authorities and € 41.000 for developers) are multiplied by 10 % of the average number of screenings (2.740-3.380), the costs would be for € 30.140.000 to € 37.180.000 for public authorities and € 112.340.000 to € 138.580.000 for developers.

³⁷³ Correspondence with Cara Davidson, Scottish Government, October 2011.

³⁷⁴ Kammer für Angestellte und Arbeiter zu Wien (2008) Die UVP auf dem Prüfstand, Zur Entwicklung eines umkämpften Instruments.

³⁷⁵ Correspondence with Professor Lars Emmelin, Chair of Environmental Assessment at the Swedish School of Planning, Blekinge Institute of Technology (October 2011).

Given the incomplete information that is currently available, only a theoretical estimate of potential impacts can be made. In 2008, Annex II projects represented on average 7.6 % of the total number of projects submitted to the authorities³⁷⁶. Assuming that, on average, at EU level, 50 % of these Annex II projects could be carried out with 20 % less effort due to the introduction of a simplified procedure, the impact would be in the order of **€3.8 million annual savings for authorities and almost €21.4 million annual savings for developers**. This estimate takes into account the fact that some Member States already have a simplified procedure in place. Given the Austrian example, the 20 % time savings assumption in the case of a simplified procedure (compared to the baseline scenario), can be considered as a conservative assumption.

In the short term, authorities would also need time to get familiar with the methodology related to the alternative procedure (it is assumed that guidance would be developed by the Commission), which may lead to slightly higher costs in the first few years of implementation.

10.13.3. *Modifications of Annex III*

More specific criteria in Annex III are expected to reduce the time spent by authorities during the screening, since there would be fewer margin for interpretation in making the decision of whether or not an EIA is required. In the absence of information from Member States' experience, it is roughly assumed that screening time could be reduced on average by 10 to 20 % at EU level. The associated annual **savings for the authorities would be in the range of € 0.5 to 1.5 million**³⁷⁷.

10.13.4. *Justification of negative screening decisions*

If authorities have to justify negative screening decisions this will require time to formally write down the reasons for the decision. On the other hand, it will save time because there will be less queries and informal discussions linked to the screening decision. This amendment has been subject to an impact assessment in the UK³⁷⁸. Based on a consultation with local planning authorities, this impact assessment came to the conclusion that on average the net effect of this change is an increase in screening time equivalent to one working hour per negative screening decision³⁷⁹. Applied to the EU, **the impact for public authorities would be € 0.96 to 1.2 million in 2010**³⁸⁰. This is a yearly recurrent cost.

³⁷⁶ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

³⁷⁷ Assuming a total screening cost (i.e. efforts to conduct positive and negative screenings) estimated at 4.8-7.7 million €/year (time spent by authorities at conducting positive screenings is assumed to account for 3 % of total time to process an EIA file – see section 3.4 and Annex 6).

³⁷⁸ UK Communities and local government (2011), The Town and Country Planning (Environmental Impact Assessment) Regulations 2010, Consultation on draft regulations.

³⁷⁹ This is a net impact, also taking into account the time savings from an expected decrease in the number of queries and informal discussions with developers and other parties involved.

³⁸⁰ For 24,660 to 32,110 negative screening decisions per year. Hourly rates for public authorities are taken from the EU Standard Cost Model.

10.13.5. Mandatory scoping

In approximately half of the Member States scoping is already mandatory. This cost is already included in the total cost for the baseline scenario. Average times spent by authorities and developers on the scoping step of the EIA process were estimated in Section 3.1.2. Based on these average values, the introduction of a mandatory scoping procedure in all Member States which do not have the mandatory scoping procedure in place is estimated to be in the order of € 6.4 million per year for authorities and € 14.8 million per year for developers in 2010.

On the other hand, scoping is generally seen as a useful way of reducing the costs of an EIA procedure³⁸¹. According to a recent survey in the UK with Local Planning Authorities (where scoping is not mandatory), a majority of authorities (67 %) think that scoping yields beneficial effects on the quality of the EIA report subsequently submitted³⁸². The experience in Hungary³⁸³ shows that ignoring scoping can lead to EIA reports containing a lot of unnecessary or unimportant information. In France, it is noticed that some project developers produce extensive EIA reports on some topics (e.g. air pollution) which would not have necessarily been the case if scoping had been done correctly; the reason is that project developers tend to use EIAs more as juridical insurance than decision-making tools³⁸⁴. This extra time needed for authorities to undertake mandatory scoping is therefore expected to be largely offset by the fact that EIA reports would be of better quality and more focused, hence authorities would spend less time requesting further information to developers, reviewing lengthy EIA reports and asking for successive modifications of these reports. For developers, the extra cost is also likely to be offset by time savings during the drafting of the EIA, as the analysis of irrelevant information would be avoided. It was previously estimated that, when an EIA report needs to be revised by the developer to address comments made by the authorities, the revision step can represent up to one third of the total EIA cost for the developer (and approximately 17 % of the total costs, on average). This step of the process, which represents a significant share of the total EIA cost for developers, could probably be reduced if mandatory scoping was put in place. This would be beneficial in particular for SMEs, which are more vulnerable due to their limited financial capacity.

Given the above, overall, this option is likely to have zero net impact on administrative burden for authorities and developers.

10.13.6. Use of accredited consultants or mechanism for quality control

In this section, only the costs of the first variant, i.e. the use of accredited consultants, have been estimated, as this variant is considered as the easiest way to address quality issues in those Member States which do not yet have a mechanism in place to achieve a good quality of EIA reports. The second variant, i.e. the creation

³⁸¹ IVM, BIO, IEEP, IEP and Ecologic (2007), Costs and benefits of the EIA Directive.

³⁸² UK Communities and Local Government (2006), Evidence review of scoping in environmental impact assessment, EIA Centre, University of Manchester, DCLG, London.

³⁸³ Radnai and Mondok (2000), Environmental Impact Assessment Implementation in Hungary, in: Bellinger, E., et al. (eds.), Environmental Assessment in Countries in Transition. CEU Press, (p.57-62).

³⁸⁴ BIO Intelligence Service (2006), Cost and benefits of the implementation of the EIA directive in France (Appendix IIB to the IVM report of 2007 on Costs and benefits of the EIA Directive).

of a ‘quality control’ committee at national level, which is already in place in some Member States, is considered as a more costly variant for public authorities.

Requirements to use accredited consultants or to have a quality control mechanism of EIA reports are already in place in at least 17 Member States.

For those Member States that do not have any of these requirements, the use of accredited consultants would generate some costs for the authorities that would have to organise the accreditation process and enforce the requirements. Impact assessments show that the cost for the authorities in a decentralised state is higher than in a centralised state (only one authority dealing with accreditation)³⁸⁵. Due to the fact that there will have to be an open market of service providers, also smaller Member States and/or Member States with a small number of EIAs would have to put efforts in the accreditation process. However, the extra cost for authorities is likely to be offset by an improved quality of EIA reports, leading to less time being spent at requesting further information from developers and at reviewing revised versions of EIA reports. It is therefore assumed that there would be no net impact for public authorities.

For consultants, this amendment would involve costs for obtaining and maintaining accreditation. No information could be found on the range of costs encountered in Member States having already this requirement in place. In the absence of such information, a rough estimate can be developed based on the assumption that, in the concerned Member States, each environmental consultancy firm would need to have 2 experts accredited and that 2-3 days per person would be spent at obtaining this accreditation (via training). Taking into account a regular turnover in staff and new people to be trained, it is assumed that this cost would be incurred each year. The training would only be accessible for consultants having minimum qualification criteria (based on CV, past experience, references, etc.). The total number of environmental consultancy firms in the EU is unknown but market research shows that e.g. in UK some 611 environmental consultancy firms are registered on a national level. If we assume that half of these environmental consultancy firms are involved in EIA activities and if we apply the ratio of ‘EIA consultancy firms per EIA report produced in the UK’³⁸⁶ to those Member States that do not yet have any requirement in place, this equals an average cost of approximately **€2 to 3 million per year**³⁸⁷. It is assumed that half of this cost would be passed on to developers (via an increase in the cost of EIA-related services).

For developers, the cost of preparing an EIA report might increase due to the fact that accredited consultants may be more expensive to hire than using internal resources. However, only a small share of developers currently has dedicated staff working on EIAs and those which have internal staff are usually large companies or public entities. The main impact for developers comes from the possible increase in

³⁸⁵ Nationales Zentrum für Bürokratiekostenabbau (2010), Expert Opinion on the Assessment of Administrative Burdens, Arising in connection with the Proposal of the European Commission for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil (COM(2006)232) from 22 September 2006 (draft Soil Protection Directive), and taking account of the proposed compromise of the Czech Presidency submitted on 5 June 2009.

³⁸⁶ 338 EIAs in 2010 in the UK.

³⁸⁷ The cost per hour in each of the concerned Member States is taken from the EU Standard Cost Model, for Category 1 staff.

the costs of EIA-related services charged by environmental consultants (as mentioned above, it is assumed that half of the accreditation costs would be passed on to developers).

10.13.7. Mandatory assessment of reasonable alternatives

For developers, additional information will have to be provided at the scoping stage and additional alternatives will have to be taken into account when preparing the EIA report and will therefore be subject to consultation. These additional alternatives will include, at least, a ‘no development’ option and a ‘reasonable alternative’ option. In this cost assessment, it is assumed that this amendment would be implemented in conjunction with the ‘mandatory scoping’ option, since the scoping stage would greatly facilitate its implementation.

As mentioned previously, thirteen Member States have already introduced a legal obligation to consider specific alternatives (including the ‘zero-alternative’ in some cases). Although the quality and level of detail of these assessments would need to be improved in some of these countries, the incremental effort induced by a change in the text of the EIA Directive is considered to be minimal for these countries.

For the remaining fourteen Member States, this new requirement will increase the number of man-days required to be spent in the EIA process, especially during the scoping and EIA report preparation phases. The effort required for each of the additional scenarios will be smaller than the effort put in the main scenario, but sufficient information will need to be provided in order to properly inform future decisions. On the other hand, this requirement may reduce the time needed to answer further requests from authorities and issues raised during the public consultation (at present, issues raised often concern possible alternatives not studied in detail by developers). Besides, in the case of projects which are part of larger plans or programmes subject to the SEA Directive, the incremental work would be minimal since reasonable alternatives would have already been assessed in accordance with the SEA Directive’s requirements (Article 5).

Although the assessment of ‘reasonable alternatives’ is already required under the SEA Directive and other EU Directives (e.g. Industrial Emissions, Habitats and Water Framework Directives), no information is available on the impact of this requirement on developers and on public authorities. No impact-related information from the Member States is available either. In the absence of such data, it is not possible to accurately estimate the costs associated with this option. It should also be noted that costs would widely differ from one type of project to another. However, as a very rough estimate, it could be assumed that such a requirement would involve 15-20 % extra work for consultants/developers, on average, at EU level (compared with the average time currently spent in the whole EIA process). This would correspond to **€ 41.9 to 55.8 million per year**. This cost may decrease in the long term, as developers and consultants gain more experience in the methodology for identifying and assessing alternative scenarios.

For public authorities, additional time would be required to validate alternatives at the scoping stage and review their assessment in the EIA report. On the other hand, it may reduce the time needed to deal with issues raised during the public consultation. As a very rough assumption, it could be assumed that, on average, 5 % extra time

would have to be spent in the EIA process, corresponding to **€3.8 to 5.6 million per year at EU level**. In the short term, authorities would also need time to get familiar with the methodology for defining and assessing the alternative scenarios (it is assumed that guidance would be developed by the Commission), leading to higher costs in the first few years of implementation.

10.13.8. Justification of final decisions

For public authorities, the requirement to specify the reasons underlying the final decisions and the conditions attached to it may result in a small increase in the time spent during the last stage of the EIA process. However, this would likely be offset by reduced time needed to justify any decisions that might be challenged by stakeholders at a later stage. Overall, this option is **unlikely to have a significant impact on administrative burden**. This amendment is closely linked with the option concerning mandatory monitoring; administrative burden related to mandatory monitoring itself is discussed below.

10.13.9. Mandatory monitoring

The administrative burden related to this option, for public authorities and for developers, would only affect projects not already subject to monitoring requirements arising from other EU or national legislation (e.g. IED), from EU or national guidance (e.g. guidance on the assessment of projects with impacts on biodiversity) or from voluntary initiatives (e.g. ISO 14001 or EMAS) or carried out as a disguised mitigation measure. No data could be found on the share of EIAs corresponding to IED activities and the share of projects where environmental monitoring is conducted on a voluntary basis or as a mitigation measure. In the absence of such data, it is roughly assumed that a mandatory monitoring requirement would create additional burden in 50 % of projects subject to EIA; this corresponds to a conservative assumption.

Developers would need time to identify the relevant monitoring measures to be proposed in the EIA report (this is considered as negligible compared to the overall time needed to prepare an EIA report) and to conduct monitoring activities in compliance with the requirements of the authorities' final decision.

No quantitative information is currently available concerning the costs of existing post-EIA monitoring activities and the efforts required are likely to vary from one project to another. As assumed in the description of amendments, the types and number of environmental parameters to monitor and the monitoring frequency would be defined by the authorities on a case-by-case basis. The scope of the monitoring is described in Annex 10.

In the absence of data from Member State's experience and given the wide range of monitoring procedures that could be established, only theoretical estimates can be made. In order to obtain an order of magnitude of possible costs, the following assumptions are made: additional monitoring would be required on an annual basis during 3 years following the development of the project, this requirement would apply to 50 % of projects being developed each year (considering that a number of projects are already subject to monitoring) and the time requirements would be 5 to 10 man-days of environmental expert covering the monitoring and evaluation of 1 or

2 key environmental parameters per project per year. Based on these assumptions, the cost of this amendment is estimated at **€22.8 to 45.7 million per year in total for developers**, however it would be incurred by different developers each year, since monitoring would only be conducted during the first 3 years of the project³⁸⁸. For each new project, the cost of this option would amount to 1.100 to 2.200 €/year on average, at EU level. This represents a total of 3.300 to 6.600 € per new project for the 3 year-period, i.e. between 8 % and 16 % of the average cost of an EIA.

Public authorities would need additional time to review the monitoring measures (this is considered as negligible compared to the overall time needed to review the EIA report) and to enforce monitoring requirements (e.g. via random inspections of facilities and evaluation of monitoring results). In the absence of quantitative data based on Member State experience, only a theoretical estimate can be made. For the purposes of this study, it is assumed that authorities would inspect each year 10 % of projects having received a consent in the previous year and would spend 1 to 2 man-days for each inspection, which leads to an **additional cost in the order of €0.46 to 0.92 million per year**³⁸⁹. In addition, authorities will need time to get familiar with the new monitoring requirements (it is assumed that guidance would be developed by the Commission) and this may lead to slightly higher costs in the first few years of implementation.

10.13.10. *Additional environmental issues*

Developers will need to assess a slightly broader scope of impacts, but this will vary depending on the type of project. Projects that are likely to be affected by this new requirement include those with significant impacts on greenhouse gases emissions, on biodiversity, on the marine environment and/or resource use, as well as projects with high vulnerability to a changing climate or to other man-made or natural disasters. Except for the direct impacts on greenhouse gas emissions and the inventory of fauna and flora species (which are already well covered by EIA reports), methodologies for assessing these impacts are not yet very well established, so it may take more time in the first few years of implementation as developers and consultants would need to gain experience.

In order to accurately assess the potential impacts of this amendment, it would be necessary to have an estimate of the proportion of projects likely to have significant impacts on each of the additional issues (climate change, biodiversity, marine environment, use of natural resources) or to be significantly affected by a changing climate or disaster risks. For example, the need to further describe impacts due to indirect greenhouse gas emissions or impacts from a changing climate is likely to concern a majority of projects being developed, while the need to describe impacts on the marine environment would only concern a small number of projects located near or within marine territories. With regard to biodiversity, only certain types of

³⁸⁸ Cost calculated for 2010, covering 25 MS (it is considered that NL and FR already have similar requirements in place). The calculation takes into account the average number of EIAs per Member State and the average cost per hour in each Member State given by the EU Standard Cost Model (staff category 1). It is assumed that the cost of monitoring equipment is included in the hourly rates used in the calculation.

³⁸⁹ The calculation takes into account the average number of EIAs per Member State and the average cost per hour in each Member State given by the EU Standard Cost Model (staff category 1).

projects with significant effects on biodiversity (e.g. large-size projects) or projects located within or near sensitive areas would be concerned by the new requirement, which would involve going beyond the usual fauna and flora species inventory. With regard to the use of natural resources, only projects likely to cause significant pressure on natural resources would be concerned by the new requirement. At EU level there are no available statistics on the number of EIAs performed in relation to each project category as defined in Annexes I and II and by type of location. It is therefore difficult to estimate the impact of this option.

For public authorities, there would also be a slight increase in the time needed during the scoping phase and during the review of the EIA report, depending on the type of project as explained above. Time will also be needed to develop specific guidelines for assessing these additional types of impacts. For the same reasons as mentioned above, more time may be needed in the first few years of implementation.

The cost of this amendment for public authorities depends not only on the number of competent authorities involved in the EIA process in the EU but also on the number of authorities involved in processes related to the issues that will be integrated or added to the EIA. To give an illustration of the possible magnitude of costs, an impact assessment of policy options for the draft Soil Framework Directive states that an amendment of the EIA Act in Germany to incorporate soil aspects into Annex 2 of the EIA Act would cost € 27 million annually to the public sector³⁹⁰. The cost of this amendment for Germany is mainly driven by the fact that 3.000 local authorities or administrative entities are involved due to delegation of tasks in the areas set forth in Article 3 of the draft Soil Directive Framework. However, due to the specificities of each Member State, it is difficult to extrapolate these German data to the EU in the case of our amendment. The impacts would need to be examined on a case-by-case basis.

The overall additional costs of this option, at EU level, are **likely to be moderate to high for public authorities and developers**. However, most projects will require further assessment only in relation to one or two additional environmental issues (i.e. only the ones corresponding to significant effects) and very few projects will be concerned by all the additional environmental issues proposed in this option. Moreover, in the case of climate change and disaster risks to projects, it has already been demonstrated that the avoided damage costs to population, materials assets, the economy and the environment largely outweigh the costs of adequately assessing and preventing such risks (this is further discussed in the section on wider socio-economic impacts).

³⁹⁰ Nationales Zentrum für Bürokratiekostenabbau (2010), Expert Opinion on the Assessment of Administrative Burdens, Arising in connection with the Proposal of the European Commission for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil (COM(2006)232) from 22 September 2006 (draft Soil Protection Directive), and taking account of the proposed compromise of the Czech Presidency submitted on 5 June 2009. Additional environmental aspects to be taken into account include: erosion by water, erosion by wind, organic matter decline, compaction, salinisation, risk of mudslides and acidification.

10.13.11. *Amendments related to time-frames*

Both options related to time-frames (specific time-frame for public consultation and maximum time-frames for decision-making on screening and EIA decision) will influence the duration of the EIA procedure but **will not have a direct impact on administrative burden**. However, there are significant positive wider socio-economic impacts for developers, as explained in Section 6.3 and Annex 14.

10.13.12. *Better coordination/integration with other legislation (EIA one-stop shop)*

Case studies show that better coordination of different types of assessment can result in economic benefits; they also show that it requires further integration in local planning procedures. Examples of integrated/joint procedures assessment procedures can be found at least in Austria and France.

In Austria, regional agencies are responsible for an integrated assessment and permitting procedure in each of the nine regions. These provisional authorities correspond to the regional tier of a system including also a national and a regional tier. In this integrated procedure, the EIA has been combined with the IED, the Habitats Directive, the national legislation on water, air and waste licensing, etc. However, EIAs for federal roads and railways are not part of this consolidated process but dealt with by the Ministry of Transport. Also, SEAs are not part of this consolidated process as SEAs are seen to be part of the responsibility of planning authorities, not permitting authorities. In this integrated approach, the developer only needs to fill in one application for all permits with the possibility of assistance from the provisional authority, even in the form of meetings. According to the Austrian authorities³⁹¹, such an one-stop shop approach, which is required by law, has reduced the administrative burden for developers compared to an approach where the permitting responsibilities were allocated to several separate agencies. It is estimated that the increase in administrative costs for the provisional authorities are still less than if this burden would have been divided between several of permitting authorities. There is currently no hard evidence regarding this, however, the Court of Accounting is scheduled to provide more detailed information on the one-stop shop approach in Austria in a report to be published by mid 2012.

For public authorities, in the long term this option will avoid duplication of efforts at the various stages of the EIA process and is therefore expected to reduce administrative burden. More time may need to be spent at the EIA scoping stage in order to identify all areas where synergies can be found with other applicable legislation in terms of information collection and analysis, but the other steps of the EIA process could be shortened. It may also be necessary for the authorities to spend extra time checking the relevance and validity of previous information submitted by the developer to comply with other legislation, in order to decide whether or not it can be 're-used' as part of the EIA process. However, this option could require a reorganisation of the administration in some Member States and, in the short term, such reorganisation may be particularly costly in the more decentralised Member States.

³⁹¹ Interview with Waltraud Petek, Austrian Ministry of the Environment, October 2011.

For developers, this option is expected to reduce environmental assessment costs in general, including EIA-related costs, as a single environmental assessment report would be prepared in order to comply with the EIA Directive's requirements and with other environmental assessment requirements, thus avoiding a duplication of efforts. Cost savings will be particularly significant in Member States where such coordination procedures are not yet in place and for certain types of projects, e.g.:

- Projects related to industrial activities also subject to the IED.
- Projects with significant impacts on biodiversity (e.g. infrastructure projects³⁹²; quarries and mines; projects related to agriculture, silviculture and aquaculture; tourism and leisure projects).

In order to assess the potential cost savings for public authorities and developers, it would be necessary to have an estimate of the percentage of projects for which there are overlapping information requirements between the EIA Directive and other EU legislation, such as in particular the SEA Directive, the IED, the Habitats Directive and the Birds Directive. In the absence of such data, it is **difficult to quantify the economic impacts** of this option.

10.13.13. Summary of direct administrative costs

Impacts in terms of administrative burden for each of the amendments are summarised below, on the basis of the qualitative description and the rough quantitative estimates presented in this chapter. Impacts are expressed as direct savings or incremental costs per year with regard to the baseline scenario (i.e. no policy change option). The levels of costs and benefits (zero, negligible, limited, moderate, high, very high) correspond to the estimated order of magnitude of costs or savings with regard to the costs for conducting EIAs in the baseline scenario, i.e. **146 to 215 million € year for public authorities** and **558 to 846 million €/year for developers** in 2010 (see Section 3.4). The assessment presented below in Table 27 should also be considered in the light of wider socio-economic costs and benefits (which are discussed in Section 6.3).

Amendments	Net impact for public authorities	Net impact for developers
Adaptation of Annexes I and II	High to very high costs	High to very high costs
Alternative procedure for Annex II projects	Limited savings	Limited savings
Modification of Annex III criteria	/	/
Justification of negative screening decisions	/	/
Mandatory scoping	/	/
Quality control of the EIA information	/	/
Mandatory assessment of reasonable alternatives	Limited costs	Moderate costs
Justification of final decisions	/	/
Mandatory post-EIA monitoring	/	Moderate costs
Additional environmental issues (climate change, disaster risks, biodiversity, marine environment, resource use)	Moderate to high costs	Moderate to high costs

³⁹² According to GHK study (2010), in new Member States most projects are infrastructure related projects (up to 80 % in Greece, whereas in old Member States this is not always the case (only 20 % in France).

Specific time-frame for public consultation	/	/
Maximum time-frames for decision-making	/	/
Coordinated or integrated/joint procedure (EIA 'one-stop shop' procedure)	Moderate savings	Moderate savings

/ : Zero or negligible costs/savings, i.e. +/- 0-1 % with regard to baseline scenario

Limited costs/savings: +/- 1-5 % with regard to baseline scenario

Moderate costs/savings: +/- 5-10 % with regard to baseline scenario

High costs/savings: +/- 10-25 % with regard to baseline scenario

Very high costs/savings: > +/- 25 % with regard to baseline scenario

10.14. Annex 14: Detailed description of the wider socio-economic costs

Some of the wider socio-economic impacts are very similar for all amendments; hence they are described in a first section (impacts on the functioning of the internal market and competition; impacts on competitiveness and trade; impacts due to better integration of environmental aspects; and impacts on public health and safety). Other types of impacts, which may differ significantly from one amendment to the other, are described separately in the remainder of this chapter. The wider socio-economic impacts described in this section correspond to indirect, long-term impacts of the amendments. Other social impacts were considered (e.g. on poverty or distribution of incomes), but no significant impacts are expected.

10.14.1. Impacts common to most of the amendments

10.14.1.1. Functioning of the internal market and competition

A level playing field has to be ensured in order for fair competition to take place within the EU. There is an uneven playing field when there are barriers to competition, which negatively affects the functioning of the internal market and reduces its efficiency.

- Increased harmonisation

All the policy options analysed in this impact assessment, except the ‘do-nothing’ option, tend to set higher minimum standards for different stages of EIA process and thus contribute to harmonising practices between Member States having already implemented the option in question and those which have kept the minimum requirements of the current EIA Directive. For example, this is the case of mandatory scoping, which has already been implemented in most of the new Member States but not in all the older ones.

In general terms, increasing harmonisation between Member States contributes to improving the functioning and efficiency of the internal market, as developers benefit from a more level playing field and less distorted market conditions. For example, the differences in the overall duration of EIAs across the Member States can provide an indication of the discrepancies in terms of the EIA procedures, the level of requirements imposed by national authorities to developers and the ability of developers to submit receivable EIA reports: as shown by GHK study³⁹³, the average duration of the EIA process is approximately 11 months, ranging from as low as 5 months (Slovenia, Estonia) to as high as 27 months (Spain), with a standard deviation of more than 6 months.

The competitive edge will differ between Member States, depending on the specific changes that will be made. Those Member States that have already put these provisions in place voluntarily would benefit from these more than those Member States that have not.

³⁹³ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

The result that most amendments contribute to improving harmonisation, with varying degrees (amendments of time-frames only marginally affect market conditions, whereas mandatory scoping and mandatory assessment of reasonable alternatives, for example, have a more significant impact), is however conditional on the assumption made in the baseline scenario that national environmental legislations remain as they are today (i.e. no additional measures taken to go beyond the current Directive). This is a necessary but strong assumption, as acknowledged in the description of the baseline scenario. Indeed, one can reasonably assume that Member States will continue to strengthen their environmental legislations including with regard to EIA. For example, several Member States are currently reviewing their EIA legislation, but it is difficult to know what future provisions may look like at present. As a result, the degree to which harmonisation and market conditions will be improved as a result of the introduction of the different amendments is difficult to assess and clear-cut conclusions should be avoided.

- Transboundary projects

Increased harmonisation is especially relevant for projects with significant transboundary impacts, as developers and authorities of different Member States are required by the EIA Directive to exchange information and comply with (some of) their respective – and often differing – requirements.

Developers involved in transboundary projects would be the first to benefit from a harmonisation of practices within the EU in relation to EIAs. The gap between national projects and transboundary ones, in terms of administrative and wider economic costs, would be reduced.

10.14.1.2. Competitiveness, trade and investment flows

EU initiatives have an impact on competitiveness when they affect at least one of the following: (a) Cost/price competitiveness (capacity to produce products at a lower cost and/or offer them at a more competitive price); the cost of enterprise operations includes the cost of inputs (including resources and energy) and factors of production, which may be affected by the proposal. (b) Innovative competitiveness (the quality or the originality of a sector's supply of goods or services). (c) Effective market competition and undistorted access to external markets including those of inputs and materials, of public procurement, etc. (d) The sector's market shares on the international markets. The present revision is not relevant for all the above aspects of competitiveness; it refers mostly to effective market competition and – to some extent – to innovative competitiveness.

Most of the policy options and amendments would result in improved clarity in the legal requirements of the EIA Directive and less margin for interpretation. Most of the options would therefore contribute to reducing uncertainties and delays for developers, as well as avoiding lost business opportunities and any costs related to delays. As mentioned in the baseline scenario, delays caused by lengthy EIA processes are one of the main issues raised by developers³⁹⁴. A more certain

³⁹⁴ During the public consultation on the review of the EIA Directive, about 22 % of respondents (all categories) found that the EIA 'always' causes considerable delays in the approval of projects and about 25 % found that it 'sometimes' causes considerable delays.

regulatory environment and clear time-frames for certain steps of the EIA process are beneficial to attract private investment; intra-EU investment could be favoured, as developers from one Member States would be less reluctant to carry out projects in other Member States, as well as extra-EU investments.

These benefits would be particularly significant for the following options: alternative procedure for Annexes II projects; revision of Annex III criteria; justification of negative screening decisions; specified time-frames for public participation; and maximum time-frames for final decisions on the screening and EIA decisions.

Administrative costs associated with possible changes to the EIA Directive are unlikely to affect the competitiveness of EU developers. In the present situation, EIA costs only represent between 0.01 % to 2.37 % of the total costs of projects (1 % on average), i.e. a relatively modest part of total development costs³⁹⁵. Most of the amendments considered have no or limited administrative costs for developers or provide savings in comparison to the baseline scenario. Concerning the more costly amendments for developers (alternatives, monitoring and additional environmental issues), the incremental costs are not expected to exceed 25 % of baseline costs.

10.14.1.3. Avoided risk of environmental damages and cost savings through better integration of environmental aspects

Most of the options analysed are expected to bring various types of environmental benefits, as described in Section 6.1. These environmental benefits also lead to a number of socio-economic benefits, in terms of avoided risk of environmental damages and cost savings through better integration of environmental aspects. These benefits would be particularly significant for the following options: adaptation of Annexes I and II; revision of Annex III criteria; additional environmental issues to be included in EIAs; assessment of reasonable alternatives; and mandatory monitoring.

More specifically in the case of climate change and disaster risks to projects, it has been demonstrated that the avoided damage costs to population, materials assets, the economy and the environment largely outweigh the costs of adequately assessing and preventing such risks. As an illustration, draft estimates for inland flooding from the ClimateCost project³⁹⁶ suggest the following:

- EU costs of inaction: 20 billion per year by 2020 and 46 billion by 2050
- EU costs of adaptation: 2.4 billion per year by 2020 and 5.7 billion per year by 2050
- EU avoided costs (benefits): 8 billion per year by 2020 and 20 billion per year by 2050.

³⁹⁵ GHK (2010), Collection of information and data to support the IA study of the review of the EIA Directive.

³⁹⁶ <http://www.climatecost.cc/>

The European Environmental Agency (EEA) also reports € 414 billion of overall economic losses and 108.000 fatalities due to natural hazards between 1980 and 2009³⁹⁷.

10.14.1.4. Public health and safety and quality of life

For most of the options, positive impacts are expected in terms of public health and safety and quality of life, for similar reasons as those mentioned in the assessment of environmental impacts (see Section 4.1). These benefits would be particularly significant for the following options: modification of content to Annexes I and II; revision of Annex III criteria; additional environmental issues to be included in EIAs; assessment of reasonable alternatives; and mandatory monitoring. The avoided adverse impacts on public health, safety and quality of life are potentially significant for infrastructure projects, especially in the transport sector, which generate important amounts of local air pollutants and are a source of other negative externalities (noise, congestion, etc.).

10.14.2. Other impacts specific to each amendment

10.14.2.1. Adaptation of Annexes I and II

- Costs related to legal disputes

As already mentioned in this report, screening is the most common cause for legal disputes. Reducing the number of Annex II projects by moving them to Annex I would reduce the amount of legal disputes as the amount of projects requiring screening would be reduced. For the introduction of any new project categories the impact could be more diverse, with some Member States being able to be more familiar with these than others. It also depends on whether these new project categories would be introduced as Annex I and/or Annex II projects.

10.14.2.2. Alternative procedure for Annex II projects

No significant wider socio-economic impacts, other than those common to all options, are expected.

10.14.2.3. Modification to Annex III criteria

- Costs related to legal disputes

Revising the screening criteria of Annex III would reduce the amount of legal disputes as more certainty would be provided.

10.14.2.4. Justification of negative screening decisions

- Costs related to legal disputes

³⁹⁷ Presentation by EEA at the Conference on prevention and insurance of natural catastrophes, October 2011, Brussels, (http://ec.europa.eu/internal_market/insurance/docs/natural-catastrophes/conference-20111018/jol_en.pdf)

As a result of greater transparency, the proposed change would help reduce the risk of legal challenge and the associated financial and time costs for public authorities, developers and third parties.

- Indirect savings for developers

In the impact assessment carried out in England for the introduction of a similar amendment, it is considered that it will bring ‘greater transparency of circumstances in which an EIA is not required for developers to gain a better understanding of EIAs’. A reduction in average EIA costs for developers might be anticipated in the long-term, due to a reduction in time spent in queries and information requests, and a better understanding of the EIA requirements.

- Governance, participation, good administration and access to justice

This policy option would have a strong positive effect on governance and participation, by providing greater transparency in the decision-making process.

10.14.2.5. Mandatory scoping

- Costs related to legal disputes

The introduction of mandatory scoping would contribute to reducing the number of legal disputes, as there would be more clarity and transparency about the information that is requested and the methodologies to be employed, with a written record of it. It would be more difficult for developers or third parties to complain about the requirements imposed by public authorities at a later stage in the process.

- Costs related to delays

Mandatory scoping is likely to reduce the overall duration of EIA processes, by avoiding additional requests for missing information that are frequently made by the authorities when the EIA report is incomplete. The positive and significant role of mandatory scoping on reducing the duration of EIA processes is also highlighted in a recent study on EU permitting procedures carried out for DG ENER³⁹⁸.

By reducing the overall duration of EIA processes, mandatory scoping may also contribute to reducing unexpected delays. In the case of transboundary projects, where significant delays can be observed due to differences in the procedural requirements from one Member State to another, a mandatory scoping process may have a positive impact by reducing such delays and possible associated costs. When all the scoping procedures are harmonised and are mandatory, the synchronisation of possible procedural steps can be considered a benefit³⁹⁹. This becomes clear by looking at Article 7(3) of the EIA Directive, which requires that information should be made available to the authorities directly involved in the EIA procedure in the neighbouring Member State in order to give this authority the opportunity to express

³⁹⁸ Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations.

³⁹⁹ Jerzy Jendrośka, Quality of the EIA process: issues of concern and ways for improvement, Presentation for the Conference for the 25th Anniversary of the EIA Directive, Leuven, 18-19 November 2010.

its opinion on the information supplied by the developer. However, a reduction in delays would also require that scoping is performed in a harmonised way between the Member States (e.g. based on improved guidance documents) and scoping time-frames are also harmonised.

- Governance, participation, good administration and access to justice

Scoping allows a more efficient and effective EIA process by providing adequate information to developers in a timely way, thereby reducing potential delays and costs in future stages of the process. In this sense, it can be said that mandatory scoping favours good administration and transparency in the decision process.

10.14.2.6. Use of accredited consultants or mechanism for quality control

- Indirect impacts from accreditation

Certain small environmental consultancies may not be able to fulfil the accreditation criteria (e.g. in terms of technical capabilities, years of experience, EIA track record). Hence, this requirement may generate a loss of revenues for these small consultancies. For those consultancies having obtained the accreditation, the requirement could lead to an increase in revenues as there would be less competition due to a smaller number of actors present on the market.

- Costs related to legal disputes

This option can potentially reduce the number of disputes that arise due to third party complaints over poor quality of EIA reports. Such conflicts may lead to legal proceedings, hence a reduced number of disputes would translate into reduced legal proceeding costs both for developers and authorities.

- Costs related to delays

The use of accredited consultants to prepare EIA reports may contribute to reducing the overall duration of EIA processes, by avoiding poor quality reports that are rejected by public authorities and have to be revised one or several times by developers.

In the case of EIA reports prepared by developers and verified by accredited consultants before their submission to the authorities, an additional step would be introduced in the EIA procedure, with a risk of additional delays. Such delays might occur due to the late identification of gaps in the EIA report during the verification process, which could lead to extra costs for developers having prepared EIA reports of insufficient quality.

In the case of national ‘quality control committees’, their involvement may introduce an additional step in the EIA procedure, with a risk of additional delays. However, as this measure would also provide greater impartiality and transparency to the decision-making process, this risk of delays would be offset by a reduced occurrence of conflicts between public authorities, developers and/or other stakeholders.

- Employment and labour markets

Additional jobs may be created within environmental consultancies, as more developers subcontract the preparation of their EIA reports. This would mainly affect the larger consultancy companies, while some jobs may be lost in some of the smaller ones that are not able to meet the criteria for accreditation.

- Governance, participation, good administration and access to justice

As mentioned above, the creation of national ‘quality control committees’ would provide greater impartiality and transparency to the decision-making process. Indeed, in most Member States where such committees have been put in place, their conclusions concerning the quality of EIA reports are publicly available.

10.14.2.7. Mandatory assessment of reasonable alternatives

- Costs related to delays

The mandatory assessment of reasonable alternatives may contribute to reducing the overall duration of EIA processes, by avoiding poor quality reports that are rejected by public authorities and have to be revised one or several times by developers. When an EIA report needs to be revised by the developer to address comments made by the authorities or the public, the revision step can represent up to one third of the total EIA cost for the developer (and approximately 17 % of the total costs, on average). This step of the process, which represents a significant share of the total EIA cost for developers, could probably be avoided or reduced if the issue of alternatives was adequately addressed. This would be beneficial in particular for SMEs, which are more vulnerable due to their limited financial capacity.

- Costs related to legal disputes

The identification of additional alternatives to be studied might lead to more conflicting views and more disputes at an early stage of the EIA process and during the public consultation. However, given the opportunity for third parties and public authorities to influence in a more significant way the selection of options for the project, this new provision may lead to fewer proceedings from third parties against the final decisions made by public authorities. Overall, both effects would probably compensate each other.

- Employment and labour market

The introduction of this option would increase the workload of the experts carrying out EIAs, whether external consultants or developers’ internal staff dedicated to EIAs, and workload of competent authorities. In Section 6.2, it was roughly assumed that this new requirement would generate 15-20 % extra EIA-related work for consultants/developers and 5-10 % extra EIA-related work for authorities, on average, at EU level. This might lead to new jobs being created mainly within consultancies and developers, although the impact on employment would probably remain limited.

10.14.2.8. Justification of final decisions

- Costs related to legal disputes

A better argued decision may prevent legal disputes from occurring related to the step in the EIA process described in Article 8. Besides, criteria that would be included in Article 8 would help developers anticipate the breadth of the information that they would be required to provide. This amendment would also improve the transparency regarding the environmental criteria on which the decision regarding development consent is based upon, therefore reducing the risk of confusion and misinterpretation that often leads to legal disputes. Costs associated with legal disputes would be reduced, for developers, public authorities and third parties.

- Governance, participation, good administration and access to justice

Reinforcing Article 8 would favour good administration as the regulatory process would become more transparent, effective and predictable. By specifying, in accordance with the objectives of the Directive, the criteria on which the decision has to be based, this amendment also brings some more coherence between the objectives set forth in the Directive and the actual environmental outcomes of the projects for which development consent has been granted.

10.14.2.9. Mandatory post-EIA monitoring

- Costs related to legal disputes

Monitoring should enable an earlier identification of issues (e.g. environmental releases exceeding estimates presented in the EIA report), thereby decreasing the likelihood for legal disputes concerning discrepancies between predicted and actual impacts of projects.

Conflicts may arise between developers and authorities concerning the interpretation of monitoring results by the authorities and the possible mitigation actions imposed. However, such conflicts would probably occur anyway in cases where the EIA report would have underestimated the project's impacts; in the absence of mandatory monitoring, such conflicts would just occur at a later stage, once environmental damage is noticeable.

- Employment and labour markets

The introduction of mandatory monitoring would lead to an increase in the overall workload of environmental consultants (monitoring experts) and public authorities. In Section 6.2, it was roughly assumed that additional monitoring would be required on an annual basis during 3 years following the development of the project, this requirement would apply to 50 % of projects being developed each year and the time requirements would be 5 to 10 man-days of environmental expert per project per year; this represents approximately 187.500 to 650.000 man-days of environmental experts per year in total across the EU. This may lead to an increase in jobs in the field of environmental monitoring (water/air monitoring, noise surveying, ecological surveying, etc.).

For public authorities, it was roughly assumed that additional monitoring would require 1 to 2 man-days per project and would cover 10 % of projects receiving consent each year; this represents 1.500 to 5.200 man-days per year in total across the EU, which may also require new jobs to be created.

- Governance, participation, good administration and access to justice

Mandatory post-EIA monitoring would increase transparency, legitimacy and effectiveness of the EIA process, thereby improving environmental governance. In particular, documented evidence would be available concerning the actual environmental impacts of projects and the public would have the right to request information on the monitoring results and on possible subsequent measures imposed by the authorities. Overall, this would increase the credibility of the EIA process.

10.14.2.10. Additional environmental issues

- Employment and labour markets

The additional workload resulting from this option may lead to job creations within environmental consulting companies as there will be an increased need for experts in climate change, disaster risks, biodiversity, marine environment and natural resources. However, there is insufficient data to estimate the magnitude of possible impacts on employment.

10.14.2.11. Specific time-frame for public consultation

- Costs related to delays

Approximately 15 % of Member States allow more than two months for the public consultation to take place. In the case of France, for example, this process may last up to four months. While sufficient time has to be allowed for the public consultation to take place effectively, especially for sensitive projects such as major transport or infrastructure projects, too many delays and lengthy processes increase opportunity costs for developers. Setting minimum and maximum durations for public consultation would therefore increase visibility for developers on the length of the overall EIA procedure, incentivise developers and authorities to plan ahead and optimise the process and limit the number of avoidable delays.

Overall, such an amendment would reduce the costs related to delays, but as public participation for most projects is completed within the envisaged maximum length of two months⁴⁰⁰, these avoided costs are likely to remain moderate. It would also make investments happen by providing a stable legal framework, making it possible for investors to plan their investments.

- Governance, participation, good administration and access to justice

Setting clear time-frames for public participation increases the transparency of the overall EIA process and improves the visibility of developers. In this sense, this option will improve governance and foster good administration.

⁴⁰⁰ Based on the sample of 15 Member States for which data is available on the length of the public participation process (GHK, 2010): in approximately 30 % of countries the duration of the public participation process is below 1 month, while only approximately 15 % report an average duration exceeding two months.

In addition, setting a minimum length for the public participation process ensures an appropriate consultation of the public, allowing sufficient time for opinions and suggestions to be made and incorporated early enough in the process.

10.14.2.12. Maximum time-frames for decision-making (screening-EIA decision)

- Competitiveness, trade and investment flows

As general rule, the lengthier the EIA process, the higher the opportunity costs incurred by developers. Ensuring that screening and the final decision phase do not exceed respectively 1.5 month and 2 months on average would, everything being held equal, reduce by around 0.5 month the time required to complete all the steps of the EIA process. This modest reduction (equivalent to -5 % approximately) would not translate into significant direct competitiveness gains for developers but nevertheless constitutes a step in the right direction.

Generally speaking, setting maximum time-frames improves overall visibility over the EIA process and helps developers better forecast the whole duration of the project lifecycle, reducing the likelihood of unforeseen delays. This contributes to improving the overall economic environment for developers and constitutes a positive sign for investment.

- Costs related to delays

Expected benefits are similar to those described for the previous option analysed ('Clear time-frame for the public consultation process'). The positive and significant role of legally defined target durations on reducing the duration EIA processes and reducing possible delays is also highlighted in a recent study on EU permitting procedures carried out for DG ENER⁴⁰¹.

- Governance, participation, good administration and access to justice

Impacts on governance and good administration are similar to those of the previous option analysed ('Clear time-frame for the public consultation process').

10.14.2.13. Coordination and integration with other legislation (EIA 'one-stop shop')

- Governance, participation, good administration and access to justice

Based on the experience from the Austrian approach, it seems that the coordinated or integrated procedures for the EIA process and other environmental assessments enable an easier access to documents, as information of different permitting procedures is compiled under one Agency.

- Costs related to delays

The length of the EIA process in Austria, where a joint procedure for the EIA process and other environmental assessments is in place, ranges from 9 to 15 months

⁴⁰¹ Roland Berger Strategy Consultants (2011), Permitting procedures for energy infrastructure projects in the EU: evaluation and legal recommendations.

and hence corresponds to the average length of an EIA. However, within the same time period all the other permitting requirements will also be addressed and hence it is likely that this coordinated approach will reduce the costs of delays, not necessarily from the EIA itself, but also from those arising from other permits.

10.14.3. Summary of wider socio-economic impacts

Based on the qualitative description of wider socio-economic impacts associated with each amendment, a comparative overview of these impacts is presented in the Table 28. For each group of amendments, the analysis demonstrated that the vast majority of such impacts are either positive or neutral for the main stakeholders (authorities, developers, consultants), with a few exceptions that did not appear to be significant. The levels of benefits (limited, moderate, high) are based on the qualitative assessment contained in this chapter.

Table 28: Summary of wider socio-economic benefits

Possible amendments	Wider economic benefits					Wider social benefits		
	Internal market	Competitiveness	Avoided damages and wastage, risk prevention	Decrease in costs on legal disputes	Decrease in costs on delays	Governance	Health, safety, quality of life	Jobs creation
	EU economic actors		Developers and society	Public authorities Developers society	Developers	Civil society	Society at large	
Adaptation of Annexes I and II	Moderate	Limited	Limited to high	Moderate	/	/	Moderate to high	/
Alternative procedure for Annex II projects	Moderate	Moderate	/	/	/	/	/	/
Modification of Annex III	Moderate	Moderate	High	Moderate	/	/	High	/
Justification of negative screening decisions	Moderate	Limited	Limited	Limited	/	High	Limited	/
Mandatory scoping	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	/
Mechanism for quality control	Moderate	Limited	Moderate	Moderate	Limited	Moderate	Moderate	Limited
Mandatory assessment of reasonable alternatives	Moderate	Limited	High	Moderate	/	Limited	High	Limited
Justification of final decisions	Moderate	Limited	Limited	Moderate	/	High	Moderate	/
Mandatory post-EIA monitoring	Moderate	Limited	High	Moderate	/	/	High	Limited
Additional environmental issues	Moderate	Limited	High	/	/	/	High	Limited
Specific time-frame for public consultation	Moderate	Moderate	Limited	Moderate	Moderate	Moderate	Limited	/
Maximum time-frames for decision-making	Moderate	Moderate	/	/	High	Moderate	/	/
Coordinated or integrated/joint procedure (EIA 'one-stop shop')	Moderate	Moderate	Limited	/	High	Limited	Limited	/

/: zero or negligible impact

10.15. Annex 15: Specific monitoring parameters

Amendments	Examples of relevant parameters to be monitored (in each Member State)
Adaptation of Annexes I and II	Average duration of the screening process Average number of man-days required by authorities to conduct screening Average cost of an EIA for developers
Alternative procedure for Annex II projects	Number of alternative procedures/year Average duration of the screening process Average number of man-days required by authorities to conduct screening Average cost of an EIA for developers Breakdown of EIAs undertaken by type of developer
Modification of Annex III criteria	Average duration of the screening process Average number of man-days required by authorities to conduct screening
Justification of negative screening decisions	Average duration of the screening process Average number of man-days required by authorities to conduct screening Nature of justifications given (could be analysed for a sample of EIAs)
Mandatory scoping	Qualitative judgment from competent authorities on the level of quality of EIA reports (e.g. on a 5-level scale), covering the quality and relevance of data used and the quality of the data analysis
Quality control of the EIA information	Number of accredited consultants Average accreditation costs for consultants Average cost of an EIA for developers
Mandatory assessment of reasonable alternatives	Qualitative judgment from competent authorities on the quality of the assessment of reasonable alternatives (e.g. on a 5-level scale) % EIAs where the assessment of reasonable alternatives has resulted in substantial changes to the initial project in order to obtain a development consent (could be analysed for a sample of EIAs) Average cost of an EIA for developers
Justification of final decisions	Nature of justifications for negative final decisions (could be analysed for a sample of EIAs) Nature of conditions attached to final decisions (could be analysed for a sample of EIAs)
Mandatory post-EIA monitoring	Types of environmental parameters monitored Average cost of monitoring for developers % projects inspected each year by the authorities Number and types of actions required by the authorities following the inspection activities
Additional environmental issues	Qualitative judgment from competent authorities on the coverage of these additional issues (e.g. on a 5-level scale) Average cost of an EIA for developers
Specific time-frame for public consultation	% EIAs where the public consultation has resulted in substantial changes to the initial project in order to obtain a development consent (could be analysed for a sample of EIAs)
Maximum time-frames for decision-making	Average man-days required by the authorities to carry out each step of the EIA process
Coordinated or integrated/joint procedure (EIA 'one stop shop' procedure)	Level of integration of environmental assessment processes Average duration of each step of the EIA process Average number of man-days required by authorities to conduct each step of the EIA process Average cost of an EIA for developers

10.16. Annex 16: Changes introduced to address comments of the IAB

Opinion of the Impact Assessment Board of 19 March 2012	Changes made
<i>(1) Strengthen the problem definition and improve the baseline scenario</i>	
<p>The report should present a more comprehensive overview of the application of the current EIA directive indicating the magnitude of the practical application difficulties and illustrating problems observed in the Member States. It should then give a much more explicit definition and description of the concrete problems and shortcomings to be addressed and should demonstrate in a clearer way their relevance and magnitude, their underlying drivers and why there is a need to act now. This should include the presentation of a detailed problem tree and an explanation of differences in the application by Member States (e.g. concerning the screening exercise, number of EIAs).</p>	<p>Chapter 3 has been appropriately revised. Firstly, it now provides a description of the main features of the EIA Directive and an overview of its application across the EU (including information on key parameters, e.g. number of EIAs, duration, administrative costs). Secondly, it presents the strengths and weaknesses of the EIA (including environmental and wider socio-economic benefits). The analysis closely refers to the application of the EIA in the Member States, when data are available. Thirdly, it describes the specific problems encountered when applying the EIA and their drivers, with appropriate information and relevant examples (from the public consultation, studies and literature) demonstrating the relevance and magnitude of the problems. The problem tree has been revised and moved into the main text from the Annexes.</p>
<p>The report should present a detailed overview of the gaps in implementation and of infringements relevant to the application of the directive.</p>	<p>Sections 3.2 and 3.3 refer to the implementation experience (i.e. main implementation gaps on the basis of the infringements/complaints)</p>
<p>The report should strengthen the baseline scenario by clearly outlining the weaknesses of the existing directive and by showing how the situation would evolve if no further EU action is taken. It should then present this strengthened baseline as a real reference for the comparison of the options.</p>	<p>Section 3.4 has been thoroughly revised. It now focuses on the evolution of impacts if no EU action is taken and presents a realistic reference for the comparison of the different options examined.</p>
<p>The report should clarify potential overlaps with other (environmental) legislation.</p>	<p>This is one of the specific problems described now with more detail (section 3.3).</p>
<i>(2) Establish a clear intervention logic and objectives</i>	
<p>The report should strengthen the intervention logic by clearly connecting the problems/problem drivers and the objectives, and by linking the latter directly to corresponding policy options to substantiate the proportionality of the measures.</p>	<p>The problem tree has been revised and moved into the main text. The drivers/problems, objectives, amendments and policy options are clearly linked (see chapters 4 and 5).</p>
<p>The report should specify in more detail if and in which way the initiative is related to other policy initiatives.</p>	<p>Section 4.3 refers to the links with other policy initiatives (Europe 2020, Resource Efficient Europe, energy policy, cohesion policy).</p>
<p>The objectives should be presented in a more explicit and ‘SMART’ way by breaking them down into general, specific and operational objectives, to allow the options to be compared in terms of effectiveness and efficiency.</p>	<p>Although the EIA is essentially a process driven Directive, which does not set specific and measurable environmental standards, operational objectives have been defined and made explicit. Furthermore, the general and specific objectives have been reformulated.</p>
<i>(3) Better present the content of the options</i>	
<p>The report should improve the presentation of the options by including a more detailed description of the content of the feasible options, with a clearer differentiation between options 1 and 2 and sub-options 2a-2c, by avoiding a bias towards the preferred option.</p>	<p>Chapter 5 has been restructured with a view to describing in detail the content of the feasible policy options (0+, 1, 2a, 2b and 2c). In this regard, additional tables have also been included.</p>
<p>The justification for discarding certain options should be provided up-front in a separate sub-section (with a more detailed analysis in an annex).</p>	<p>The justification for discarding certain options is summarised in the main text, while a more detailed analysis of has moved to Annex 6.</p>
<i>(4) Better assess and compare impacts</i>	

<p>The report should considerably reinforce the analysis of impacts and should include clear explanations if certain impacts cannot be analysed, e.g. due to a lack of data. If impacts cannot be quantified then the report should at least include some information on the general magnitude of the expected impacts for the different options on the basis of reasonable assumptions. To accomplish this, the report should move relevant information from the annexes 12-14 to the main text. The report should assess more thoroughly the impacts on business, particularly SMEs and on sector competitiveness, as well as wider socio-economic impacts.</p>	<p>The analysis of the environmental and wider socio-economic impacts was reinforced. In particular, relevant information was moved from the annexes into the main text (mainly the assessment of impacts from the various amendments). When no data was available, this was highlighted.</p> <p>This has allowed providing a more robust and clearer assessment of the magnitude of environmental and wider socio-economic impacts (sections 6.1 and 6.3). The report (in chapters 3 and 6) contains specific and detailed analysis on the impacts of the options on competitiveness and business/SMEs.</p>
<p>The report should describe the major impacts in terms of administrative burden in a more proportionate manner, by analysing the different (sub-) options on an equal basis, avoiding a bias towards the preferred option, and by including the underlying methodology and assumptions.</p>	<p>The basic assumptions and methodologies used are explained, with emphasis on those regarding direct administrative costs.</p> <p>The administrative costs are first analysed per specific amendment and then per policy option. The analysis is proportionate and more attention is given to amendments likely to have high costs.</p>
<p>The report should also provide a more differentiated assessment of the impacts by Member States.</p>	<p>This has been done when data and information are available; however, due to lack of data it was not possible to provide a differentiated assessment per region.</p>
<p>The report should compare the options explicitly against the baseline scenario in terms of effectiveness, efficiency and coherence.</p>	<p>This has been done in chapter 7 (see table 16).</p>
<p><i>(5) Clarify the future monitoring and evaluation arrangements.</i></p>	
<p>The report should provide more developed monitoring and evaluation arrangements, including a set of robust progress indicators that are clearly linked to the preferred option and operational objectives.</p>	<p>Chapter 8 was amended in order to:</p> <ul style="list-style-type: none"> - include additional monitoring parameters (which are linked to the operational objectives and the amendments of the preferred option). - detail the evaluation arrangements that will be put in place.
<p><i>(6) Procedure and presentation</i></p>	
<p>The report should aim to achieve a better balance in the distribution of relevant information between the different annexes and the main text. The report should be shortened while retaining the most relevant information in the main text.</p>	<p>This has been done by using of references, by inserting new tables and footnotes and by moving relevant information from the Annexes into the main text; this taken into account the need for complying with the recommendations 1 and 4.</p>
<p>The report should be streamlined in terms of language to allow the non-expert reader to fully understand the presentation and analysis.</p>	<p>A summary of the EIA Directive process was moved from the Annex to section 3.1.1. A glossary was also added.</p>
<p>The report should present stakeholder views more systematically throughout the text.</p>	<p>The views of stakeholders and the findings of the public consultation are presented for the main issues (either in the main text or in the footnotes), mainly for the problem definition, the policy options and when analysing the impacts from the possible amendments.</p>