06

Getting Proportions Right

How far should EU impact assessments go ?

April 2006

IMV · INSTITUT FOR MILJØVURDERING

06

Getting Proportions Right

How far should EU impact assessments go ?

April 2006

IMV · INSTITUT FOR
MILJØVURDERING

Reference no.: 2002-2208-003
ISBN: 87-7992-040-3
Authors: Uffe Nielsen, Dorte Bjerregaard Lerche,
Peter Marcus Kjellingbro, and Lykke Mulvad Jeppesen
Published: April 2006.
Photo on cover: Michael Ulfeldt

For further information, please contact:
Institut for Miljøvurdering /
Environmental Assessment Institute
Gammel Kongevej 5, 1st floor
DK-1610 Copenhagen V
Denmark
Phone +45 7226 5800
Fax +45 7226 5839
imv@imv.dk
www.imv.dk

Foreword

The Environmental Assessment Institute was formed as an independent policy assessment institute by the Danish Government in 2002 with the stated objective of contributing to achieving environmental objectives in the most economically effective way. This involves putting Danish environmental policies into perspective: what trade-offs are involved with other policies and what are the environmental, economic and social costs and benefits of different policies? In a sense, therefore, the Danish Environmental Assessment Institute can be seen as a product of both a wish to put an integrated perspective on environmental, economic and social concerns and as an instrument to help achieve improved environmental regulation.

The EU Commission Impact Assessment system has the same aspirations. This system was initiated in 2002 as the product of the Sustainable Development Strategy as well as of the Better Regulation initiative of the European Commission. Since then it has been seen as a potential instrument for informing European policy-makers about a range of different policy options and the trade-offs involved in the choices made.

It should come as no surprise, therefore, that we at the Environmental Assessment Institute are interested in how the EU Impact Assessment system integrates environmental, economic and social concerns and contributes to the overall European Union Better Regulation Agenda in practice. We seek not only to inform the Danish process, but also to contribute to the improvement of the European policy process, not least since more than three quarters of Danish environmental policies are effectively implementations of EU legislation.

It is a challenge to identify synergies and trade-offs between the effects of different types of policies on the environment, economic growth, employment and other social aspects - Nationally as well as at the EU level. This, as well as the challenge of developing applied methodologies to address it, is therefore a central theme in the Strategic Plan for 2005-2008 of the Environmental Assessment Institute. This report should be considered as one of several steps towards fulfilment of these objectives.

Peter Calow
Director

TABLE OF CONTENTS:

Executive Summary

All policies arising from the EU have impacts on the economy, environment and broader society to varying extent. A recent example is the 7th Framework Programme on research and technological development, which has been estimated to increase the European Gross Domestic Product (GDP) by an expected 0.5 to 1 per cent by 2030 (SEC(2005)430). This could amount to net benefits in the region of 50 to 100 billion Euros.

Policy makers need to have a clear view about what these impacts are. To this end, the EU Commission has, starting 2003, undertaken Impact Assessments of all major proposals integrating assessments of environmental, economic and social impacts. Compared to what was in place previously, this has been a significant and ambitious step forward.

Impact Assessments of policy proposals is crucial in guiding policy makers' views about advantages and drawbacks expected from proposed EU legislation. It is also important in terms of providing policy makers with a clear view about main trade-offs or synergies between environmental protection, economic growth and social impacts. Yet, Impact Assessments can be expensive and time consuming. Rough estimates of the costs of recent Impact Assessments range from tens of thousands of Euros to several million Euros.

This means that effort put into Impact Assessment needs to be proportional to likely impacts. The Commission is striving to achieve this - yet as our report shows, so far with limited success. The guidelines need to be more explicit.

In this report, we analyse how Commission Impact Assessments published in the period from 2004 and until 1 October 2005 have been carried out in practice. Our aim is to identify strengths and weaknesses of how 'proportional analysis' is currently carried out, and on the basis of this to formulate some clear recommendations to inform potential future revisions of Commission Impact Assessment procedures. In doing so, we take a 'welfare-economic' approach.

We address four questions related to different levels of Impact Assessment proportionality:

1. Which proposals should be included in the Impact Assessment system?
2. How many policy options should be analysed in a given Impact Assessment?
3. How many impacts should be analysed?
4. How detailed should the coverage of these impacts be?

Main findings

1. The types of proposals analysed in the Impact Assessment system during the period covered by this report reflect the proposals that have been included in the Commission Work Programme. A more proportionate and flexible approach could be warranted. This could entail not undertaking Impact Assessment for less important proposals (e.g. some Communications) under the Work Programme, but instead carrying out assessments for other important initiatives (e.g. following international commitments) not currently included in the Work Programme.
2. On average, each Impact Assessment covers four policy options, most often including a 'no-policy' option and a 'business-as-usual option'. This means that many Impact Assessments only consider one or two policy options in detail, and thus make it difficult for them to contribute to identifying the best policy option for achieving underlying policy objectives.
3. The range of impacts covered by Impact Assessments is typically narrow. Only 27 out of 58 Impact Assessments cover environmental, economic as well as social impacts. This is also reflected in a low average number of specific impacts covered per Impact Assessment (one environmental impact, three economic impacts and two social impacts per Impact Assessment on average).
4. In respect of the detail of analyses of impacts, quantification of expected impacts is only taking place in 19 out of 58 Impact Assessments. When monetisation is undertaken, it only covers some of the impacts described – and most often not environmental and social impacts (15 out of a total of 22 impacts monetised in all the Impact Assessments covered relate to economic impacts). A full cost-benefit analysis is therefore not possible based on the data represented in any of the Impact Assessments covered. In general, little distinction is made between short term and long term impacts and only a limited proportion of Impact Assessments distinguish between a 'welfare' approach and a 'financial' approach to economic analysis.

Generally speaking, the level of detail of analysis in Commission Impact Assessments varies widely with respect to the number of policy options covered, the number of impacts covered and the level of detail of analyses of individual impacts. This need not be problematic, as long as:

1. the varying level of detail is due to deliberate proportionality considerations,

2. the most important trade-offs between different types of impacts are identified in the Impact Assessments that are less detailed (e.g. the 39 Impact Assessments with qualitative analyses only), and
3. the limitations of the less detailed analyses are rendered explicit.

However, on all three counts, the Impact Assessments covered in this report are not generally convincing:

1. There are some indications that the varying level of detail of analysis could be due to proportionality considerations since, generally speaking, Impact Assessments in early phases of the policy process are also those with the lowest level of detail. However, this is a presumption, since there are very few explicit considerations of proportionality in the actual Impact Assessments and in the guidelines available at the time of completion of the Impact Assessments. Thus, there is little transparency in terms of the motivation behind the level of detail in any given Impact Assessment.
2. The Impact Assessments that offer qualitative analyses only are also those with the lowest number of options and impacts covered, very often only within one of the main categories of impacts (environmental, economic, or social). It can be argued that these Impact Assessments are therefore not successful in identifying the main trade-offs between potential impacts.
3. The limitations to the analyses are not extensively communicated for example in terms of data gaps, uncertainties, assumptions and the importance of omissions of options and impacts. This is also reflected in the conclusions of the Impact Assessments, where only six out of 58 Impact Assessments mention limitations of analysis due to incomplete information or non-availability of data.

This lack of explicit considerations about proportionality and the ensuing limitations of the analysis make it very difficult to assess whether all relevant options and impacts have in fact been analysed, and therefore whether conclusions are based on sufficient analysis.

Given the importance of providing decision-makers with a clear view of advantages and drawbacks of proposed legislative initiatives, this should give rise to some concern. If decisions are not made on the basis of sound evaluation of main costs and benefits, this could lead to missed opportunities in terms of designing policies with the best economic, environmental and social potential.

Main recommendations

Based on these observations, we recommend a more explicit, structured and transparent approach to proportionality in Impact Assessments. A starting point could be to distinguish clearly between different levels of proportionality - e.g. what proposals to include under the Impact Assessment system, what options to include, what impacts to include and the level of detail of coverage of these impacts.

The reason for including or excluding a policy option should always be stated. The same applies to impacts. Proportionality and data gaps are legitimate reasons not to undertake detailed analysis, but if this is the case, it should as a minimum be explained why the level of detail is low. For example, why is it not important, what information is lacking, and how much effort would it take to obtain such information?

The main recommendation of this report is therefore for the Commission to develop new and clearer guidance regarding systematic and transparent implementation of proportionality in Impact Assessments in practice. This guidance should make it compulsory for Impact Assessments to:

- be explicit and transparent in respect of the chosen level of detail of analysis (level of quantification, options and impacts covered, methods used and why),
- be explicit and transparent with respect to the consequence of limitations of analysis for certainty of results (e.g. due to data gaps, assumptions, uncertainties, qualitative coverage of impacts),
- reflect limitations in the analysis as well as in the conclusion. One concrete way to address this issue would be to require Impact Assessments to include statements which could invite challenges from stakeholders, e.g. “We are not aware of any evidence suggesting impacts on X, so this issue was not investigated further”.

Being more specific about proportionality of Impact Assessments could also:

- make it more transparent that Impact Assessments should be considered an instrument to integrate analyses of the most important impacts, and not as an instrument to always require analysis in areas which may not always be important (e.g. analyses of administrative costs and competitiveness, which has been seen by some to be given precedence),
- lead to a customisation of the questions addressed in Impact Assessments as to where in the policy process the proposal covered by the Impact Assessment is. If it is early in the process, one way of making the analysis proportional would be to

concentrate on the overall analysis of many possible policy options. Whereas at a later stage in the policy process this could be followed up by more elaborate analysis of more impacts (but only for selected options).

- make it clearer that the Commission Impact Assessments should be seen as a process and not as a one-off event. A concrete suggestion could be to introduce an explicit process of establishing the proportional number of options to be covered already at the 'road map' stage. This should take account of 1) when a proposal is particularly important or not, and 2) whether the net benefits of one option are expected to be obviously higher than for other options or whether there is an expected 'close race' between options.

Impact Assessments should take a cost-benefit *perspective* in order to ensure that both costs and benefits are assessed, and that all main impacts are compared on as equal footing as possible. This is not the same as to undertake full cost-benefit *analysis*, which is a much more ambitious exercise. The goal should not be to get exact measures of everything, but instead to obtain estimates of the order of magnitude. Quantitative estimates should be accompanied by explicit and transparent considerations about the uncertainty surrounding the numbers used.

As a minimum, Impact Assessments should be able to describe the most important trade-offs involved. But the proportions of such trade-offs should also be made transparent. We may end up having to choose between an option which could lead to an increase in carbon dioxide emissions and an option that rather leads to an increase in administrative costs. If we do not identify the overall net welfare effects on the European Union of different policy options, it will be difficult to get a clear view of these trade-offs.

The Impact Assessment system has potential to integrate environmental, economic and social concerns into EU decision-making in a systematic and transparent manner. This study has identified weaknesses of the current practice, and has put forward some suggestions for improvement. This should be viewed constructively as an input that can ensure continuing development and refinement of the procedures and their implementation in practice via a continuous learning-by-doing process.

Resume (in Danish)

Alle de politikker, der stammer fra EU, har virkninger på økonomi, miljø og samfund i forskellig grad. Et nyere eksempel er det syvende rammeprogram for forskning og udvikling. Her er det vurderet, at den foreslåede politik vil kunne øge EUs samlede bruttonationalprodukt med 0,5 til 1 procent i 2030 (SEC(2005)430). Dette kan svare til en nettogevinst i omegnen af 50 til 100 milliarder Euro.

Beslutningstagere har behov for et klart overblik over hvad disse virkninger er. Derfor har EU-Kommissionen siden 2003 foretaget konsekvensvurderinger, der integrerer analyser af miljømæssige, økonomiske og sociale konsekvenser af alle større forslag. Dette er et stort og ambitiøst skridt frem i forhold til hvad der tidligere blev gjort.

Konsekvensvurdering af forslag til politikker er vigtigt, for det første fordi det kan informere beslutningstagere om forventede fordele og ulemper ved den foreslåede EU-lovgivning. For det andet fordi det kan give overblik over afvejninger eller samvirke mellem økonomisk vækst, miljøbeskyttelse og sociale effekter. Men samtidig kan konsekvensvurderinger være dyre og tidskrævende. Eksempler på grove skøn af omkostningerne til udarbejdelse af nyere konsekvensanalyser ligger i intervallet fra ti-tusinder af Euro til flere millioner Euro brugt pr. analyse.

Det betyder, at indsatsen bliver nødt til at stå i forhold til hvor store konsekvenser der forventes – dvs. den skal være 'proportional'. EU-Kommissionen tilstræber at opnå dette – men, som vores rapport viser, ind til videre med begrænset succes. Retningslinjerne bør være mere udtrykkelige.

I denne rapport undersøger vi, hvordan de konsekvensvurderinger, som Kommissionen har foretaget i 2004 og de første 9 måneder af 2005, er foretaget i praksis. Formålet er at identificere styrker og svagheder i den måde 'proportional' analyse bliver foretaget i øjeblikket. Det er så målet på baggrund af dette at formulere nogle klare anbefalinger, som kan informere fremtidige revideringer af procedurer for Kommissionens konsekvensvurderinger.

I den forbindelse tager vi fat på fire spørgsmål, der har at gøre med forskellige niveauer af proportionalitet af konsekvensvurderingerne:

1. Hvilke forslag skal inkluderes i konsekvensvurderings-systemet?
2. Hvor mange mulige politikker, skal analyseres i en given konsekvensvurdering?,
3. Hvor mange konsekvenser skal analyseres?

4. Hvor detaljeret skal analysen af disse konsekvenser være?

Hovedresultater

1. De typer af forslag, der er blevet konsekvensvurderet i løbet af den periode, denne rapport dækker, afspejler de forslag, der har været inkluderet i Kommissionens arbejdsprogram. En mere proportional og fleksibel tilgang kunne være berettiget. Den kunne fx indebære ikke at konsekvensvurdere mindre vigtige forslag på Kommissionens arbejdsprogram (fx visse meddelelser), men i stedet at inkludere andre vigtige initiativer (fx som følge af internationale forpligtelser), som ikke er inkluderet i konsekvensvurderingssystemet i øjeblikket.
2. Gennemsnitligt bliver der behandlet fire mulige politikker pr. konsekvensvurdering. Dette omfatter tit en 'ingen politik-mulighed' samt en 'business-as-usual'-mulighed, og det betyder, at mange konsekvensvurderinger kun seriøst betragter en eller to mulige politikker. Dette gør det svært for mange konsekvensvurderinger at bidrage til et svar på spørgsmålet om hvilken politik, der er den bedste til at opnå de underliggende politik-mål.
3. Bredden af konsekvenser der bliver vurderet er for det meste snæver – kun 27 af 58 konsekvensvurderinger behandler såvel miljømæssige som økonomiske og sociale konsekvenser. Dette ses også i et temmeligt lavt gennemsnitligt antal specifikke konsekvenser pr. konsekvensvurdering – i gennemsnit behandles én type miljøkonsekvens, tre typer økonomiske konsekvenser og to typer sociale konsekvenser pr. konsekvensvurdering.
4. Hvad angår detaljeringsgraden af konsekvensvurderingerne, er en væsentlig indikator i hvor høj grad, der bliver sat tal på de forventede effekter. Der finder nogen kvantificering sted i 19 ud af 58 konsekvensvurderinger. Når 'monetarisering' (dvs. kvantificering i kroner og ører) finder sted, sker det kun for nogle af de beskrevne effekter – og for det meste ikke for miljømæssige og sociale effekter (15 ud af alt i alt 22 monetariserede effekter drejer sig om økonomiske konsekvenser). Fuldstændig cost-benefit analyse er derfor ikke mulig ud fra datagrundlaget i nogen af konsekvensvurderingerne. Derudover bliver der generelt kun i begrænset omfang skelnet mellem kort- og lang-sigtede effekter eller for den sags skyld mellem velfærdsøkonomisk og budgetøkonomisk analyse.

Der er samlet set stor spredning i detaljeringsgraden af Kommissionens konsekvensvurderinger. Dette gælder antallet af mulige politikker, antallet af konsekvenser, der er be-

handlet, samt detaljeringsgraden af analyserne af de enkelte konsekvenser. Dette behøver ikke at være et problem, så længe:

1. den vekslende detaljeringsgrad skyldes bevidste overvejelser om proportionalitet,
2. de konsekvensvurderinger, der har mindre detaljeringsgrad (fx de 39 konsekvensvurderinger der alene er kvalitative) identificerer de vigtigste afvejninger mellem forskellige typer af konsekvenser er, og
3. begrænsningerne ved analyserne med mindre detaljeringsgrad er gjort tydelige.

På alle disse tre områder er de konsekvensvurderinger, der er behandlet i denne rapport, dog generelt ikke overbevisende:

1. Der findes nogle antydninger af, at den forskellige grad af detaljering i analyserne kunne skyldes overvejelser om proportionalitet. Konsekvensvurderingerne i tidligere faser af politik-processen er nemlig generelt også er dem med mindst detaljeret analyse. Dette er dog i bund og grund gætteri, eftersom der er meget få udtrykkelige overvejelser om proportionalitet i selve konsekvensvurderingerne og i de retningslinjer der var til rådighed ved gennemførelsen af dem. Der er altså meget lidt gennemsigtighed med hensyn til hvad der ligger bag detaljeringsgraden i en given konsekvensvurdering.
2. De konsekvensvurderinger, der udelukkende er kvalitative, er også dem der analyserer det laveste antal mulige politikker og konsekvenser, meget ofte kun inden for én af kategorierne økonomiske, miljømæssige og sociale konsekvenser. Disse konsekvensvurderinger kan derfor generelt ikke siges at have succes med at pege på de vigtigste afvejninger af potentielle konsekvenser.
3. Generelt siger konsekvensvurderingerne meget lidt om begrænsningerne ved analysen – fx med hensyn til data-mangler, usikkerheder, antagelser og betydningen af udeladte politik-muligheder og konsekvenser. Dette afspejler sig også i konsekvensvurderingernes konklusioner, hvor kun seks ud af 58 konsekvensvurderinger nævner begrænsninger i analysen på grund af ufuldstændig information eller tilgængelighed af data.

Denne mangel på overvejelser om proportionalitet, og de begrænsninger ved analysen der følger med, gør det svært at vurdere om alle relevante politik-muligheder og konsekvenser faktisk er blevet analyseret, og om konklusionerne derfor er baseret på tilstrækkelig analyse.

Da det er vigtigt at give beslutningstagere et klart overblik over fordele og ulemper ved foreslåede love, er dette noget, der bør give anledning til bekymring. Hvis beslutninger ikke bliver foretaget på baggrund af velfunderet vurdering af de vigtigste omkostninger og gevinster, kan man forpasse nogle vigtige muligheder for forbedring af miljø, økonomi og sociale forhold.

Hovedanbefalinger

Baseret på disse observationer anbefaler vi en tydeligere, mere struktureret og gennemsigtig tilgang til proportionalitet i Kommissionens konsekvensvurderinger. En begyndelse kunne her være at klart skelne mellem forskellige proportionalitetsniveauer af konsekvensvurderinger – fx hvilke forslag, hvilke politik-muligheder og hvilke konsekvenser, der skal inkluderes i konsekvensvurderings-systemet, og hvor detaljeret dækningen af konsekvenserne skal være.

Det bør altid blive forklaret hvorfor hver politik-mulighed er inkluderet eller ej. Det samme gælder for konsekvenser. Proportionalitet og datamangel er legitime grunde til ikke at foretage detaljeret analyse, men hvis dette er tilfældet, bør det som minimum argumenteres hvorfor detaljeringsgraden er lav – fx hvorfor det ikke er vigtigt, hvilken information der mangler, og hvor stor indsats det vil kræve at få den.

Hovedanbefalingen i denne rapport er derfor, at Kommissionen udvikler nye klarere retningslinjer om systematisk og gennemsigtig brug af proportionalitet i konsekvensvurderinger. Disse retningslinjer bør gøre det obligatorisk for konsekvensvurderinger at:

- være tydelige og gennemsigtige med hensyn til valg af detaljeringsgrad – fx mht. hvilket niveau af kvantificering, hvor mange mulige politikker og konsekvenser er dækket, anvendte metoder, samt begrundelser herfor,
- være tydelige og gennemsigtige med hensyn til konsekvenserne af analysernes begrænsninger for sikkerheden af resultaterne - fx grundet data-mangler, antagelser, usikkerheder, og kvalitativ vurdering af konsekvenser,
- reflektere begrænsninger både i analysen og i konklusionen. En konkret måde at gøre dette kunne være at kræve af konsekvensvurderingerne, at de indeholder udsagn som kan stimulere interessenter til at udfordre dem, fx ”Vi kender ikke til materiale, der tyder på konsekvenser for X, så denne mulighed blev ikke undersøgt yderligere”.

At være mere specifik omkring proportionalitet af konsekvensvurderinger kan også:

- gøre det mere gennemsigtigt at konsekvensvurdering bør ses som et instrument, der kan integrere analyse af de vigtigste konsekvenser, og ikke som et instrument til altid at analysere enkelte områder, som nogen mener, skal have forrang (fx analyse af administrative omkostninger og konkurrenceevne).
- føre til, at spørgsmålene i konsekvensvurderingerne bliver mere målrettede mod, hvornår i politik-processen forslaget, som konsekvensvurderingen dækker, befinder sig. Hvis det er tidligt i processen, kunne en måde at gøre analysen proportional være at koncentrere den om overordnet analyse af mange forskellige politikker. Så kan man på et senere tidspunkt følge op med udvidet analyse af enkelte konsekvenser (men kun for udvalgte politikker),
- gøre det mere klart, at konsekvensvurdering i Kommissionen skal ses som en proces og ikke en engangsforestilling. Et konkret forslag kunne her være at introducere en proces, der fastsætter det proportionale antal af politik-forslag, der skal behandles allerede på det tidspunkt, hvor Kommissionen lancerer en 'køreplan' for en given konsekvensvurdering. Her bør det inddrages 1) hvornår et forslag er særligt vigtigt eller ej, og 2) om den forventede netto-gevinst ved et politik-forslag kan forventes at være åbenlyst højere end for de andre mulige politikker, eller om der er et forventet 'tæt løb' mellem politikkerne.

Konsekvensvurderinger bør have et 'cost-benefit'-perspektiv for at sikre at både omkostninger og gevinster bliver vurderet, og at alle de vigtigste konsekvenser bliver sammenlignet på så lige fod som muligt. Dette er ikke det samme som at foretage en fuld cost-benefit analyse, som er en meget mere ambitiøs opgave. Målet bør ikke være at få præcise tal på alle konsekvenser, men i stedet at få en vurdering af størrelsesordenen. Kvantitative vurderinger bør derfor være ledsaget af tydelige og gennemsigtige overvejelser om den usikkerhed, der omgærder de anvendte tal.

Som et minimum bør konsekvensvurderingen beskrive de vigtigste afvejninger, et forslag involverer. Men det bør også blive synligt, hvad proportionerne af dem er. Vi kan ende med at blive nødt til at vælge mellem en politik, som kan lede til en stigning i kuldioxid-udledninger og en politik, der i stedet fører til en stigning i administrative omkostninger. Hvis vi ikke identificerer de forskellige politikkers overordnede velfærdseffekter på den Europæiske Union, vil det være svært at få et klart overblik over disse afvejninger.

Konsekvensvurderingssystemet har potentiale til at kunne indarbejde miljømæssige, økonomiske og sociale overvejelser i EU's beslutninger på en systematisk og gennemsigtig måde. Denne rapport har identificeret svagheder ved den nuværende praksis, og fremkommet med forslag til forbedringer. Dette bør opfattes konstruktivt som bidrag til en

løbende udvikling og forbedring af procedurerne og hvordan disse bliver udført i praksis i en løbende 'learning by doing'-proces.

1 Introduction

The EU Commission has since 2003 undertaken Impact Assessments of most major proposals (e.g. decisions, regulations and directives) with the purpose of integrating assessments on environmental, economic and social areas of impact on society, including an assessment of potential trade-offs between these impacts (European Commission 2002c). From 2005 onwards, it is intended that this should happen for *all* major proposals (European Commission 2005b).

The Impact Assessment system is based on the EU Sustainable Development Strategy (European Commission 2001a) together with the Lisbon Agenda of 1999, which describe the political commitment of the Member States to make the European economy the most competitive and dynamic knowledge-based economy in the world.

A full overview of costs and benefits of EU proposals would require detailed cost-benefit analyses. Most often, this is not realistic given resource and time constraints in the Commission. This is why a recurrent theme in the Impact Assessment guidelines (European Commission 2005e) is 'proportionate' analysis, i.e. that Impact Assessments should be proportional to the significance of the initiatives covered.

Some of the proposals covered by Impact assessments can have wide-ranging implications for the EU. For example, the Impact Assessment on the Thematic Strategy on Air Pollution[1] is expected to yield benefits for human health and crop damage of approximately 43 billion Euros per year with associated costs of 7 billion Euros per year. Also, the 7th Framework Programme on research and technological development has been estimated to increase the European Gross Domestic Product (GDP) by an expected 0.5 to 1 per cent by 2030 (SEC(2005)430). This could amount to net benefits in the region of 50 to 100 billion Euros.

At the same time, Impact Assessments are undertaken for much more modest types of proposals, e.g. on Protection of chicken kept for the production of meat (SEC(2005)801).

The resources spent on Impact Assessments also vary. Rough estimates of the costs of recent Impact Assessments range from tens of thousands of Euros to several million Euros.

However, the question remains, whether the time and resources spent on analysing the expected impacts of these proposals are proportionate to the significance of the propos-

[1] The Thematic Strategy on Air Pollution COM(2005)446 with Impact Assessment SEC(2005)1133.

als covered, as well as to the likely effect of the Impact Assessment on the final policy design. Further, questions can be raised about how detailed Impact Assessments should be, including how detailed analysis should be of different policy options and specific types of impacts. All this needs to be considered systematically and transparently early in the Impact Assessment process.

Wilkinson et al. (2004) carried out an analysis of EU Impact Assessments undertaken in 2003, the first year of operation. Here the range of impacts analysed was limited. Little attention was given to issues of sustainable development or trade-offs between the environmental, economic and social impacts. Most attention was paid to economic impacts whereas the treatment of environmental and social impacts was limited. Most impacts were discussed in qualitative terms and where quantification was attempted, most attention was paid to short-term economic costs. Few attempts were made to quantify long-term environmental benefits.

The question is whether these observations still hold, and if so, how they should be interpreted in the light of Commission efforts to make the analysis in Impact Assessments proportional to the significance of the expected impacts of the initiatives covered. Furthermore, 2003 and 2004 was seen as a first preliminary period of trial and error by the Commission. The procedures for Impact Assessment are considered by the Commission as continuously developing in a learning-by-doing process as experience from actual Impact Assessments carried out is processed and more work is done on refining guidelines. This has lead to the development of new guidelines in 2005 as well as further specification of individual elements of the guidelines.

1.1 Objective of report

The purpose of this report is to:

- provide an overview of how the concept of proportionality is dealt with in practice in EU Impact Assessments from 2004 onwards,
- develop further proposals on how Impact Assessment proportionality can be implemented in the future,
- provide an overview of how assumptions and limitations have been communicated in Impact Assessments,
- provide an overview of how quantitative and qualitative analyses have been used in Impact Assessments. To what degree have costs and benefits been assessed, and has

quantification been as elaborate in the environmental and social domains as in the economic domain?

- provide input to the discussion on how the main costs and benefits systematically can be established in practice with due consideration to proportionality.

The aim is thus to facilitate learning from experience with the Impact Assessment process so far, and thereby contribute to the on-going evaluation of the Impact Assessment system and further revisions of the Impact Assessment guidelines. This has the potential to help decision-makers get closer to a more explicit and transparent process of determining the 'right' Impact Assessment proportionality.

Our perspective will be 'welfare economic' – i.e. taking all costs and benefits to European citizens into account, including environmental and social effects.

This is not just an academic exercise. Sound analysis of expected main economic, environmental and social impacts of all new EU policies can lead to more informed decision-making, and hence potentially save tax-payers in EU billions of Euros.

2 Background

Main Points

EU Commission Impact Assessments should capture expected environmental, economic, and social effects of policies. This would call for detailed, quantitative analysis, but since there are constraints on available time and resources for undertaking assessments there is a need for 'proportional' analysis with respect to:

- what policies to assess,
- what policy options to assess,
- what impacts to assess,
- what the detail level of analysis of should be.

Building upon the 1992 Rio Declaration, article 6 of the EC treaty states that environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities, in particular with a view to promote sustainable development. Furthermore, before the UN World Summit on Sustainable Development in Johannesburg in 2002, the European Council of Ministers adopted the EU Sustainable Development Strategy (European Commission 2001a). Thereby, the commitments made at the 19th Special Session of the UN General Assembly in 1997 to draw up strategies for sustainable development could be seen to be fulfilled by the EU.

The EU Sustainable Development Strategy completes and builds upon the Lisbon Agenda, which seeks to make the EU competent of developing sustainable economic growth with more and better jobs and greater social cohesion. Thus, the EU in principle recognises that economic growth, social cohesion and environmental protection should be thoroughly co-ordinated (European Commission 2001a).

One of the key elements in the EU Sustainable Development Strategy is a change in the process of making policy. In order to integrate sustainable development, the policy-makers should make use of careful assessments of the full effect of political proposals. The assessments should estimate environmental, economic and social impacts both inside and outside the EU (European Commission 2001a).

Additionally, since the European Council in Edinburgh in December 1992, the issue of 'better regulation' has received high priority within the EU (European Commission 2002d).

As a result the Commission has been engaged in an Action Plan for simplifying and improving the regulatory environment, particularly since 2002 (European Commission 2001b; European Commission 2001c; European Commission 2002b). The objective is to improve the legislative procedure and institutional practice in order to save time and reduce costs for companies and public authorities. An important tool in this Action Plan is the Impact Assessment of major legislative and policy initiatives, as the assessment will make it easier to choose the most appropriate instrument or combination of instruments from the range of options available.

In 2002, motivated by the EU Sustainable Development Strategy, the Commission published the Communication on Impact Assessment (European Commission 2002c). In 2002 the Commission thus established a common system of integrated Impact Assessment for all major EU proposals where all former EU procedures for Impact Assessment were integrated. The system thus replaces former assessment obligations, such as assessments of impacts on Small and Medium-Sized Enterprises, Environmental Assessment, Gender Assessment, Business Assessment, Regulatory Assessment, etc. (European Commission 2002c).

Even though Impact Assessment in various disguises has been widely applied internationally, there are only a few examples of Impact Assessment systems which fully address considerations on sustainable development in a balanced and comprehensive way (Wilkinson et al. 2004). Renda (2006), however, argues that the United States' system of Regulatory Impact Assessment in many ways is more developed than the EU system, particularly in terms of assigning monetary values. Especially if it is done properly, monetary valuation is one of the most developed ways of integrating environmental, economic and social concerns.

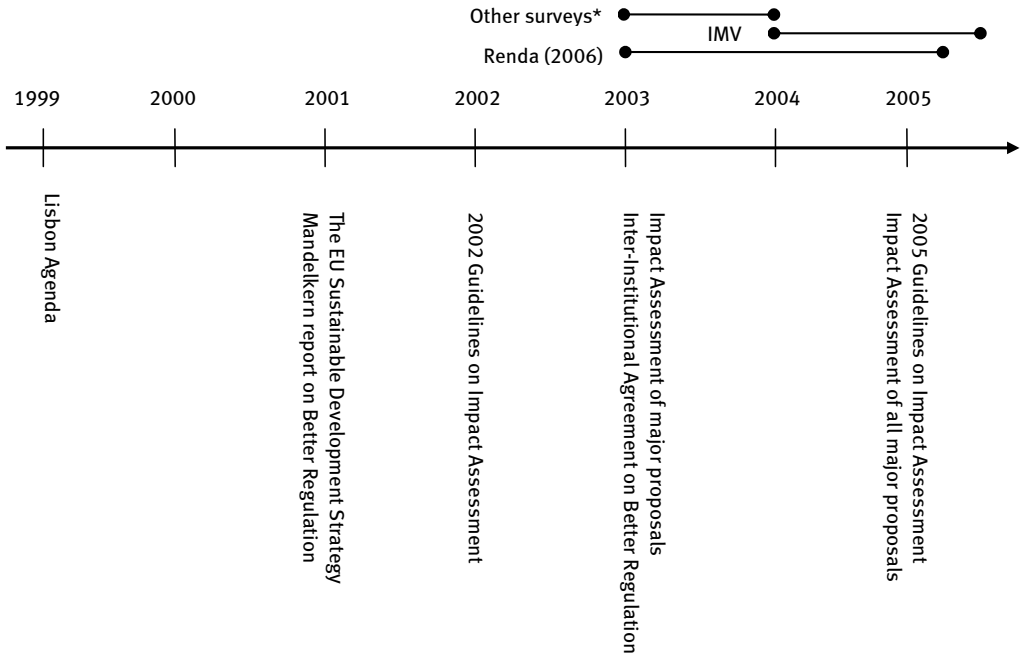
However, since the European system of Impact Assessment strives to integrate impacts on environmental, economic and social areas as well as potential trade-offs between these areas in the same analysis, it is considered an ambitious initiative. Thus, if successful, Impact Assessments will provide an overview of all the important environmental, economic and social costs and benefits associated with a given proposal. Moreover, this can be seen as a potential step towards a fuller, more balanced, well-documented, consistent and consequently more informed decision-making process.

2.1 Previous studies

According to the 2002 guidelines on Impact Assessments (European Commission 2002a), all Commission proposals were to be subject to a short preliminary Impact Assessment.

Based on the preliminary Impact Assessments, those initiatives with major environmental, economic and social impact were selected for an extended Impact Assessment. In 2003, according to Wilkinson et al. (2004), 580 proposals went through the preliminary Impact Assessment and 43 were selected for extended analysis. Three studies (Lee & Kirkpatrick 2004; Vibert 2004; Wilkinson et al. 2004) have reviewed the extended Impact Assessments in 2003, and Renda (2006) have reviewed Impact Assessments from 2003 until June, 2005 (see Figure 2.1).

Figure 2.1 Time line showing coverage of studies reviewing Impact Assessments in relation to the development of the Commission's Impact Assessment system.



* Wilkinson et al (2004), Lee & Kirkpatrick (2004) and Vibert (2004)

In general, the results of the evaluations of the 2003 Assessments are dominated by the fact that the assessments were made using a process of 'learning by doing'. In other words, the studies pointed to many areas of potential improvement.

A wide range of quality parameters have been analysed in these studies, such as

- Number of policy options analysed
- Range of impact analysed
- Quantification of impacts

- Content of the guidelines
- Application of and consistency with the guidelines
- Mechanisms for quality control
- Availability of resources for undertaking the assessments
- Involvement of Members States
- Approach to stakeholder consultations.

Not all these parameters are stated as quality parameters in the actual Impact Assessment guidelines. Most notably, no requirements for quantification of impacts exist.

Wilkinson et al. (2004) found that, in general, no plans on ex-post monitoring and evaluation have been made in the 2003 Impact Assessments. Here, it was also found that it was unclear if the guidelines or parts of them were mandatory, since none of the 2003 Impact Assessments followed the guidelines fully and a smaller number paid it only little attention.

Lee & Kirkpatrick (2004) identified weaknesses in terms of problem identification, narrowness in the range of policy options covered and unbalanced coverage of different main types of impacts. Similarly, the treatment of environmental issues in the 2002 guidelines was found to be brief and incomprehensive by Wilkinson et al. (2004), who also found that the guidelines were giving the impression that the Impact Assessment is a single event, rather than a continual process that follows the successive steps in the policy-making process.

Furthermore, Lee & Kirkpatrick (2004) identified an unclear presentation of the findings, and Wilkinson et al. (2004) found that there was no formal mechanism for ensuring quality control and provision of advice, guidance or training. There appeared to be no institutional framework where the 'learning by doing' could take place. Additionally, there was no formal arrangement for involving Member States and the stakeholder consultation was not performed consistently (Vibert 2004; Wilkinson et al. 2004).

Renda (2006) observed what he termed a declining quality of Impact Assessments over time, documenting lower proportions of Impact Assessment undertaking quantitative analysis in 2005 than in 2004 and 2003. Thus, a range of problematic issues has been raised by several previous studies on Impact Assessments, and it remains to be fully explained what lies behind these patterns. Such explanation would be relevant information for potential future revisions of the system to the extent the issues raised have not already been addressed.

2.2 Quantification and quality

Quantification is only one of several possible quality parameters. Overall, the concept of 'quality' depends very much upon what the objectives of the Impact Assessment are, both stated and implicit. Even though interesting recommendations may arise from the analysis of the organisation and the process, the core issue of the Impact Assessments is whether or not the Impact Assessments provide the policy-makers with information that improves the decision-making process.

Some main categories of quality indicators with regard to the content of Impact Assessments are the number of policy options analysed, the range of impact analysed and the quantification of impacts (Wilkinson et al. 2004). However, the degree to which qualitative analysis provides valuable information that is not captured by quantification is also relevant. There may be areas where it is less meaningful to quantify impacts, e.g. in terms of impacts on fundamental rights.

Quality could also be regarded in connection with the concept of proportionality. If proportionality of analysis means that less detailed analysis is warranted due to limited resources, proportionality can also mean acceptance of lower quality Impact Assessments.

The advantage of quantification, specifically monetary valuation of all types of impacts, is that a common denominator is established, making it easier to compare the relative importance of different types of impact. This is particularly important in a context where so many different types of impacts are being integrated into one Impact Assessment. Quantification can also serve to provide estimates of order of magnitude. Qualitative information can be important, particularly when quantification is not possible, but does often not reveal any proportion of the effects.

One important purpose of an Impact Assessment is to establish an overview of advantages and drawbacks of different policy options. Here, quantification is also important, with cost-benefit analysis as the most developed and rigorous tool, since it allows a quantifiable comparison of advantages and drawbacks. Other less rigorous methods include cost-effectiveness analysis, compliance cost analysis or multi-criteria analysis (European Commission 2001d). Quantification, if well-documented, also has the potential to contribute to more transparent and consistent decision-making, and therefore be less vulnerable to influence by lobbying or use of selective information (Hahn & Litan 2005).

A statement on assessing the costs and benefits of policy options was also made as early as in the implementation of the 18th declaration to the final act of the Maastricht Treaty from 1992, which states that*: "...the Commission undertakes, by basing itself where appropriate on any consultations it considers necessary and by strengthening its system for*

evaluating Community legislation, to take account in its legislative proposals of costs and benefits to the Member States' public authorities and all the parties concerned"
(European Communities 1999).

Assessing the overall net benefits of a proposal is not stated as an overall goal in the Impact Assessment guidelines (European Commission 2002a; European Commission 2005e). Renda (2006) suggests that they should be revised so the net benefits *are* made the primary objective of Impact Assessments.

However, a Commission staff working document on 'Minimising administrative costs' (European Commission 2005a) states that *"In the EU's approach to better regulation, the preparation of new legislation and simplification of existing legislation take into account the* ***overall benefits and costs"*** (original emphasis).

Recently, at a seminar on Better Regulation in Edinburgh on 22-23 September 2005, Gunther Verheugen, Commissioner for enterprise and industry, stated that *"... new legislative proposals to which the Commission since this year applies a stringent principle – we will only put forward proposals that have undergone an Impact Assessment. This approach would guarantee that we know the full costs and benefits of future legislation".*[2]

Although there are also other important aspects of an Impact Assessment, this could be interpreted as an indication that the Commission sees quantification of costs and benefits as an important and integral part of the Impact Assessment system, at least at decision-maker level. The Impact Assessment guidelines (European Commission 2002a; European Commission 2005e), however, are much less prescriptive than this.

Studies of the extent to which advantages and disadvantages of EU environmental policies were analysed (both ex-ante and ex-post) prior to the initiation of the new Impact Assessment system in 2003 have criticised the lack of monetary estimation of costs and benefits (Pearce 1998; Pearce 2004). The new Impact Assessment system thus provides a potential vehicle to address this deficiency.

It is important to note, however, that the degree of quantification should not be seen as a quality parameter in itself, but it should be seen in connection with the quality of the quantitative estimates and how they are used.

The ability to meaningfully include quantitative estimates in the analysis depends very much on how uncertain estimates are. Key issues here are how much is known about the uncertainty, how important this uncertainty is for the overall results, and how transpar-

[2] Retrieved 17/02/06 at http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/543.

ently this is addressed in the Impact Assessment. Therefore, the importance of assumptions, limitations in scope and uncertainty will also be addressed in this report.

This report provides input to the evaluation of the Commission's Impact Assessments as carried out in practice. This is done from the perspective that quantification of costs and benefits should in principle be seen as the best way of addressing environmental, economic and social impacts. In this way the potential trade-offs between these three areas can be made explicit and transparent, provided that the relevant data is available.

Some considerations on proportionality are also important – the question is how, and how much? Clearly, all relevant data are rarely available, and it may require great effort and many resources to obtain and analyse relevant quantitative data. Thus, a trade-off will most often be involved between the wish for a thorough quantitative analysis with all relevant data included and the need for quick and less costly analysis.

2.3 Considerations on proportionality

As mentioned in Chapter 1, proportionality relates to considerations about when detailed and resource-demanding quantitative analyses are necessary and when less ambitious exercises are warranted. In the context of Impact Assessments this relates to the level of quantification, the number of policy options included in the analyses and the emphasis on economic vs. social and/or environmental impacts.

The concept of proportionate analysis suggests that full-fledged quantification need not be warranted in every case. On the other hand, it should be recognised that the concept of proportionality involves a trade-off, in that the absence of quantitative estimates of impacts will make a full overview of likely impacts and their relative importance difficult, and hence make the basis for decision-making more uncertain.

Identifying proper levels of proportion in Impact Assessments involves striking a balance between different interests. For example, there may be calls from decision-makers for well-documented background information prior to decision-making and calls from interest groups (e.g. environmental NGOs, industries, and labour unions) for proper treatment of environmental, economic and social impacts, respectively. At the same time, there are administrative constraints on time and resources available for the analysis. There are also divergent opinions on the need for simplicity and complexity in Impact Assessments. While acknowledging that proper analysis may involve complex information not always easily interpretable, decision-makers have a need for clear recommendations.

If we want to 'get proportions right', we first have to consider what the criteria for assessing the right proportion is. In theory, the obvious answer from an economic perspective,

will be the level at which the marginal benefits from putting more efforts into doing more elaborate analysis no longer outweighs the costs. The marginal benefit will often be the avoided cost of making a wrong decision. To identify this level is easier said than done. In real life, considerations on the 'right' level of proportionality are more likely to be determined by ad hoc decision-making and the resource constraints of those responsible for undertaking Impact Assessments.

In the 2005 guidelines (European Commission 2005e) a separate section is devoted to the issue of proportionality, which is new compared to the 2002 guidelines. However, this short one-page section, which is not elaborated in the detailed Annex is rather vague in terms of information as to how proportionality should be sought in practice, and by whom. In effect, this could potentially leave wide discretion to individual desk officers as to how proportionality should be interpreted in practice in a given Impact Assessment.

One example from the new section is the statement that "some aspects of the analysis will often have to be more developed than others". This is also described as depending on "the point in the policy-making process at which the Impact Assessment is undertaken". This is somewhat confusing, as elsewhere in the guidelines the Impact Assessment system is presented as a process, and not a one-off event. However, another interpretation is that Impact Assessment should indeed be seen as a process, with different levels of detail of the analysis to be undertaken in connection with various revisions of the Impact Assessment at different stages of the policy process..

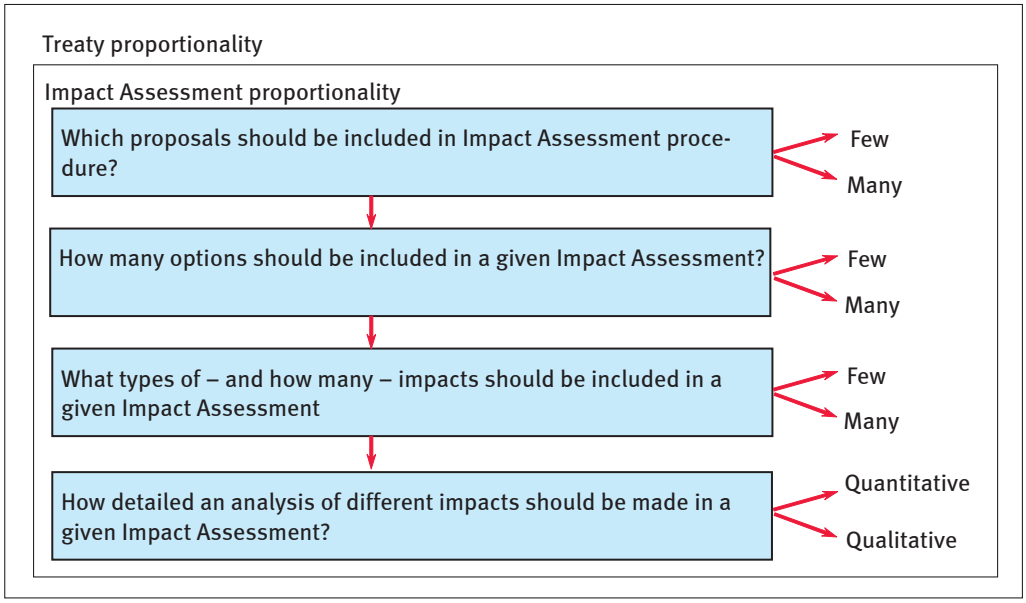
There are many different levels at which it is relevant to look at proportionality. At the most fundamental level, the added section about proportionality in the guidelines does contain a useful distinction is between 'treaty proportionality' and 'Impact Assessment proportionality' (European Commission 2005e; Renda 2006). 'Treaty proportionality' here refers to the policy analysed in the Impact Assessment: is the policy proportionate to the problem at hand, or are other actions more adequate?

'Impact Assessment proportionality' is more related to methodology: How much effort should be invested in assessing the effects of the policy in question? In this report, we will primarily focus on 'Impact Assessment proportionality'. But even within this type of proportionality, there are several levels at which proportionality can be relevant (see Figure 2.1).

- The first area where some kind of Impact Assessment proportionality can be implemented is in determining the overall scope of the Impact Assessment system: what categories of proposals should be included in the system, and for what categories is the added value of doing so small?

- The second area where Impact Assessment proportionality can be implemented is when it is to be determined which policy options should be covered in a given Impact Assessment: how important is it to include more than one policy option in the given case?
- The third area is when the overall coverage of potential impacts is to be decided: how important is it to include assessment of impacts in environmental as well as economic and social areas and how many impacts within a given area is it necessary to include in the assessment?
- The fourth area is when the depth of analysis of the individual impacts is to be determined: How important is it that an impact is quantified, should it be quantified in monetary terms and should all impacts covered be quantified to the same extent?

Figure 2.1 Different levels of proportionality in Impact Assessments



2.3 Structure of report

The report will be structured to reflect the above mentioned different levels of possible 'Impact Assessment proportionality'. We will start with the most fundamental questions of what proposals to include under the system, and gradually we will progress to deal also with proportionality of choice of options, impacts and the level of detail of analysis of individual impacts.

- Chapter 3 will present the methods used in this report alongside other methodological considerations.

- Chapter 4 will provide an overview of what types of proposals are covered in the Impact Assessments carried out from 2004 until October 2005.
- In Chapter 5, an analysis of the number and nature of options that have been addressed in these Impact Assessments will be presented.
- In Chapter 6 an Analysis of the coverage of different types of impacts will follow.
- In Chapters 7-10 we will analyse patterns of quantification and how they can be interpreted.

The implications of the observations made on how proportionality should be understood will be discussed in the individual chapters, but we will also return to it in a more general discussion of what lessons can be learnt for the future.

- Chapter 11 will present this discussion
- In Chapter 12 our conclusions are made.

3 Methods

Main Points

This report reviews the content of 59 EU Commission Impact Assessments from 2004 and 2005. It applies a checklist on the Impact Assessments, focussed on policy options considered, types of impacts analysed, degree of quantification/monetisation, methods used in quantification, short/long term focus, and treatment of data gaps and uncertainty. Results are presented mainly as descriptive statistics.

The report reviews the Commission Impact Assessments published in 2004 and the first nine months of 2005 (as available at the Commission Impact Assessment website October 1st 2005)[3], using a systematic checklist focused on the degree of quantification, methods of quantification, and options considered. This comprises 59 Impact Assessments available in English (excluding 6 Impact Assessments only available in French and 3 Impact Assessments with restricted access).

Two of these 59 Impact Assessments are updates of earlier Impact Assessments.

- The first (SEC(2005)808) is included in our sample as a separate Impact Assessment, since the earlier version is from 2003 and therefore outside our sample.
- The second (SEC(2005)914) is an update of an earlier Impact Assessment undertaken in 2004 (SEC(2004)931), which is already included in our sample. They are therefore treated as one merged Impact Assessment in our analysis.

This reduces our total sample size to 58. Appendix 1 gives a detailed list of the Impact Assessments covered.

3.1 The approach in this study

Vibert (2004), Lee & Kirkpatrick (2004) and to some extent from Wilkinson et al. (2004) and Renda (2006) all employ 'scoring', which, depending on how it is used, can require subjective evaluation from the researcher. This report uses predominantly descriptive criteria for the assessment, as far as possible leaving subjective evaluation aside. In order

[3] http://europa.eu.int/comm/secretariat_general/impact/index_en.htm (retrieved 17/02/06)

to make the analysis easily reproducible, a systematic checklist is used to cover a number of methodological issues (see Appendix 2) which, to the extent possible are defined to be objectively observable.

In one area, it has been particularly difficult for us to establish objective criteria in the present report. When assessing how well an impact has been addressed in qualitative terms, we found it necessary to further distinguish between an impact which is briefly mentioned and one which is discussed in detail. In contrast to the other questions in our checklist (see Appendix 2), this has required some subjective evaluation on our part. Examples of briefly mentioned impacts are given in Chapter 8.

Some Impact Assessments have referred to other reports for further details. We have in general not consulted these references, but instead only covered the impacts summarised in the Impact Assessments themselves.

The main issues addressed in this report are the following;

- overall assessment methods commonly used,
- the justifications used for the choice of approach,
- the number of policy options considered,
- the degree of quantification/monetisation and the methods used in quantification,
- types of impacts analysed,
- short/long term focus,
- major data gaps and sources of uncertainty.

The present study does not cover the degree to which Impact Assessments have succeeded in describing the *main* impacts relevant in the given Impact Assessment context. Nor does the report check the quality of the quantification as such. What we focus on is the degree to which it has taken place. Thus, the present report constitutes what Harrington & Morgenstern (2004) term a 'content test' of the Impact Assessment system - i.e. a review of what is included in the Impact Assessments. Therefore, the present report does neither perform an evaluation of how the new Impact Assessment system compares to what existed previously (a 'function test'), nor an 'outcome test' of what the actual effect of Impact Assessments are on real world polices and their impacts. (ibid.).

The results are mainly presented in the form of descriptive statistics, cross-tabulating different criteria with basic characteristics of the Impact Assessments. This way, we will be able to establish correlations between main variables, but not to establish causal effects of the patterns of quantification we can observe. Similarly, due to the limited sample size and many variables, we do not perform multivariate regression analysis and therefore

cannot statistically test for influence of other variables on our results. We will, however, discuss possible interpretations and the limitations of our results throughout the report.

The Impact Assessments covered have been obtained directly from the Commission's official Impact Assessment website and the Commission has confirmed that we have indeed included the available Impact Assessments in the period covered by this report.

Two authors have applied the checklist on the same 5 Impact Assessments in order to compare results and ensure consistency in how the checklist has been filled. The remaining Impact Assessments have since been read and categorised by one author.

4 What types of proposals are included under the Impact Assessment system?

Main Points

The types of proposals analysed in the Impact Assessment system reflect the proposals that have been included in the Commission Work Programme. This is a consistent approach, but it may not be reflecting proportionality considerations sufficiently. Some proposals not covered by the Work Programme could potentially have more significance than some proposals covered by the Work Programme.

4.1 Changes in coverage from 2003 to 2005

From the introduction of the Impact Assessment system in 2003, it was intended to cover 'major initiatives' from the Commission. The Impact Assessment system was thus intended to cover all Commission legislative and policy proposals presented in the Annual Policy Strategy or the Work Programme (European Commission 2002c). Hence, directives and regulations were required to undergo an Impact Assessment, as were "white papers, expenditure programmes and negotiating guidelines for international agreements that have an economic, social or environmental impact" (ibid.). Exemptions from the Impact Assessment procedure applied to, for example, green papers, where the policy formulation process is still ongoing, proposals following international obligations, periodic Commission decisions, and adaptations to technological progress.

A Preliminary Assessment functioned as the first stage of a two-stage system. The rationale for the Preliminary Assessment was to identify which proposals should qualify for more elaborate analysis in an Extended Impact Assessment (European Commission 2002c). The Preliminary Assessment should provide a first overview of the issues at hand and of what the main options and main impacts would be expected to be. This aimed to ensure that the system would be proportionate, since proposals with only a minor impact would only require a minimum of resources.

In the latest communication on the Lisbon Agenda by the Commission (European Commission 2005d), it was emphasised that "key legislative proposals as well as the most important cross-cutting policy-defining non-legislative proposals" as set out in the annual Legislative and Work Programme should undergo an integrated Impact Assessment. As such,

this entailed no formal change in requirements, but it could be interpreted as an intention to include a broader range of proposals in practice from 2005 onwards, given that this was not fully implemented in 2003 and 2004. However, the Commission still intends that "Impact Assessments of proposals with no major impacts should, therefore, be avoided or at least kept short" (European Commission 2004). This is elaborated in the 2005 guidelines (European Commission 2005e), where it is stated that for "... White Papers, Action Plans, other Communications setting out strategic orientations, or proposed framework directives ... the analysis will generally be rather broad in its problem description and objectives". Furthermore, the "Assessment of impacts will necessarily be preliminary and will not provide detailed quantitative data" (ibid.).

On the surface, it would seem that a two-stage approach has been retained with the Preliminary Impact Assessments now being called 'Road Maps', but this should no longer be seen as a selection process as such. Instead it should be seen as a milestone for the assessment work already underway or about to get underway. To reflect this, and the fact that some Impact Assessments may remain limited also at a late stage, the 'Extended Impact Assessments' have since the beginning of 2005 been renamed simply 'Impact Assessments' (European Commission 2004). However, the road maps and the Impact Assessments as well as the guidelines, are not clear as to whether the Road Maps and Impact Assessments should be seen as status reports in a continuing process or simply as one-off events. Therefore it is possible to interpret the Road Maps and Impact Assessments as still being a two-stage process.

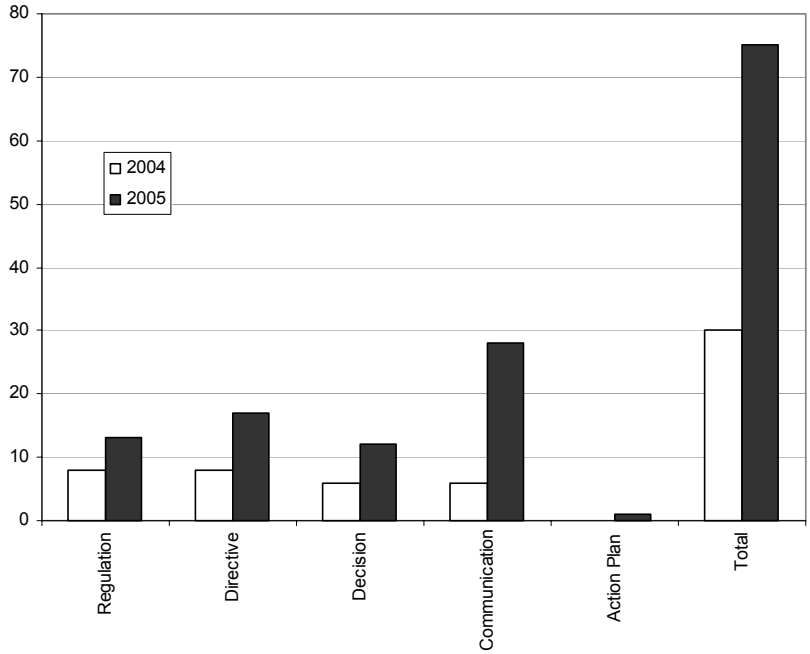
4.2 Changes in coverage from 2003 to 2005 – in practice

In the Commission Work Programme from 2003, 43 proposals were formally identified as requiring an Extended Impact Assessment. By February 2004 only 16 of the expected 43 Extended Impact Assessments had been completed (Wilkinson et al. 2004). However, in October 2004, the Commission announced that more than 50 Extended Impact Assessments of proposals had been completed and that this represented approximately 50% of the major Work Programme proposals (European Commission 2004). According to the Commission Impact Assessment homepage updated in March 2006, 21 Extended Impact Assessments were completed in 2003, 30 in 2004 and 75 in 2005. Thus, many 2005 Impact Assessments were only made public after the October 1st 2005 cut-off point used in this report.

Following the 2005 Communication on Impact Assessment and the 2005 guidelines, it would be expected that the indicated broader coverage would also in practice manifest itself in a higher total number of Impact Assessments and a broader coverage of different

types of Commission initiatives, all else being equal. It should be noted, however, that the new guidelines were only published in June of 2005. Given the time required to undertake an Impact Assessment, it is therefore unlikely that we will be able to detect changes in practice due to these new guidelines within our sample. In Chapter 11, we will discuss the extent to which such changes can be expected.

Figure 4.1. The number and type of Impact Assessments of different proposals for the years 2004 and 2005.



Nevertheless, a change in coverage can actually be observed from 2004 to 2005. Figure 4.1 shows that a clear increase in the number of Impact Assessments has taken place – from 30 in 2004 to 75 in 2005.[4] In the same period the number of proposals put forward in the Commission Work Programmes has fallen slightly – from 126 to 110.[5] From figure 4.1 it appears that the distribution of Impact Assessment according to type of proposal has changed towards more communications being covered in 2005. This is mainly due to a shift in distribution of types of proposals in the Commission Work Programme from 2004 to 2005, and not as could otherwise be hypothesised, due to an intention of the

[4] These numbers are the total numbers of Impact assessments in the two years and thus not the same numbers that are analysed in this report.

[5] The number of proposals in Work Programme for 2004 is based on the proposals corresponding to political priorities for 2004 (126 items). Other proposals that were categorised as "likely to be brought forward in 2004" are not considered (147 items). See also the Commission Work Programme for 2004 (European Commission 2003).

Commission to broaden the range of initiatives covered in the Impact Assessment system in 2005. In fact, Impact Assessments have been performed for a higher proportion of all types of proposals within the Work Programmes in 2005 than in 2004. This increase in the relative share of proposals covered by Impact Assessment is almost the same for the different types of proposals, except for decisions, where the relative share of impact Assessments has not increased.

4.3 Proportionality in terms of proposals selected for Impact Assessment

Despite the guiding principles there has been reported widespread confusion within the Commission about which proposals should undergo Impact Assessment (Wilkinson et al. 2004). The definition of what constitutes a 'major' policy proposal was not initially clarified and within the Commission the process of Impact Assessments generally appears to be regarded as burdensome (ibid.). Most Directorates General (DGs) therefore have been reluctant to 'volunteer' their measures. The list in the 2003 Work Programme was eventually finalised through political bargaining in a special meeting of Chefs de Cabinet (ibid.)

The 2003 Impact Assessments can therefore not be expected to have been chosen based on a consistent set of selection criteria reflecting the principle of proportionality. Furthermore, Wilkinson et al. (2004) identified several proposals not included in the Impact Assessment system that are expected to have a significant influence on aspects of sustainable development.

The 2005 Impact Assessment guidelines and the preceding Communication from the Commission are clear in terms of which types of proposals should undergo detailed Impact Assessments and which proposals should be more broadly assessed. However, as for proportionality regarding what initiatives to include and not to include in the overall Impact Assessment system, there is little guidance. One exception is the statement that Impact Assessments should be undertaken for all items on the Commission's Work Programme (European Commission 2005d). This appears to be the interpretation of the intention that only significant initiatives should undergo Impact Assessments.

But is it enough only to assess the items in the Work Programme – or maybe too much? An alternative possibility would be that only Impact Assessments of initiatives with expected net benefits or costs above a certain threshold should take place, or instead that the level of detail of a given Impact Assessment could be determined by such a threshold (Renda 2006).

Unfortunately, it has not been possible for us to assess the significance of the Impact Assessments covered, and whether this adequately reflects whether an Impact Assess-

ment is warranted or not, and how detailed it should be. This is because this type of information has not been supplied in Impact Assessments in a systematic fashion – only in a few instances are preliminary quantitative estimates supplied reflecting the order of magnitude of the expected effects of the initiatives covered, or a qualitative statement about the significance is offered.

As will be discussed further in chapter 11, more elaborated screening of initiatives with respect to proportionality could potentially point to proposals not currently under the Work Programme who are more significant than less important proposals under the Work Programme.

5 How are policy options analysed in the Impact Assessments?

Main Points

On average, each Impact Assessment covers four policy options, most often including a 'no-policy' option and a 'business-as-usual' option. This means that many Impact Assessments consider only one or two policy options in detail, and consequently it will often be difficult to identify the best policy option for achieving underlying policy objectives.

5.1 The number of policy options

An Impact Assessment is an aid to make decision-making better informed (European Commission 2002c). Here it is essential not to rush over the various policy options and jump to premature conclusions. Instead, the Impact Assessment can potentially provide policy-makers with information on the various policy options and thus create a base for considered political judgement.

In the Impact Assessment guidelines (European Commission 2002a; European Commission 2005e) the term 'policy options' is briefly discussed. A policy option consists of two components: a so-called 'basic approach' and a 'policy instrument'. An example of a choice of a basic approach could be that in order to address traffic problems, measures could focus on limiting road transport or increasing railway transport. In the annexes to the 2005 guidelines (European Commission 2005e) eight categories of policy instruments are given:

- Monitoring self-regulation
- Open method of co-ordination
- Provision of information and guidelines
- Market-based instruments
- Direct public sector financial interventions
- Co-regulation
- Framework directives
- Prescriptive regulatory actions

More or less ambitious version or mixtures of approaches and instruments can, of course, be developed. There are no rules on how many options should be included in the Impact

Assessment. The 2005 guidelines suggest that "*the most promising options (usually three or four, excluding the 'no EU action')*" should be subject to an in-depth analysis (European Commission 2005e). The number of policy options analysed in Impact Assessments is presented in Table 5.1. Furthermore, maximum and minimum numbers of options that have been considered in some of the Impact Assessments are shown. The Table shows the number of options when the 'no policy' option is excluded as well as when it is included as a separate option.[6]

Table 5.1 The number of policy options covered in the Impact Assessments

	Number of options considered*					Average number of options considered	Max.** / Min.
	0	1	2	3	>3		
The 'No policy'* option excluded	1	3	12	12	30	3.5	13 / 0
The 'No policy'* option included	0	3	5	17	33	4	13 / 1

*For definition of the 'no policy' option, see section 5.1.2.

**Maximum and minimum numbers of options that have been considered in one Impact Assessment

When the 'no policy' option is excluded, the average number of policy options per Impact Assessment is 3.5. The average number of policy options per Impact Assessments is 4 when the 'no policy' option is included. The highest number of options analysed is 13 and the lowest number is one (when the 'no policy' option is included as a separate option). The majority of the Impact Assessments have considered three or more policy options. Three Impact Assessments have only considered one policy option. These are the Impact Assessments for the proposals given in Box 5.1. If an Impact Assessment only analyses one policy option, there is a risk that the Impact Assessment will contribute only little to the decision process, since it will then mostly provide information on something already decided upon rather than inform the decision as such. However, it may still add some value to the decision-making process, if it can contribute to the fine-tuning of the chosen option.

[6] For definition of 'no policy' option, see section 5.1.2.

Box 5.1. Impact Assessments that only consider one policy option

- Communication on the Environment & Health Action Plan (SEC(2004)729)
- Communication on Accelerating progress towards achieving the Millennium Development Goals – The European Union's contribution (SEC(2005)452)
- Communication on the Tenth Anniversary of the Euro-Mediterranean Partnership: A work programme to meet the challenges for the next five years (SEC(2005)483)

The number of policy options included in the Impact Assesments is in line with the observations on the 2003 Impact Assessments by Wilkinson et al. (2004). For the 2003 Impact Assessments, the number of policy options ranged from one to 11 and most of the Impact Assessments put forward between two and four options. Lee & Kirkpatrick (2004) also conclude in their detailed review of six Impact Assessments from 2003 that the range of policy options is relatively narrow, restricting the foundation for a successful assessment. Four 2003 Impact Assessments analysed one policy option only. This reflected the influence of pre-existing policies or legislation (Wilkinson et al. 2004).

Thus, it is likely that Impact Assessments that only consider one policy option are merely applied as a means of finding the appropriate level of ambition of the proposal covered instead of providing real choices between different policy options. However, this is not in conflict with the 2002 guidelines (European Commission 2002a).

5.1.1. 'Business as usual' option

According to the guidelines (European Commission 2002a; European Commission 2005e) one of the following four policy options should always be included:

- 'business as usual',
- status quo,
- 'no policy change' or
- 'no EU action'.

One exception is in cases where an obligation to act is laid down by the treaties. One of the four options forms a baseline or a point of reference against which the other options should be evaluated (European Commission 2002a). A crucial concept here is the 'opportunity cost' of regulation, i.e. what would have happened in the absence of the policy proposal. The assessment of this option thus addresses the question of whether or not to regulate. The 'business as usual' option is also relevant in cases where the regulation is time-limited and the question is whether it should continue or not. In order to make use of the 'business as usual' scenario as a point of reference for comparison, it is essential to

cover future trends of the main variables, such as demographic, technological and economic developments.

The 'business as usual' scenario is mentioned in approximately 80 % (48/58) of the Impact Assessments, and is assessed in approximately 50 % (30/58).[7]

The 'business as usual' scenario is the most obvious point of reference for other options to use as a benchmark in the comparison. Therefore, the fact that only 50% of Impact Assessments actually assess the 'business as usual' scenario is somewhat surprising since this is described as an important item in the Guidelines.

Compared with the 2003 Impact Assessments (Wilkinson et al. 2004), there is no change in the share of Impact Assessments that consider the 'business as usual' scenario. Here 17 out of 21, i.e. 81% of Impact Assessments considered the 'business as usual' scenario.

There appears to be a lack in the application of the baseline as a point of reference to which the new policy options should be compared. Only in 28% (16/58) of the Impact Assessments has the baseline scenario been compared with the new policy options. The quality of the baseline scenarios that are used for comparison may also be improved. This is due to the fact that only two-thirds (11/16) of the Impact Assessments that apply a baseline scenario describe the scenario in detail and only half (8/16) include projections of policies into the future.

The 2005 Impact Assessment guidelines (European Commission 2005e) suggest that the 'business as usual' scenario should be applied as the baseline. In the sample covered in this report, only 75% (12/16) of the Impact Assessments that apply a 'business as usual' scenario use it as baseline. The rest apply the 'no policy option' or an alternative baseline.

5.1.2 The 'no policy' option

We have checked whether or not a 'no policy' option has been included in the Impact Assessment. The 'no policy' option indicates no regulation at the EU level. The 'no policy' option means that existing policy will be removed or that in the case of no existing policy, there will neither be a policy in the future. In cases where existing regulations are in place, the 'no policy' option is thus used to evaluate whether it is beneficial to continue regulation at the EU level or if deregulation would be more beneficial. The option functions

[7] Note the difference between "mentioned" and "assessed", which is only made for the options "no policy" and "business as usual". This is similar to the distinction made in section 3.1 about coverage of impacts.

as a 'business as usual' scenario or 'status quo' in the cases where the proposed option will regulate new policy areas.

Initially, in 2001 the Mandelkern group supported the assessment of a 'no policy' option or at least consideration of alternatives to regulation (European Commission 2001d). Furthermore, the guidelines from 2005 (European Commission 2005e) state that "*Given the amount of existing legislation, a 'doing less' option could also be considered. If, for example, existing measures in a certain area do not produce the expected effects, creating a new instrument is not necessarily the best remedy. Streamlining, simplifying and 'pruning' the existing legislation might produce better results".* In this context the 'no policy' option can be seen as an expression of 'pruning' or a 'maximum of simplification'.

The EU Better Regulation agenda was initially targeted at simplifying and improving the regulatory environment (European Commission 2001b; European Commission 2002b). More recently, the objective has been more in line with the Lisbon Strategy, i.e. to create more jobs and promote economic growth (European Commission 2005d). The Commission has identified three key actions: Simplifying existing legislation, withdrawing Commission proposals already under consideration by the Council and European Parliament and strengthening the scrutiny of proposals in the early stages of development (Wilkinson et al. 2005). For instance, as a part of the Better Regulation Plan the Commission has screened 183 proposals for EU laws pending the European Parliament and Council and decided to scrap 68. This provides a clear indication of the Commission's desire to 'prune' and simplify the European regulation. In the current regulatory environment the 'no policy' option is thus of high relevance.

Box 5.2. Arguments for not assessing the 'no policy' option

- Conflicts with the European political targets (SEC(2005)693)
- The option has adverse economic consequences (SEC(2005)439)
- Conflicts with the Lisbon Agenda and the EU Sustainable Development Strategy (SEC(2004)206)
- Late in decision-making process (SEC(2004)161)
- The identified needs of the sector will not be met (SEC(2004)955)
- The 'no policy' option does not respond to the obligations of the treaty (SEC(2004)960)
- Inconsistent with Community policy and the precautionary principle (SEC(2005)1133)

The 'no policy' option has been mentioned in approx. 45% (27/58) of the Impact Assessments and assessed in approx. 20% (11/58)[8]. In some Impact Assessments reasons for not assessing the 'no policy' option are given. These are mentioned in Box 5.2. Most frequently, legal or political obligations are the reason for not assessing the 'no policy' option.

5.1.3. The distribution of the different types of policy options

Table 5.2 shows how many and what type of policy options have been considered in the Impact Assessments. In all, 14 Impact Assessments have considered the 'business as usual' scenario and the 'no policy' option as well as more than one other policy option. 24 Impact Assessments have considered the business as usual' scenario and more than one other policy option. More than half (38) of the Impact Assessments thus fully comply with the original intention behind the Impact Assessment scheme, when it comes to the evaluation of different policy options.

Table 5.2 The number and type of policy options considered in the Impact Assessments.

Policy options - excl. "no policy" and "business as usual" options	"No policy" option	"Business as usual" option	**Number of Impact Assessments**
0	X	X	**0**
		X	**0**
	X		**1**
			0
1	X	X	**6**
		X	**4**
	X		**1**
			2
>1	X	X	**14**
		X	**24**
	X		**5**
			1

Note: In six instances the 'no policy' option is the same as the 'business as usual' option.

[8] It should be noted that when there is no existing regulation in the area the 'no policy' option and the 'business as usual' option are by definition the same. Thus, the percentages given would be higher if proposals that introduce new regulation are subtracted from the total of 58 Impact Assessments.

Six Impact Assessments have considered the 'business as usual' scenario, the 'no policy' option and one other policy option. Four Impact Assessments have considered the 'business as usual' scenario and one other policy option. These ten Impact Assessments do not provide the policy-maker with a real choice between several policy options. However, the policy-maker is still left with the choice between a 'new policy' option, 'no policy' and 'business as usual'.

5.2 The number of policy options according to type of proposal, time of completion and responsible Directorate General

5.2.1. Type of proposal and the number of policy options

Table 5.3 shows the number of policy options analysed in the Impact Assessments for the different types of proposals. In general, the directives and the decisions have relatively many policy options on average per Impact Assessment (they all consider at least three options). There are three Communications with only one policy option considered.

Table 5.3. The number of policy options seen in relation to type of proposal

Type of proposal	Average	Number of options*									
		0	1	2	3	4	5	6	7	8	13
Regulations	3			4	4	2	1			1	
Directives	5				3	2	5	3			
Decisions	4				5	1	6		1		
Communications	4		3	1	4	8	2				1
Action plans	3				1						

* Including the 'no policy' option and the 'business as usual' scenario.

5.2.2. The number of policy options over time

Table 5.6 shows the number of considered options in 2004 versus the number considered in 2005.

Table 5.4. The number of policy options* in the Impact Assessments in 2004 versus 2005.

Year	Average no. of options per Impact Assessment	Number of policy options covered					
		1	2	3	>3	Highest	Lowest
2004	4.3	1	1	6	16	8	1
2005	3.8	2	4	11	17	13	1

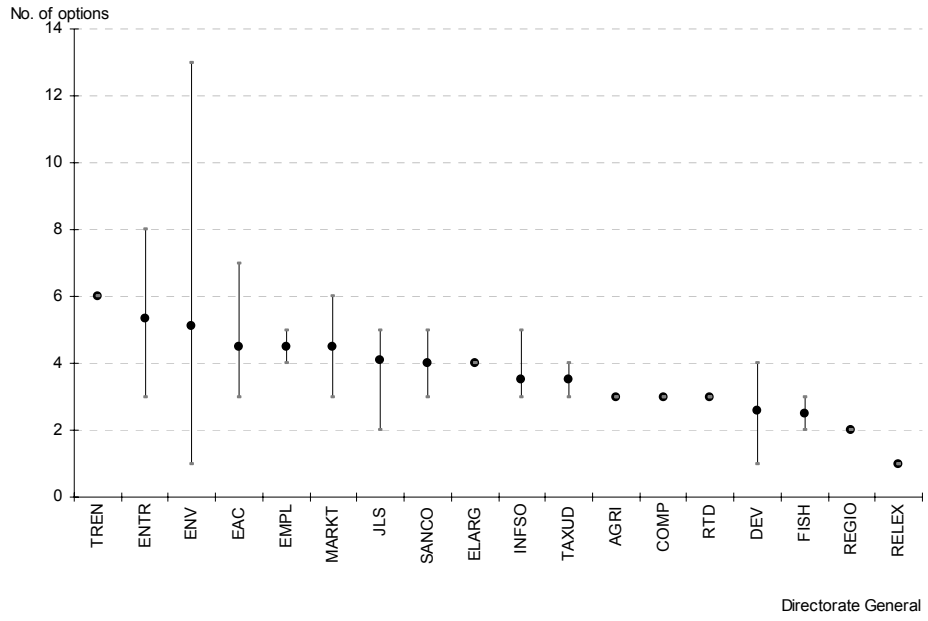
*The number of policy options includes the 'no policy option' and 'business as usual' options.

The average number of options per Impact Assessment was 4.3 in 2004 and 3.8 in 2005. The highest number of policy options considered was 8 in 2004 and 13 in 2005. The majority of the assessments had more than three options in 2004 as well as in 2005, but the number of assessments with more than three options was relatively smaller in 2005 (17/34) as compared to 2004 (16/24). So all in all, if 2005 is compared with 2004, there appears to be a small decline in the average number of options covered. However, it may be difficult to conclude too much on the basis of only two years' worth of information and not controlling for other determinants.

5.2.3. Directorate Generals and the number of policy options.

In Figure 5.1, the average, maximum and minimum numbers of policy options in the Impact Assessments are given for the responsible Directorates General (DGs).

Figure 5.1: Number of policy options* as a function of Directorate General**



* Including the 'no policy' option and the 'business as usual' scenario.

** The dots show the average number of policy options in the Impact Assessments issued by the responsible DGs. The lines mark maximum and minimum numbers.

On average, DG Transport and Energy (TREN) and DG Enterprise (ENTR) have approximately six options in their Impact Assessments. However, due to the low number of observations, the possible conclusions to draw on this basis are limited.

5.3 Discussion of proportionality with respect to options included in Impact Assessments

An important parameter in the evaluation of Impact Assessments is whether all relevant policy options have been covered. The present analysis shows an average of approx. 4 policy options per Impact Assessment. Is this enough?

In theory, there are almost always many potential policy options; therefore the most promising options need to be defined. Here the concept of proportionality is highly relevant. However, there is only limited guidance concerning the specific application of the principle of proportionality with respect to the number of policy options in the 2005 Impact Assessment guidelines (European Commission 2005e)

Out of the 58 Impact Assessments, 45 address the issue of not considering policy options or dismissing them early in the process. Table 5.7 shows the arguments for dismissing policy options.

Table 5.5 Arguments for dismissing policy options*

Argument	Number of Impact Assessments
Proportionality	9
Lack of data	1
Widespread agreement on policy option by stakeholders	15
Late in the decision-making process	2
Difficult	1
Not compatible with other legislation	22
Case obvious	2
Policy option dismissed without argumentation	5
Others	19

*Numbers may not add up to 45 since more than one argument has been used in some Impact Assessments.

The most frequently used arguments for not considering a policy option seem to be potential conflicts with other legislation or widespread agreement on policy options by stakeholders. Considering the latter argument, this is understandable from an administrative efficiency point of view; why put effort into analysis of an option, which will never be adopted? However, if the overall aim of an Impact Assessment is to identify the best means of achieving an objective, this assessment should *in principle* be made independently of legislative constraints, stakeholder opinions and political considerations. If a policy option that is in conflict with other legislation turns out to be very favourable, this could point to a potential need for reform within other areas.

In two Impact Assessments, policy options have not been considered because the Impact Assessment is performed late in the decision-making process. In one sense, it might be a waste of resources and thus out of proportion to perform an Impact Assessment if agreement on one policy option has already taken place, but as argued earlier, some added value may still come from fine-tuning the option chosen. In line with this observation, the Mandelkern Report states that: *"Preparation of RIA [Regulatory Impact Assessment] should, whenever possible, be by the policy officials concerned and should start as soon as possible in the policy development process, continuing as a fundamental part of it"* (European Commission 2001d).

Thus, the sooner the Impact Assessment process begins, the wider the catalogue of possible options to consider will be, and the more influence on the decision process the Impact Assessment can potentially have. This points to the need for thorough analysis of many options, particularly in earlier phases of the policy process. This could be the case for Impact Assessments covering White Papers or Communications, or at least in the Road Maps, which could be seen as an early status report of how far work on particular Impact Assessments are. As documented by Torriti (2006), very few policy options are included in the 60 Road Maps covered in this study.

In nine Impact Assessments, the argument used was proportionality and in two Impact Assessments policy options were not considered because others seemed more obvious. As we will discuss further in Chapter 11, these can be seen as legitimate reasons for not covering a policy option if proportionality of analysis should be ensured. However, in order to make such an early exclusion of a policy option, some knowledge of the impacts of that particular option would be required. This might require documentation that is at least somewhat quantitative, covering economic as well as environmental and social dimensions in order to be credible. We will also return to this issue in Chapter 11.

Five Impact Assessments dismissed policy options without any arguments. It should be a requirement for an early exclusion of policy options that documentation or, as a minimum, some argumentation is provided.

6 What types of impacts are analysed in the Impact Assessments?

Main Points

The range of impacts covered by Impact Assessments is typically narrow, with 27 out of 58 Impact Assessments covering environmental, economic as well as social impacts. This is also reflected in a low average number of specific impacts covered per Impact Assessment – one environmental impact, three economic impacts and two social impacts per Impact Assessment on average. Often, only positive impacts have been covered, and little distinction is generally made between short term and long term impacts.

6.1 Number of impacts covered

Within the checklist applied to the 58 Impact Assessments covered by this report, the range of impacts is grouped in 3 overall areas: environmental, economic and social. These areas are then subdivided into several categories:

- 11 different for economic impacts, e.g. competitiveness, administrative costs of businesses and property rights.
- 12 different for environmental impacts, e.g. air quality, climate change and biodiversity and
- 9 different for social impacts, e.g. employment, social inclusion, and protection of particular groups.

In total the impacts covered are grouped into 32 possible impact categories – see Table 6.2 and Appendix 2. This is based on a list supplied in the 2005 Impact Assessment guidelines (European Commission 2005e), which is a further development of a similar list in the 2002 guidelines (European Commission 2002a). Furthermore, within each overall area, general description and other types of impacts can be marked.

In the 58 Assessments a total of 314 impacts, on average 5.4 impacts per assessment, have been covered, ranging from one to 17 impacts. Compared with the possible 32 types of impacts, five impacts per assessment may appear as a relatively low number (approx. 17% of all possible types of impacts) even though a given proposal would not be expected to have impacts in all areas. However, without detailed knowledge from the area that a given Impact Assessment is covering, it is not possible to determine whether all relevant

impacts have in fact been covered. This is therefore something we are unable to assess in the present report.

6.2 Distribution of environmental, economic and social impacts

Table 6.1 shows the number of impacts analysed within the three types of impacts in the different Impact Assessments. For environmental impacts in particular, the number of impacts analysed is very low, with an average of only 1.0 impact per Impact Assessment.

Table 6.1. The number of impacts analysed within environmental, economic and social categories per Impact Assessment

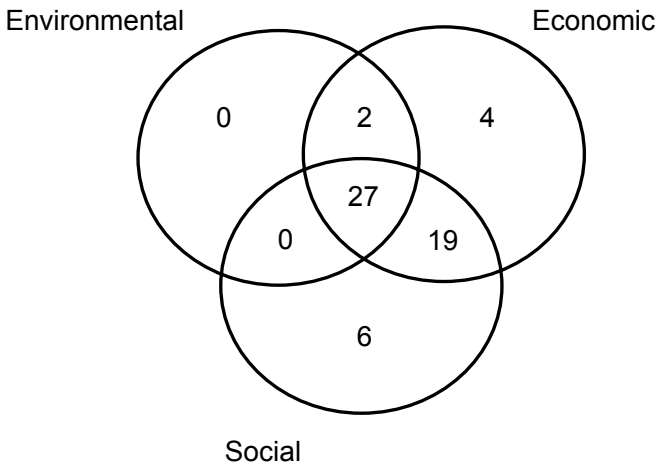
	Impact		
	Environ-mental	Economic	Social
Average number of impacts covered	1.0	2.5	1.9
The lowest/highest number of impacts covered	0 9	0 9	0 6
Average number of impacts with monetary quantification	0.1	0.4	0.1
The lowest/highest number of impacts with monetary quantification	0 2	0 4	0 2
Average number of impacts with other types of quantification	0.1	0.1	0.1
The lowest/highest number of impacts with other types of quantification	0 3	0 4	0 2
Average number of impacts with qualitative description	0.6	1.8	1.5
The lowest/highest number of impacts with qualitative description	0 6	0 9	0 6
Average number of impacts only briefly mentioned	0.2	0.2	0.2
The lowest/highest number of impacts with impacts only briefly mentioned	0 1	0 1	0 1

From Figure 6.1 it can be seen that in 29 out of the 58 Impact Assessments, environmental impacts are not covered at all. Similarly, six do not cover economic impacts at all, and six do not cover social impacts at all.

From the coverage of impacts it cannot be concluded whether the distribution in tables 6.1 and 6.2 reflect the full range of impacts that Commission proposals would be expected to have. However, it could be interpreted as a reflection of a wish by the Commis-

sion to include only the most important impacts due to considerations about Impact Assessment proportionality.

Figure 6.1: Impact Assessments with different combinations of environmental, economic and social impacts.



In general, however, it is very difficult to read from Impact Assessments whether the exclusion of impacts is due to a conscious decision – a belief that there will be no or negligible impact in this particular area – or whether impacts in these areas have been overlooked. At any rate, very little argumentation – or for that matter documentation – is to be found for why certain impacts have not been covered in Impact Assessments. In other words, there is a distinct need for more explicit restrictions of scope of the various types of impacts.

Table 6.2 provides an overview of the main categories of impacts that have been addressed in all 58 Impact Assessments. All categories have been addressed at least once, but many have only been addressed in very few Impact Assessments. One striking example is the macroeconomic environment, which has only been specifically addressed in one Impact Assessment. Impacts on innovation and research have been assessed in 12 of the 58 Impact Assessments, only one of which has done so in quantitative terms.

Table 6.2: Number of Impact Assessments covering different impacts

	Bm	Ql	Qn	M	Total (excl. Bm)
Economic					
General	11	11			11
Competitiveness, trade and investment flow		12	2	4	18
Competition in the internal market		11	1		12
Operating cost and conduct of business		8		4	12
Administrative cost on businesses		8		1	9
Property rights		2			2
Innovation and research		12		1	13
Consumers and households		6	1	5	12
Specific regions and sectors		11	2	4	17
Third countries and international relations		9			9
Public authorities		1		1	2
The macroeconomic environment		1		1	2
Other		11	2	2	15
Environmental					
General	10	9		1	10
Air quality		1	1	1	3
Water quality and resources		2	1		3
Soil quality or resources		1			1
The climate		1		1	2
Renewable or non-renewable resources		5			5
Biodiversity, flora, fauna and landscapes		1	2		3
Land use		1		1	2
Waste production / generation / recycling		3			3
The likelihood or scale of environmental risks		1			1
Mobility (transport modes) and the use of energy		3			3
The environmental consequences of firms' activities		2			2
Animal and plant health, food and feed safety		5			5
Other		1	2		3
Social					
General	13	10			10
Employment and labour market		13	5	2	20
Standards and rights related to job quality		4			4
Social inclusion and protection of particular groups		8	1		9
Equality of treatment and opportunities, non-discrimination		15			15
Private and family life, personal data		3			3
Governance, participation, good administration, access to justice, media and ethics		4		2	6
Public health and safety		12		1	13
Crime, Terrorism and Security		5			5
Access to and effects on social protection, health and educational systems		2			2
Other	1	12			12

Abbreviations: Briefly Mentioned (Bm), Qualitatively assessed (Ql), Quantified (Qn), Monetised (M).

6.3 Positive and negative impacts

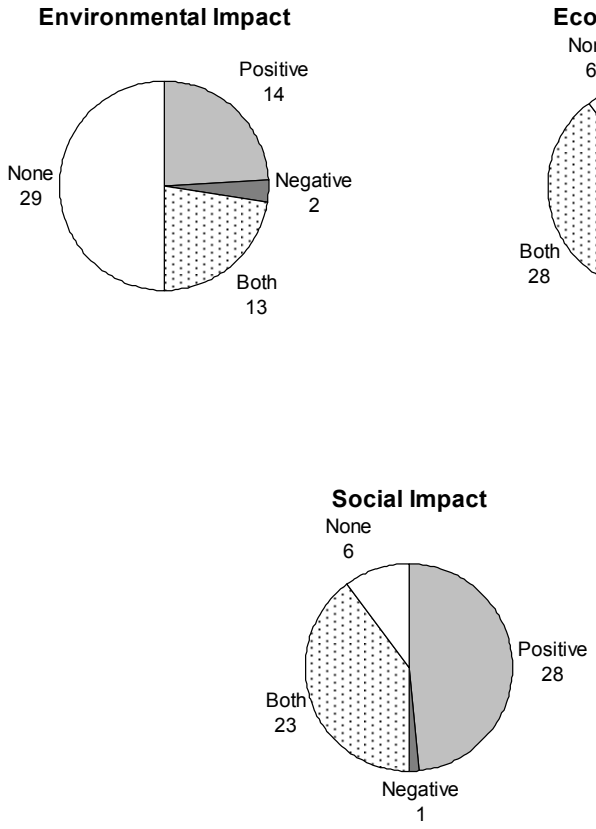
In order to make decisions by policy-makers as informed as possible, it is essential that both positive and negative sides of impacts are covered, not least in order to be explicit about the possible trade-offs involved in policy proposals.

In Figure 6.2, the Impact Assessments with impacts mentioned more than briefly, are categorised according to whether they contain analysis of both negative and positive effects.

For all three categories of impacts, a considerable proportion of the Impact Assessments addressing these types of impacts have only covered positive impacts. For 24 out of the 58 assessments only positive impacts have been covered. As even the most outstanding

proposals will always entail opportunity costs, it is unlikely that this appropriately reflects all possible impacts.

Figure 6.2. The number of Impact Assessments that cover both negative and positive impacts in different areas*.



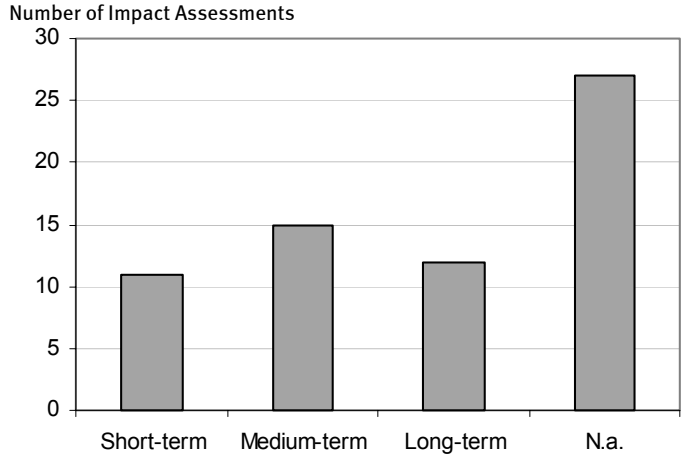
* Note that the burden on the EU budget is not counted as an effect in this analysis

6.4 Time frame of the Impact Assessments

Wilkinson et al. (2004) found that Impact Assessments from 2003 were predominantly focusing on short-term economic costs. In Figure 6.3 the number of Impact Assessments from 2004 and 2005 with specifically stated short, medium and long-term impacts is shown. At first sight it would appear that compared with 2003, the time frames covered have shifted towards more medium and long term impacts in 2004 and 2005. However, this is only taking the specifically stated impacts into consideration. 'n.a.' covers Impact Assessments where impacts covered do not refer to a specific time frame, either because they are only qualitatively mentioned, or because the impact is stated as one figure (with-

out reference to timeframe). Since we do not know anything about the distribution over time of the n.a. category, it is difficult to reach any clear conclusion with respect to time frame.

Figure 6.3 The number of Impact Assessments covering short, medium and long-term impacts*



*Impact Assessments with only briefly mentioned impacts have been excluded. We have defined 'short-term' as below 3 years, 'medium term' as between 3 and 10 years, and 'long-term' as above 10 years.

It should be mentioned that this overview deals with impacts covered in the Impact Assessments and not the impacts, which for some reason are not included. Nor does it relate to the way in which these impacts are dealt with (e.g. in qualitative or quantitative terms). It is therefore difficult to infer from this overview, if medium- or long-term impacts are adequately taken into consideration in Impact Assessments as a whole. If anything, the fact that the timeframe in approximately half of all Impact Assessments is not explicitly addressed may suggest that they are not.

Can limited analysis of long-term impacts be seen as a consequence of proportionality? The most important issue here is whether any significant long-term impacts are expected or not. Therefore, a basic requirement for Impact Assessments would be to justify why medium or long-term effects may not be possible to assess (or do not exist) or that this assessment would demand too many resources and thus be out of proportion.

7 With what degree of detail are impacts analysed in the Impact Assessments?

Main Points

Quantification of expected impacts only takes place in less than half of all Impact Assessments. The number of monetary estimates of environmental and social impacts is low. Most impacts are assessed in qualitative terms, as is most distributional analysis. There is relatively little coverage of uncertainty and sensitivity in Impact Assessments.

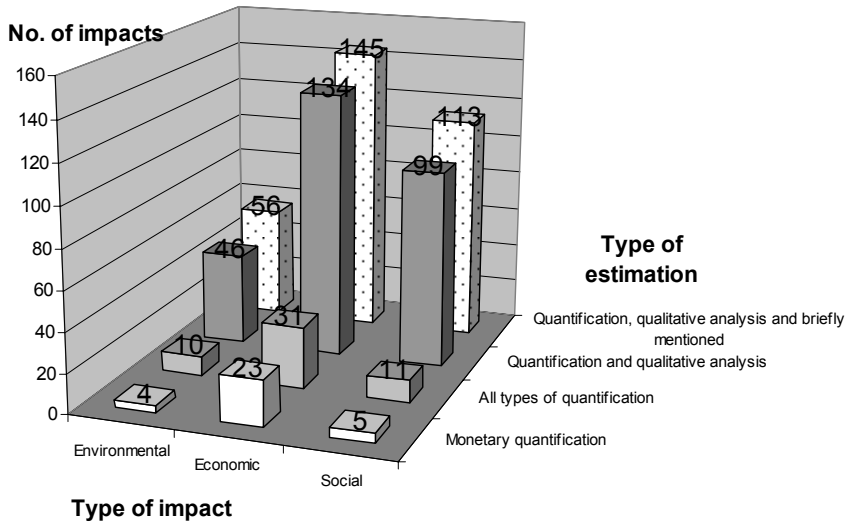
This chapter analyses and discusses the level of detail in the Impact Assessments, primarily in terms of degree of quantification, but also in terms of how much effort is spent on covering distributional effects and uncertainty. In our analysis we have classified all impacts covered as either a monetary quantification, general (non-monetary) quantification, as qualitatively described or as only being briefly mentioned.

7.1 Degree of quantification

In Figure 7.1 the 314 impacts, which is the total number covered in the 58 Impact Assessments, is distributed according to type of impact and to the degree of quantification. From this figure it is evident that the number of monetary estimates of environmental and social impacts is low, whereas there are a relatively large number of qualitative descriptions of expected economic and social impacts.

Thus, as also pointed out by Renda (2006), very little monetary quantification takes place, particularly in the social and environmental domains. There may be several possible reasons for this – e.g. lack of quantification skills, a genuine lack of reliable data, too few resources put into the assessment or a combination of these factors. Whether this has been made with no deliberate consideration of the significance of the initiative covered, or whether it reflects Impact Assessment proportionality applied in practice remains an open question.

Figure 7.1. The cumulative frequency of the various types of analysis (degree of quantification) in relation to the types of impacts



Note: The degree of quantification is presented here as a cumulative distribution. Starting from the front the number of Impact Assessments where monetary quantification has taken place is presented. Then it is progressing to all types of quantification (monetary as well as non-monetary), followed by qualitative analysis as well as quantitative analysis. Finally, all types of coverage (including impacts briefly mentioned) is presented in the back.

It is difficult to compare the overall magnitude and importance of effects on competitiveness, employment and the environment if they are only presented in qualitative terms. Monetary quantification is one of the few ways impacts can be translated into a common measurement unit and trade-offs, e.g. between environmental and economic benefits, can in this way be made explicit and transparent (Pearce 2001). Not only would this require that monetisation takes place in environmental, economics and social domains, it would also require that all major impacts (both positive and negative) within these domains are monetised. Otherwise, it will not be possible to compare these impacts on the same terms.

In preparation for the Bathing Water Directive (76/160/EEC) in 1976 and during the revisions in 1994 and 2000 there was no monetary quantification of environmental benefits and the expected cost of the Directive. The Commission defended the omission of a cost-benefit assessment by arguing that the benefits must exceed costs because benefits were positive and the compliance cost would fall due to expected simplification of standards. Furthermore, it was argued that there was no reliable basis upon which an objective calculation to measure the value and security of a better environment can be made (Pearce 2004).

This point to a discussion about the degree to which monetary estimates of environmental costs and benefits can be produced that will cover all dimensions of environmental impacts, and therefore how desirable it is to attempt to quantify these impacts. This may be relevant, for example in instances where certain ecological thresholds and potentially irreversible decisions are involved. We will not be able to cover this fundamental discussion in full here. Pearce (2001) and Ackerman & Heinzerling (2004) give a discussion of some of the more fundamental ethical/philosophical issues involved in monetary quantification of environmental impacts. This discussion is also relevant for impacts on fundamental rights of people, where quantification of impacts will be difficult.

7.2 Distributional analysis

Of the 58 Impact Assessments, 22 have performed some form of analysis of the distribution of impacts. Various types of distribution analysis are possible. In our analysis we have defined eight categories. These are given in Table 7.1, where the number of Impact Assessments that have applied the different forms of distribution analysis is stated.

Table 7.1 The number of Impact Assessments that have applied the various types of distribution analysis.

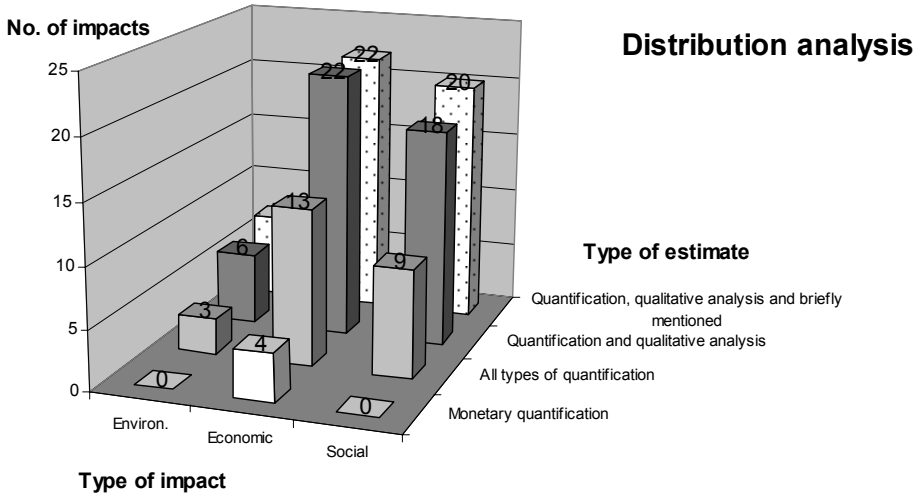
Type of distribution	Number of Impact Assessments
Geographical distribution between Member States	6
Geographical distribution EU versus non-EU	5
Distribution between sectors, types of business, consumers/producers	12
Income distribution	0
Gender distribution	4
Ethnic distribution	4
Distribution over time	4

It is striking that only six Impact Assessments have addressed distributional effects across Member States. Instead, a significant part of the distributional analysis undertaken in Impact Assessments appears to focus on the distribution between sectors, types of businesses and producers/consumers.

The result that only five Impact Assessments have addressed geographical distribution outside the EU confirms the findings from Opoku & Jordan (2005), who find very little coverage of effects of EU policies on countries outside EU in Impact Assessments.

Within the 22 Impact Assessments with some distributional analysis, the type of analysis varies for the three main types of impact. The type of analysis applied is given in Figure 7.3. Given the low overall incidence of monetisation of environmental and social impacts, it is not surprising that the analysis of the environmental and social distribution of effects has not made use of monetary quantification. Some use of (non-monetary) quantification does however take place for distributional analysis. This is in particular, of economic and social impacts – but as for the general analysis of impacts, most distributional analysis takes the form of qualitative discussion.

Figure 7.3 The cumulative frequency of the various types of distributional analysis (degree of quantification) in relation to the three types of impact



Note: The degree of quantification is presented here as a cumulative distribution. Starting from the front the number of Impact Assessments where a monetary quantification of distributional effects has been made Is presented. Then it is progressing to all types of quantification (monetary as well as non-monetary), followed by qualitative distributional analysis as well as quantitative analysis. Finally all types of coverage (including impacts briefly mentioned) is presented in the back.

7.3 Analysis of uncertainty and sensitivity

Performing an Impact Assessment is naturally subject to great uncertainties, since they are basically ex-ante assessments of expected future outcomes. Thus, both the expected magnitude of impacts and the range of types of impacts will always be uncertain, and often data for many possible impacts do not exist. However, only nine out of 58 Impact Assessments mention uncertainty with respect to assumptions or data.

Another way of dealing with the large uncertainties is the application of sensitivity analysis. One possibility here is to vary all variables to the same degree to see which parameter

has the largest influence on the result. The certainty of the result can be greatly improved if the quality of the most sensitive parameter is improved. However, only two out of 58 Impact Assessments address sensitivity issues.

The first Impact Assessment where this was done, was on the Communication on Winning the Battle Against Global Climate Change (SEC(2005)180). Here sensitivity analysis was performed with 31 key inputs, including the discount rate and equity weighting. The second was on the Thematic Strategy on Air Pollution and the Directive on Ambient Air Quality and Cleaner Air for Europe (SEC(2005)1133). Here monetary estimates were evaluated in the economic and social areas and a quantitative evaluation on the environmental impact was performed. The sensitivity analysis evaluated the cost estimates when benefits were altered.

8 What characterises quantitative and qualitative Impact assessments?

Main Points

When monetisation is undertaken, it most often does not cover environmental and social impacts. A full cost-benefit analysis is therefore not possible based on the data represented in any of the Impact Assessments covered. Only a limited proportion of Impact Assessments distinguish between a 'welfare' approach and a 'financial' approach to economic analysis. Impact Assessments with qualitative analysis only are generally less detailed and also cover fewer options and impacts.

In this chapter we will go into more detail regarding the description of how quantitative and qualitative analyses have been undertaken in the Impact Assessments in 2004 and 2005. This will be followed in Chapter 9 with some discussion of what explains current patterns of quantification.

8.1 Quantification according to type of proposal, time of completion, and responsible Directorate General

As stated in the 2005 Commission guidelines (European Commission 2005e), the level of detail in Impact Assessments should reflect their significance. Thus, white papers, action plans and communications should contain a 'broader' analysis, whereas regulations and directives should be analysed in more depth. It could therefore be expected that Impact Assessments building on the white papers, action plans and communications of more 'preliminary' types of Commission initiatives would be employing less quantitative analysis.

Table 8.1 shows the different types of proposals and the use of monetary quantification for environmental, economic and social impacts. Here it appears that the largest share of monetary estimates of environmental impacts can be found in the Impact Assessments of directives. Here two out of 13 of the Impact Assessments have monetary estimates of environmental impacts. Besides the Impact Assessments for directives, only one Impact Assessment out of nineteen communications has included monetary quantification of the environmental impact. When it comes to monetary quantification of economic impacts, again the directives take the largest share, having seven out of 13. In total, some monetary quantification has been applied in 17 out of 58, i.e. 29% of Impact Assessments.

Table 8.1 Quantification in Impact Assessments in relation to the type of proposal assessed

Type of proposal	Total number of Impact Assessments	Monetary quantification*			No quantification
		Environmental impacts	Economic impacts	Social impacts	
Regulations	12	0	4	1	7
Directives	13	2	7	2	6
Decisions	13	0	1	1	10
Communications	19	1	3	0	15
Action Plans	1	0	0	0	1

* Non-monetary quantification is not included in the table and Impact Assessments with e.g. quantification of both environmental and economic impacts will count twice in the table.

Why is the share of Impact Assessments of directives with quantification higher than for Impact Assessments of other types of proposals? Directives in general lend more flexibility as to the implementation in Member Countries than regulations do. This could make quantification of effects more complicated in directives since more implementation options are possible. Therefore, it is somewhat surprising that quantification appears to be more widespread there than for regulations, where little member state flexibility is generally possible. However, it is possible that the directives covered in our sample have been perceived as being more significant than the regulations, and that the observed pattern is therefore due to proportionality considerations. This possibility will be dealt with in Chapter 9, where we will discuss in more detail what may cause the varying level of quantification in Commission Impact Assessments.

The Impact Assessments without quantification are, to a large degree, communications. In all, 15 out of 19 communications, as can be seen from Table 8.1, describe the impact only qualitatively. It is also apparent that seven out of 12 Impact Assessments of proposals for regulations do not employ any quantification, whereas Impact Assessments of proposals for directives generally have more quantification.

Renda (2006) observed a decline in quality over time of Impact Assessments (reflecting less quantification in 2005 than in 2004 and 2003). From Table 8.2, we can confirm that an increasing proportion of Impact Assessments do not perform any quantification (from 15 out of 24 in 2004 to 24 out of 34 in 2005). However, since we only have two observations in time and very minor differences, it is not possible to make definite conclusions about a trend. Also, if a decline in the degree of quantification over time has taken place, this may to a large degree reflect an increasing inclusion of proposals at an earlier stage of their development (e.g. predominantly descriptive communications, containing mostly

discussions at a high level of generality). This possibility was already observed by Wilkinson et al. (2004), who warned that an inclusion of all Commission proposals under the Impact Assessment would run the risk of leading to a decline in overall quality.

Table 8.2 Quantification in Impact Assessments in relation to year of completion

Type of proposal	Total number of Impact Assessments	Monetary quantification*			No quantification
		Environmental impacts	Economic Impacts	Social impacts	
2004	24	1	8	1	15
2005	34	2	7	3	24

* Non-monetary quantification is not included in the table and Impact Assessments with e.g. quantification of both environmental and economic impacts will count twice in the table.

Table 8.3 shows the use of monetary quantification with regard to the DG responsible for conducting the Impact Assessment. DG Environment has used monetary estimates for environmental impacts in some of its Impact Assessments. By contrast, DG Enterprise and Industry has performed monetary estimates of economic impacts in two of their three Impact Assessments, but environmental effects have not been quantified in monetary terms in any of their Impact Assessments, nor addressed qualitatively. DG Education and Culture has issued six proposals and none of them have performed any monetary quantification.

It appears from Table 8.3 that DG Environment tends to include more monetary quantification of environmental effects than other DGs. This is not surprising, since legislation originating from this body will be expected to have more direct effects on the environment than legislation from other DGs. However, it is worth noting that DG Environment also appears to do more monetary quantification in other domains than its own main area. This is a different conclusion from the one drawn in Renda (2006), who does not rank DG Environment among the best performers in terms of quantification. One word of caution in this respect is that the sample size for individual DGs is low, making it difficult to draw wide-ranging conclusions.

Table 8.3 Quantification in Impact Assessments in relation to responsible Directorate General

Responsible Directorate General*	Total number of Impact Assessments	Monetary quantification**			No quantification
		Economic Impacts	Environmental Impacts	Social Impacts	
Justice, Freedom and Security	10	2		1	8
Environment	8	3	2	2	4
Education and Culture	6				5
Development	5	1			4
Health and Consumer Protec.	4	1			3
Information Society and Media	4	1			3
Internal Market and Services	4	2			2
Enterprise and Industry	3	2		1	
Agriculture and rural develop.	2				1
Empl., Soc. Aff. and Equal Opp.	2				2
Fisheries and Maritime Affairs	2				2
Taxation and Customs Union	2	1			1
Competition	1				1
Regional Policy	1				1
Research	1	1			
Transport and Energy	1	1	1		
Enlargement	1				1
External Relations	1				1

*DGs which have not been responsible for any Impact Assessment have not been included in the table.

** Non-monetary quantification is not included in the table, and Impact Assessments with e.g. quantification of both environmental and economic impacts will count twice in the table.

8.2 What characterises the 17 Impact Assessments where some monetary quantification has taken place?

It is interesting to take a further look at the Impact Assessments which include a monetary quantification of impacts, in order to find out in detail how this has been done, but also to see whether these Impact Assessments have any distinguishing features.

A crucial quality indicator is whether all impacts, or only a minor part of them, have been quantified. In all, 17 Impact Assessments have applied monetary quantification. Table 8.4 shows these assessments and the proportion of the impacts that are quantified in monetary terms.

Table 8.4 Share of impacts with monetary quantification*

Proposal	Environmental Impacts	Economic Impacts	Social Impacts	All impacts
Thematic strategy on Air Pollution and the Directive on ambient Air Quality and cleaner Air for Europe (SEC(2005)1133)	2/9	2/4	2/3	6/16
Decision of the European Parliament and of the Council concerning the seventh framework programme of the European Community for research technological development and demonstration activities (2007-2013) (SEC(2005)430)	0/1	3/5	0/2	3/8
Proposal for a Council Directive on taxation of passenger cars in the EU (SEC(2005)809)	0/1	2/5	0/3	2/9
Directive amending Council Directive 91/440/EEC on the development of the Community's railways (SEC(2004)236)	1/2	1/5	0/1	2/8
Directive establishing an infrastructure for spatial information in the community (SEC(2004)980)	0/1	1/2	1/3	2/6
Small Claims Regulation (SEC(2005)351)	0/0	1/3	1/1	2/4
Strategy concerning Mercury (SEC(2005)101)	0/7	2/6	0/4	2/17
Proposal for a Decision of the European Parliament and of the Council establishing a Competitiveness and Innovation Framework Programme (2007-2013) (SEC(2005)433)	0/2	0/4	1/2	1/8
Regulation on medicinal products for paediatric use and amending Council Regulation (EEC) No 1786/92, Directive 2001/83/EC and Regulation (EC) No 726/2004 (SEC(2004)1144)	0/0	1/5	0/3	1/8
Directive laying down rules on normal quantities for prepacked products (SEC(2004)1298)	0/1	1/5	0/2	1/8
Communication on an Action plan for the implementation of the legal framework for electronic public procurement (SEC(2004)236)	0/0	1/7	0/1	1/8
Communication on interoperability of digital interactive television services (SEC(2004)1028)	0/1	1/4	0/2	1/7
Directive amending Directive 98/71/EC on the legal protection of designs (SEC(2004)1097)	0/0	1/5	0/1	1/6
Council Directive on Community measures for the control of Avian influenza/ Council Decision amending Council Decision 90/424/ECC on expenditure in the veterinary field (SEC(2005)549)	0/1	1/3	0/1	1/5
Fundamental Rights Agency (SEC(2005)849)	0/0	1/1	0/1	1/2
Council Regulation establishing a voluntary FLEGT licensing scheme for imports of timber into the EU (SEC(2004)977)	0/4	1/6	0/4	1/14
Communication on winning the battle against global climate change (SEC(2005)180)	1/8	0/0	0/2	1/10

* This table covers the 17 Impact Assessments which include some form of monetary quantification. For each overall type of impact within each Impact Assessment a share is presented. This is given as the number of impacts monetised in relation to the total number of impacts assessed.

Box 8.1. The Impact Assessment concerning the Thematic Strategy for Air Pollution and the Directive on ambient Air Quality and cleaner Air for Europe

This impact assessment from DG Environment considers 16 different impacts of which five are estimated in monetary terms. It considers three policy options and two baselines and a monetary value is sought for all the 5 options. The first baseline is the 'business as usual' situation, which is projected into 2020 and the other is an upper reference scenario, where all possible technical emissions abatement are deployed irrespective of cost. This is called MTFR – Maximum Technically Feasible Reduction.

The impacts from the three proposed policy options are assessed in order to estimate the costs and benefits from closing the gap between "business as usual" and MTFR. The policy options represent different levels of gap closure, given as the percentage of gap reduction. In terms of environmental impacts, the gap between "business as usual" and MTFR are given as the difference in

- life expectancy lost from exposure to particulate matter
- premature death attributable to ozone
- accumulated deposition of chemicals which leads to acidification
- accumulated deposition of chemicals which leads to eutrophication

These environmental impacts are all assessed in the Impact Assessment, the first two in monetary terms through evaluation of health benefits, and the latter two in non-monetary quantitative terms. Macroeconomic effects, the effects on agriculture through damage to crops, and the impacts on employment are also assessed in monetary terms. Seven other impacts from all 3 main impact categories (environmental, economic and social) are discussed in qualitative terms and several additional impacts on the environment are briefly mentioned. All the monetary values are evaluated by use of sensitivity analysis and the distribution of costs on different sectors are assessed.

It is stated that the monetary value is not the total benefit given to compare to the total cost, but it is described to indicate the direction and magnitude of effects from the proposals. It is also stated that only the EU-15 is used in the calculations. This is due to lack of data from the new member states. The Impact Assessment concludes by proposing a combination of the three policy options covered. The conclusion is based on both economic and environmental as well as social costs and benefits. It also refers to the fact that the implementation is compatible with the Lisbon Strategy and the Sustainable Development Strategy, and that it is based on assumptions and limited data availability.

Compared to all of the other 57 Impact Assessments, this Impact Assessment could be seen as a benchmark. No other Impact Assessment has been as thorough in monetary quantification of impacts in all three major areas, while at the same time being elaborate in covering several options and being explicit about limitations of analysis and the implications of these for the conclusion.

As discussed earlier, one advantage of monetary quantification is that it provides a common measurement unit. However, maximum utilisation of this advantage requires all relevant impacts to have been quantified. If the impacts have only been partly quantified in monetary terms, the comparisons or summation of impacts will be hampered. Table 8.4 further shows the share of impacts evaluated with monetary quantification within the three main areas of impact; environmental, economic and social. The table shows that no Impact Assessments have performed monetary quantification for all impacts. Thus, even though some quantification does take place, it may be difficult to apply the result in terms of direct comparison of impacts, since the monetary quantification supplied in the Impact Assessment gives an incomplete measure of the overall net benefits or costs.

Economic impacts are quantified in monetary terms more often than the other overall types of impacts. Only in the case of the Impact Assessment concerning the Thematic Strategy on Air Pollution and the Directive on Ambient Air Quality and Cleaner Air for Europe (SEC(2005)1133) have some impacts from within all three overall types of impacts been quantified in monetary terms (see Box 8.1).

Table 8.5 Proportion of monetised analyses taking a 'welfare economic' perspective

Method	Financial Perspective	'Welfare economic' Perspective	n.a.
Cost-effectiveness analysis	3	3	
Cost-benefit analysis	2	1	
Other methods, e.g. macro-economic analysis	2	7	1
Not stated	7	1	
Total	14	12	1

Note: There may be more than one type of analysis per Impact Assessment and per impact. Therefore, the numbers above do not add up to 17 (number of Impact Assessments with monetisation) or 22 (total number of impacts monetised).

In Table 8.5 we present the extent to which the 17 Impact Assessments with some monetary quantification have taken a 'financial' or an 'economic' perspective. This reflects whether the analysis has been focused on costs and benefits with a 'budgetary' focus, or whether the analysis has employed a 'welfare economics' approach, where the estimates given should reflect the welfare effects of impacts instead of simply the budgetary effects of impacts. This might be considered as a technical distinction, but there are fundamental differences between the results obtained from such analyses, e.g. in circumstances where market prices do not reflect the 'true' value of impacts. Since Impact Assessments should assist in improving the legislative process to the benefit of European Union citizens, they

should as far as possible employ an 'economic' perspective. This is not reflected in the Impact Assessment guidelines at present. As appears from Table 8.5, only 12 out of 27 monetised analyses employ a 'welfare economic' perspective.

Furthermore, Table 8.5 gives some indication of the degree to which a cost-benefit perspective or a cost-effectiveness perspective has been employed. As already pointed out by the Mandelkern report (European Commission 2001d), cost-benefit analysis should be seen as the most well-developed tool for Impact Assessments, with cost-effectiveness analysis as another possibility, although not as thorough as the cost-benefit analysis. This may of course reflect considerations about proportionality, since a full cost-benefit analysis requires considerable effort in covering many impacts and in producing monetary estimates for these. It is important to note, however, that even if a full cost-benefit analysis is not attempted, there is a fundamental difference between the perspective employed in a cost-benefit analysis and a cost-effectiveness analysis. A cost-benefit analysis attempts to provide an overview of advantages and drawbacks of an activity, whereas a cost-effectiveness analysis works on the basis of a fixed benefit and then attempts to minimise the costs or to minimise the cost per unit of benefit.

Since Impact Assessments are supposed to weigh up the advantages and disadvantages of different policy options, it is therefore important that a cost-benefit *perspective* is employed – i.e. attempting to provide an overview of main categories of costs and benefits, without necessarily doing a full cost-benefit *analysis*. Taking a cost-effectiveness perspective, one runs the risk of only focussing on the cost aspects, which severely limits the ability to weigh advantages and disadvantages against each other. In other words, when only costs have been quantified in monetary terms, the Impact Assessments can only indicate the most inexpensive way of achieving goals. It cannot indicate whether the goals and the policies to achieve such goals should be chosen at all. However, if a goal has already been identified, cost-effectiveness analysis can be an efficient method to guide the choice between options.

Both the 2002 and 2005 Impact Assessment guidelines also include guidance on the assessment of costs to the EU budget. Even though this, as discussed above, is a narrower perspective than a 'welfare economics' approach, it is still relevant information. Approximately half of the Impact Assessments (26/58) include estimates of the direct cost to the EU budget.

8.3 What characterises the 39 Impact Assessments with qualitative analyses only?

In 39 Impact Assessments, no quantitative assessments of the impacts have been carried out. However, there is a difference in the degree to which the impacts are qualitatively described. As mentioned in Chapter 3, impacts not analysed in quantitative terms have been separated into two groups in this study, the 'qualitatively described' impacts and the 'briefly mentioned' impacts.

As appears from Table 8.6, a total of seven out of the 39 qualitative Impact Assessments only include a brief mention of impacts. Most of these are communications, but regulations and one action plan are also represented.

Table 8.6 Type of analysis in exclusively qualitative Impact Assessments

Only qualitatively described impacts	20
Both qualitatively described and briefly mentioned impacts	12
Only briefly mentioned impacts	7
Total	39

Of the 39 Impact Assessments from 2004 and 2005 without quantification, 22 were published in 2005. The fact that no quantification takes place in 39 Impact Assessments does not necessarily reflect poor quality as such, nor necessarily a decline in quality over time as indicated by Renda (2006). We have argued earlier that quantitative analyses have the potential to add more value than qualitative analyses. However, as long as the most important impacts are identified and potential trade-offs between environmental, economic and social impacts are discussed the Impact Assessments covering initiatives at an early stage of the policy process can still add value. This is particularly the case if they are to be followed by more detailed analysis at later stages of the policy process.

But to what extent do exclusively qualitative Impact Assessments address these trade-offs? A necessary precondition for addressing trade-offs are for impacts in several areas to be described. However, on average, only 4 impacts are addressed in the exclusively qualitative Impact Assessments compared with 8 impacts in the Impact Assessments with some quantification. Furthermore, Impact Assessments without quantification are over-represented in the group of Impact Assessments that only assess impacts in one or two of the three main categories of impacts (environmental, economic and social impacts). For example, all 11 Impact Assessments that only cover impacts in one of three main categories are exclusively qualitative.

On average, exclusively qualitative Impact Assessments also appear to cover marginally fewer policy options than in the case in Impact Assessments with some quantification (3.5 compared to 4.9).

These observations should be seen in connection with the previously mentioned high incidence of communications and other initiatives at initial stages of the policy process in the sample of Impact Assessments without quantification. As argued earlier, this is exactly the stage in the policy process where analysis of many policy options can be important.

Our observations contribute to a picture of a set of Impact Assessments with relatively little direct value in terms of informing decision-making on selecting options, identifying main impacts, or identifying trade-offs. In the longer term, however, these Impact Assessments might be seen as the first step in a longer policy process

Therefore it should not be surprising that trade-offs involved between the different impacts are rarely addressed in the non-quantitative Impact Assessments. In fact, only 1 out of the 39 Impact Assessments without quantification refers directly to trade-offs between environmental, economic and social impacts in its conclusion.

Here the distinction between a serious qualitative discussion and simply mentioning an impact briefly is useful. For seven Impact Assessments, the only impacts addressed are briefly mentioned. For example, a formulation like the following: *"The impact of the proposed measures will be felt firstly from an environmental or ecological perspective through the improvement in the state of certain important fish stocks"* from the Impact Assessment on "Proposal for a Council Regulation Establishing a Community Fisheries Control Agency" (SEC(2004)448) adds at best only marginal value to the Impact Assessment, since no order of magnitude for the impact is supplied, the importance of it compared to other impacts is not addressed and no references are cited. See box 8.2 for an example of an Impact Assessment with briefly mentioned impacts only.

If we look at the distribution of exclusively qualitative Impact Assessments according to responsible DGs, they appear to be fairly widely distributed. DG Justice, Freedom and Security are exclusively qualitative in 8 out of 10 Impact Assessments (see Table 8.3 earlier).

Overall, there are clear distinguishing features between Impact Assessments with some quantification and Impact Assessments with no quantification. On all counts, exclusively qualitative Impact Assessments are less detailed: they cover fewer options, fewer impacts, and hence only address trade-offs between impacts to a minor degree. Certain types of initiatives (most notably communications) appear to be particularly prone to ex-

clusively qualitative analysis. This may reflect that they predominantly appear at earlier stages of the policy process. We will look into this in the following chapter.

Box 8.2 The Impact Assessment on Proposal for a Regulation establishing a Rapid Response and Preparedness Instrument for Major Emergencies (SEC(2005)439).

This six-page Impact Assessment includes no quantification, and the qualitative discussion only briefly mentions impacts. Only intermediate outputs are covered (e.g. the training courses and the transportation of equipment and experts to disasters workshops, which the Regulation will ensure) – not impacts of these intermediate outputs. Only positive effects are mentioned.

The purpose of the Impact Assessment is not stated clearly. Two policy options are covered besides the no policy option, and one is recommended without further discussion. No explicit considerations of proportionality, data limitations or uncertainty are made, neither in the impact assessment itself, nor in the conclusion (which is difficult to identify). The Impact Assessment covers a Regulation, and the low level of detail of the analysis can therefore not be said to be due to an early stage of the policy process.

Even if the apparently low level of effort put into the making of this Impact Assessment is due to proportionality considerations, the value added of the Impact Assessment in terms of informing decision making is probably so low, that it is doubtful whether this effort has been worthwhile.

9 Why so little quantification?

Main Points

There is limited transparency in Impact Assessments as to the reasons for not undertaking quantitative analysis. Thus, it is difficult to ascertain whether limited quantification is due to deliberate proportionality considerations, limited access to data, or other reasons.

There is a need to be more explicit about choice of method used and the limitations of underlying data material. More effort could be put into data collection systems and into utilizing existing knowledge in Member States.

Why has so little quantification - monetary as well as non-monetary - taken place? Why is distributional and uncertainty analysis not more developed in Impact Assessments? And what barriers exist for further quantification?

Several possible explanations can be offered. Firstly, that quantification has never been seen as a primary instrument of the Impact Assessment system; secondly, that it may reflect the aim for Impact Assessment proportionality and thirdly, in many areas, relevant data or even knowledge about potential impacts is simply not available.

In this Chapter, we will address each of these reasons in turn. But first of all, we explore what arguments are used in Impact Assessments themselves to justify not going into more detail than they do.

9.1 Reasons stated for limited quantification

In the 58 Impact Assessments, it is only very rarely that arguments have been employed as to why there has been no quantification. Box 9.1 summarize some of the few arguments used in Impact Assessments. It can be seen that monetary quantification is either considered too difficult or to be impossible due to lack of data. Two proposals included physical quantification of the environmental impact and provided an argument for not carrying out monetary quantification. The first argued that it was too difficult and the second that there was a lack of data.

Box 9.1 Examples of arguments used in Impact Assessments for not quantifying impacts

Communication on Environment and Standardisation (SEC(2004)206): *"This [environmental] impact is difficult to assess in quantitative terms due to the wide scope of products and goods covered by standards".*

Communication on the Environment and Health Action Plan (SEC(2004)729: *"The issue to be tackled is the adverse impact of environmental degradation on human health, which is significant but difficult to quantify".*

Thematic Strategy on Air Pollution and the Directive on Ambient Air Quality and Cleaner Air for Europe (SEC(2005)1133): *"Quantitative assessment of links between air pollution and social deprivation is not possible at this stage because of lack of data".*

Communication on eAccessibility (SEC(2005)1095): *"it is too early to deliver a detailed analysis of impacts of the three options, particularly regarding option 3 'Legislate' as there is lack of quantitative data".*

9.2 The role of monetary quantification as stated in the Impact Assessment guidelines

Since the Impact Assessment guidelines do not set up quantitative assessment of costs and benefits as a primary target for Impact Assessments, it is not surprising that they have not had a key role to play in many Impact Assessments carried out so far. However, further monetisation of impacts is mentioned in the Communication on Impact Assessment: Next steps (European Commission 2004) as an area where further efforts are being made to improve Impact Assessments. We will return to the issue of what may happen in the future in chapter 11. One open question is whether efforts to increase the use of quantification will be sufficient. This is of course related to the highly relevant issue of proportionality.

9.3 Proportionality with respect to level of detail in analysis

As a first step in analysing how proportionality is dealt with in practice, it is interesting to consider how the term has been used in the Impact Assessments themselves. Are specific types of legislation undergoing more detailed assessments than others? Renda (2006) presents results indicating that of the Impact Assessments considered there, "40 out of 70 took into due account the principle of proportionality". Note, however, that the focus in Renda (2006) is mostly on 'treaty' proportionality, whereas our main focus is 'Impact Assessment' proportionality (see chapter 2).

In none of the Impact Assessments performing non-monetary quantification, was the argument of proportionality used directly for not performing monetary quantification.

The observations made in Chapters 7 and 8 about the low level of quantification and how this corresponds to where initiatives are in the policy process, can of course be interpreted as proportionality considerations applied in practice. As discussed in Section 9.1, it is difficult, however, to establish with certainty whether it is actually the case that the Impact Assessments currently given more attention are in fact also more significant than the others.

As for distribution analysis, this is an area where the Annexes to the new 2005 guidelines (European Commission 2005e) are more explicit than previously. The extent to which distribution analysis is employed could, as in other areas, also be interpreted as a manifestation of proportionality considerations.

The same observations can be made about uncertainty analysis. One important difference, though, is that the restrictions in the scope of the analysis are relevant for the certainty with which conclusions can be made. If restrictions in the scope are made due to lack of data or the data is encumbered by very significant uncertainties, it will be important to explicitly communicate the importance of this uncertainty to the analysis. A restriction in scope away from dealing with uncertainty is therefore not a desirable option. Instead, it is important as a minimum requirement and regardless of the level of detail of the analysis, to include considerations about the effects of proportionality on the uncertainty of conclusions. A restriction in scope away from detailed sensitivity analysis is probably more warranted when there are no quantitative estimates available to perform sensitivity analysis.

A reason for limited quantification in practice could be that the knowledge required for carrying out monetary quantification was not available within a DG. In that case it would be an advantage to hire a consultant with experience in that field, or as suggested in Renda (2006) to set up a central consultation unit in the Commission. However, in the 17 Impact Assessments which indicated that a consultant had performed the Impact Assessment only 7 had included a monetary quantification. It therefore does not seem to be of major influence for the degree of quantification whether or not the Impact Assessment is performed in-house or is outsourced.

It may well be that the social and environmental effects of a legislative proposal dealing with for example research in IT technologies could be expected to be minimal. Here, as a consequence, it would make sense if a detailed quantitative analysis was undertaken only within the economic domain. The crucial element here is to be explicit about the restrictions in scope and what documentation supports it. A preliminary assessment of overall

expected costs and benefits of the assessment would be of use in determining the need for detailed analysis in *all* main impact areas.

This could point towards the need for some kind of further explicit screening procedure with regard to proportionality – which could also include considerations about which kinds of methods are appropriate for a given ambition level for the analysis. We will return to this issue in Chapter 11.

There are more considerations of the issue of proportionality in the 2005 Guidelines (European Commission 2005e) than in the 2002 version (European Commission 2002a). Even so, there is still not much guidance on how to interpret the concept of proportionality in more detail. This means that it is very difficult to ascertain whether the patterns we have established previously in this Chapter are in fact due to deliberate proportionality considerations. Thus, the responsible Directorates General or the inter-service Steering Groups have held wide discretion in determining the level of ambition put into each Impact Assessment.

9.4 Barriers to further quantification

With regards to the identification of barriers to monetary quantification of environmental impacts, it may be useful to turn to experience gained in economic analyses of environmental policies. Up to around 1990 very few assessments were conducted. In the 1990s formal assessments increased primarily in the sphere of water and air pollution (Pearce 2004).

In the preparations for the Habitats Directive (92/43/EEC), there was no monetary quantification of environmental benefits or the expected cost of the Directive. Pearce (2004) speculates that the reason for this could be the complexity of assessing costs and benefits, since the Directive opened up for flexible implementation by the Member States in terms of designating areas of conservation.

In this report, we cannot test the extent to which data gaps exist in the areas covered by the Impact Assessments. However, we can observe the extent to which data limitations have been used to explain the limited use of quantification in Impact Assessments. As illustrated in Box 9.1, it has indeed been used as a reason in a number of Impact Assessments. More often than not no reasons have been mentioned at all. Therefore, the barriers identified in the Impact Assessments and in former studies are not very specific. Barriers identified are that it is difficult, that there is a lack of data and that it is complex. But why is the study difficult? What types of data are missing? And what makes an assessment

complex? The identified barriers are stated in such general terms that it appears difficult to apply them directly in recommendations for future research proposals.

As mentioned above, the Impact Assessment system is considered a 'learning by doing' process by the Commission. A good starting point for ensuring possibilities for improving the data material or procedures for data gathering for future Impact Assessments would therefore be to be more explicit about where limitations of current practices and data material exist. The next step could then be to consider exactly what would be required in order to remove existing data gaps.

A systematic way to improve availability of relevant data could be to put more efforts into data collection systems and to utilize existing knowledge in Member States by urging these to feed in information at early stages of the Impact Assessment process.

10 Are limitations of analysis reflected in the Impact Assessments?

Main Points

The limitations to the analyses are not extensively communicated for example in terms of data gaps, uncertainties, assumptions and the importance of omissions of options and impacts. This is also reflected in the conclusions of the Impact Assessments, where only six out of 58 Impact Assessments mention limitations of analysis due to incomplete information or non-availability of data.

In this report we have covered a number of different ways in which proportionality can be used in Impact Assessments and we have discussed how much it is currently implemented in practice. When considering the proportionality of efforts put into Impact Assessments it is also of interest to see whether the limitations of Impact Assessments are discussed and reflected in the conclusion drawn. These limitations could be in terms of omitted impacts, depth of analysis (e.g. level of quantification) and availability of reliable data.

10.1 Are data gaps addressed in Impact Assessments?

In 26 of the 58 Impact Assessments covered, issues regarding further information, data gathering, quantification, or modelling are mentioned. Only four of these 26 Impact Assessments consider the available information to be sufficient, whereas the remaining 22 of the 26 do not consider currently available information to be sufficient. Curiously, a need for further data gathering or quantification is identified explicitly in only 20 of these Impact Assessments.

Considering the high number of Impact Assessments without any quantification, this is a surprisingly low number. This is according to the fact that absence of quantitative estimates and / or coverage of all main types of impacts would be expected to influence the certainty with which conclusions can be drawn from analyses (and hence the need for further analysis).

10.2 Proportionality in perspective: Are conclusions proportionate to analysis?

Clearly, more elaborate analysis, covering many policy options, many impacts, and with detailed quantitative analysis of these impacts should almost by definition lead to more certainty about conclusions from the analysis (unless the area assessed is fundamentally beset with high uncertainties). This means that a low level of detail of analysis, whether due to conscious proportionality considerations or not, will most often mean less certainty of conclusions and more limitations of analysis.

In 14 out of 58 Impact Assessments covered, no clear conclusion can be identified. An example is the Impact Assessment concerning the proposal: 'Decision establishing an Integrated Action Programme in the Field of Life-long Learning' (SEC(2004)971). From the main text of this Impact Assessment, it is clear that one policy option is recommended, but the recommendation and its background is neither summarised in a conclusion nor in an executive summary. Thus, no limitations to the analysis due to choice of policy options covered, underlying assumptions or availability of data are covered in a conclusion.

This pattern of not referring to limitations of the analysis in a conclusion can be found not only in these 14 Impact Assessments, but in almost all Impact Assessments. References to limitations in the analysis due to choice of policy options covered is only made in 3 out of the 58 Impact Assessments. Only one refers to limitations in the analysis due to underlying assumptions. And only six refer to limitations of the analysis due to incomplete information or the availability of data. Of these six Impact Assessments, only one is from the group of 39 Impact Assessments not employing any quantitative analysis. This is striking, since these are the exact same Impact Assessments that offer the lowest level of detail, not only in terms of quantification but also in terms of the number of options and the number of impacts covered.

This very low incidence of a clear statement of limitations in the conclusions of Impact Assessments is surprising for two reasons. First, it is surprising since 22 Impact Assessments mention that they, as earlier described, do not consider the currently available information to be sufficient. Second, it is surprising given the prevailing low level of detail of analysis in Impact Assessment that we have identified in earlier chapters.

This point to a gap between limitations in the results of the analysis undertaken in Impact Assessments due to data gaps, uncertainties and proportionality and how these limitations are reflected in the conclusions of the Impact Assessments. Reservations are not communicated fully.

There is also a gap between what decision-makers announce in public and what the Impact Assessment system actually delivers. Two examples of ambitious expectations from decision-makers are the following:

Commissioner for Enterprise and Industry, Gunther Verheugen (also quoted in Chapter 2): *"... new legislative proposals to which the Commission since this year applies a stringent principle – we will only put forward proposals that have undergone an Impact Assessment. This approach would guarantee that we know the full costs and benefits of future legislation".*[9]

Commissioner for Environment, Stavros Dimas: *"Any assessment of the effectiveness of our legislation must look at the social and environmental benefits as well as counting up the economic costs".*[10]

The ambitions reflected in these quotes do not match the degree of detail of analysis in Impact Assessments we have documented in this report. This gap should not necessarily be seen as an indication of a failure of the Impact Assessment system, as in Renda (2006), but more as an indication of a gap between what the guidelines prescribe and what decision-makers expect. It is very difficult, not to say impossible, to get a full overview of costs and benefits from an Impact Assessment, particularly when proportionate analysis, as prescribed by the guidelines, is applied.

To the extent that decision-makers focus on the conclusions of Impact Assessments, part of this gap can be explained with the fact that reservations are not fully communicated in the conclusions. Several conclusions of the 58 Impact Assessments covered by the present report may lead readers to wrongly believe that Impact Assessments do in fact fully assess all relevant impacts and options. An example is the Impact Assessment concerning the Proposal for a COD Directive on Common Standards for Return Procedures (SEC(2005)1057), where one option is recommended, but no limitations (e.g. in terms of choice of options and impacts covered and level of detail of analysis) are presented in the conclusion.

[9] From seminar on Better Regulation in Edinburgh on 22-23 September 2005, retrieved 17/02/06 at http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/543.

[10] From seminar on Growth, Jobs and the Environment at the European Environmental Agency in Copenhagen, 7 October 2005, retrieved 17/02/06 at http://org.eea.eu.int/news/Ann1128583697/SPEECH_Dimas.pdf.

11 Looking Ahead

Main Points

Most of the results presented in this report will probably not be significantly affected by any of the initiatives that were launched by the Commission in 2005.

Thus, we recommend a more explicit, structured and transparent approach to proportionality in Impact Assessments, for example by distinguishing clearly between different levels of proportionality. Proportionality and data gaps are legitimate reasons not to undertake detailed analysis, but it should be explained if the level of detail is low or if certain policy options and impacts are not covered. The Commission should therefore develop new and clearer guidance on proportionality.

Impact Assessments can be important. If undertaken properly and correctly used by policy-makers, Impact Assessments can contribute to improved EU regulation. The improvement can be seen in terms of cost-efficiency, proportionality (in terms of degree of regulation) and more transparency, as well as in terms of balancing concerns for growth, jobs and the environment. This report contributes to this goal. We have pointed to some deficiencies in the way the Impact Assessment currently operates, but this should be seen as a contribution to further development and fine-tuning of the system in the future.

In this Chapter, we therefore consider the future. We will do this in three respects. First, we shall take a brief look at the Commission initiatives instigated in 2005 and consider to what extent these initiatives can be expected to have an effect on the observations made in this report. Building on this, we shall, secondly, give our own interpretation of where the results of our study point to, in terms of future revisions of the Impact Assessment system. Finally, we shall indicate areas of further investigation. Where could further analysis inform the Impact Assessment system?

11.1 Will new initiatives in 2005 change the results from this report?

Some of the observations made in this report may have been addressed in Impact Assessments undertaken following our October 2005 cut-off-point – e.g. it is possible that more in-depth analysis is now undertaken.

A number of activities relating to the development of the Commission Impact Assessment procedures are currently in progress. The Commission staff working paper 'Impact Assessment: Next steps' (European Commission 2004) took stock of experience so far and outlined planned developments for the near future. This involved a revision of the guidelines for Impact Assessment, published on June 15th 2005 (European Commission 2005e), which further developed guidance on how to analyse possible effects of the proposals on competitiveness and administrative burdens. Furthermore, in 2006, the Commission will launch an evaluation of the Impact Assessment system.

As mentioned earlier, the new and more detailed guidelines are unlikely to already have had significant effects on the Impact Assessments covered by this report. What should be expected from these initiatives?

Will proportionality be dealt with more explicitly? Will more policy options be covered? Will more impacts be covered? Will more quantitative analysis be employed? Or are the 2005 initiatives mainly addressing other issues?

A section on proportionate analysis is included in the revised 2005 guidelines. This section presents the main criteria for determining when certain aspects of the analysis will have to be more developed than other aspects. However no further guidance is given on how to apply proportionality in practice – e.g. when coverage of more policy options is warranted, when it is necessary to cover a broad range of types of impacts or when detailed analysis (e.g. quantification) is warranted. Nor are there any requirements for being explicit about choices made with respect to Impact Assessment proportionality. However, a few more remarks about being explicit about uncertainties or assumptions and about the need for the analyses to be transparent, reproducible, and robust are included in the 2005 guidelines compared to the 2002 guidelines. In the guidelines, however, these remarks are not related to proportionality considerations, nor are any further requirements to be explicit about limitations of analysis in conclusions of Impact Assessments included (European Commission 2002a; European Commission 2005e). Thus, based on the revised guidelines alone, increased explicit consideration of proportionality and limitations of analysis would not be expected to a very wide extent.

There is no significant revised guidance on coverage of additional relevant options included in the 2005 guidelines. However, the guidelines are now more explicit about not simply covering a baseline option, a preferred option, and "the ridiculous option that nobody wants" (European Commission 2005e), and also more explicit about the need for screening of options. Hence, expanded coverage of options should probably not be ex-

pected following the new guidelines, but coverage of more relevant options is a possibility.

There are no increased requirements for covering a higher number of impacts in particular areas or for a broader and more comprehensive coverage of impacts in all major areas of impact in the new 2005 guidelines. However, a clearer overview of main categories of likely impacts is provided, and the new, more detailed sections on administrative costs and assessment of competitiveness effects could provide the background for more detailed assessments in these areas. Whether this would lead to coverage of a wider or a more narrow range of impacts is, however, open to interpretation.

The new 2005 guidelines appear to be more explicit about the time scale of effects and the distributional impacts of initiatives. However, no specific requirements for increased emphasis on these dimensions are included, so it would not be expected that more emphasis would be given to this in future Impact Assessments.

The 2005 guidelines are now more explicit about possible quantitative models to be used in Impact Assessments (a new section on quantitative models is included). This would lead to some expectations about increased quantification, since clearer guidance is given on how to move from the qualitative through to the quantitative and monetary assessment, although no explicit requirements for more quantification are made. On the surface, the expanded emphasis on administrative costs and assessment of effects on growth, competitiveness and jobs in recent initiatives should be expected to lead to more in-depth economic analysis. The sections on these issues in the 2005 guidelines do not require more quantification as such, but describe possible areas of impacts, which could be quantified. Particularly, the section on administrative costs is very explicit about ways in which these aspects can be quantified in monetary terms, as is the Communication on administrative costs issued by the Commission in October 2005 and its revised annex added in 2006 (European Commission 2005c). Similarly, the section on employment effects is very explicit about how employment effects can be quantified (European Commission 2005e).

A caveat in this connection is that the new sections on competitiveness and administrative costs implicitly take a 'financial' perspective as compared to the earlier mentioned 'welfare economic' perspective. The latter should be essential when overall assessments of the economic effects of EU initiatives are undertaken. Particularly, assessments of administrative costs have a distinct budgetary approach which is not focused on overall welfare effects. Thus, any effect on overall quantification following these initiatives will not be expected to lead to a more 'welfare economic' analytical approach overall.

There are no further requirements for quantification of environmental effects in the 2005 guidelines, so although a new section on Life-cycle Assessment approaches is included, no further quantification of environmental impacts should be expected. Given the stated objectives of integrated analysis in the Impact Assessment guidelines (European Commission 2005e), the fact that new expanded guidance have been made on assessment of administrative costs and on growth, competitiveness and employment effects should not, as in Renda (2006), be taken as an indication of increased emphasis on analysis within the economic domain at the cost of integrated analysis of environmental, economic and social impacts. Thus, a lower relative emphasis on environmental impacts in Impact Assessments may not be expected.

However, this rests on one crucial interpretation of the new, more detailed guidelines in specific areas. Given the wide extent to which proportionality is already being employed in Impact Assessments (e.g. due to resource constraints in the Commission), it would be natural to expect that increased focus in one area would come at the expense of focus in other areas. This is indeed what Impact Assessment proportionality would suggest, and there will always be opportunity costs (i.e. resources diverted away from other areas) involved in such a setting. Also, without future expansion of guidance with respect to assessment of environmental effects, there is a risk that assessment of environmental effects will not be as widespread as proportional analysis could suggest it should be.

The most constructive way to interpret the new and more detailed guidelines on the assessment of administrative costs and assessment of competitiveness effects (or any other sections which have been expanded in the 2005 guidelines) is therefore the following. These guidelines will allow more consistent analyses if and when assessment in these areas is deemed more important than assessments in other areas. If not, proportionality should dictate that only brief qualitative analysis of these areas should take place. This is what is suggested in the Communication on Administrative Costs (European Commission 2005c). Rational decision-making should take as its point of departure an overview of overall welfare effects of EU initiatives. This would entail that the most important costs and benefits should be assessed regardless of whether they may happen to predominately fall within an environmental, economic or social domain. Given resource constraints, therefore, more developed guidelines for the assessment of administrative costs or competitiveness testing should not lead to more analysis within these areas – only better analysis when this is required.

Continual development of clearer guidance within specific areas could also potentially lead to more (and higher quality) analysis within these areas at lower cost, making it pos-

sible to cover even more categories of impacts. In this way, analyses within these different areas can be seen as complementary.

In the 2005 guidelines, there are no further specifications of the need to take an integrated perspective covering relevant types of impacts in all main areas of impact (environmental, economic and social) (European Commission 2005e). Hence, it would not be expected that the low proportion of Impact Assessments covering impacts in all these three main areas, which has been documented in this report, will change, following the new guidelines.

The new 2005 guidelines include a revised reporting format, which now includes an Executive Summary. As discussed in Chapter 10, this is required, given the need for clearer and more transparent conclusions. It will be interesting to see whether an enhanced use of Executive Summaries will also trigger more discussion on the limitations and uncertainties of analysis in future Impact Assessments.

By way of conclusion, most of the results presented in this report will probably not be significantly affected by any of the initiatives that were launched by the Commission in 2005. We may see more overall quantification in some areas due to the new and more detailed guidelines for the assessment of administrative costs and competitiveness effects, but the possible secondary effects of this on quantification in other areas remains to be seen.

One question is whether opening the Impact Assessment procedure to 'thinner' legislation (at an earlier stage of the policy process) will run the risk of watering down the ambition level of the Impact Assessment system. This problem concerns a trade-off between 'deepening' and 'widening' and is not easily solved. Counter to the argument that it waters down the ambition level of Impact Assessments, it can be argued that, conversely, it spreads the inherent 'Impact Assessment thinking' to a wider area. If the effort invested in these Impact Assessments therefore is lower than for other Impact Assessments, this is only a reflection of proportionality in practice. It could be argued that efforts expended on quantitative Impact Assessments should be used where expected benefits or costs are the highest (Harrington & Morgenstern 2004). We will discuss this possibility further in the next section.

11.2 Recommendations

In section 11.1 we considered the extent to which our observations will be dealt with in already existing initiatives. Given these considerations and the observations made in this report, we will here provide some suggestions as to how aspects of the Commission Im-

pact Assessment System can be improved in the future. These suggestions should by no means be seen as exhaustive, but instead simply considered inputs to the learning process inherent in the continuing evolution of the Impact Assessment system.

11.2.1 Detail level and assumptions of analysis

Recommendation 1:

> Impact Assessments should be explicit and transparent regarding the choice of level of detail of analysis (what level of quantification, how many options and impacts covered, methods used and why?).

Recommendation 2:

> Impact Assessments should be explicit and transparent regarding the consequences of limitations of analysis on the certainty of results (e.g. data gaps, assumptions, uncertainties and qualitative coverage of impacts). Limitations should be reflected both in the analysis and in the conclusion.

Recommendation 3:

> It should be made clear that the level of detail in Impact Assessments not should be fixed at the 'road map' stage, but be open for information received via, for example, stakeholder consultation through a clearly described and transparent decision process. A *minimum* level could be fixed at the 'road map' stage.

Ideally, decision-makers would like to know the full costs and benefits of all Commission initiatives before they are implemented. In practice, this is a difficult, if not impossible, exercise. Therefore, it is important to at least assess the *most important* costs and benefits, and to do so at a sufficient early a stage in the policy process to allow this information to influence decision-making.

A screening mechanism is therefore required for determining the options and what impacts to cover and not least what the detail of coverage should be. Even though the present guidelines are explicit about the need for screening, very little guidance is available on implementation of screening in practice. This is also reflected in the low degree of transparency in respect of how this screening has taken place in practice, which is evident in the Impact Assessments covered in this report. Leaving a 'paper trail' of documentation of the outcome of Impact Assessments could be a way of increasing transparency.

The 2005 Impact Assessment guidelines set up the following different criteria for when it is less necessary for an assessment to be more developed (European Commission 2005e):

- When the initiative covered is not 'significant'
- When the type of proposal under considerations is not new
- Where revision of existing legislation is concerned
- When 'broad policy-defining documents' are analysed

This illustrates that it is not possible to set up definite one-dimensional criteria for when it is most important to undertake more developed analysis. Still, it would be very relevant for decision-makers to be made aware of the level of detail of the analysis in a given Impact Assessment and the background for this level of detail.

In order for decision-makers to get the full picture of the importance of omissions of options and impacts, explicit restrictions of scope are very relevant. Are omissions deliberate? Are they important? What is the impact of omissions, assumptions and detail level of analysis for certainty of conclusions? One concrete way to address this issue would be to require Impact Assessments to include statements which could invite challenges from stakeholders, for example "We are not aware of any evidence suggesting impacts on X, so this issue was not investigated further".

11.2.2 Screening in practice

Recommendation 4:

> An explicit process of establishing the proportional number of options and impacts to be covered should be introduced already at the 'road map' stage. This should take account of 1) when a proposal is particularly important or not, and 2) whether the net benefits of one option are expected to be obviously higher than for other options or whether there is an expected 'close race' between options.

Recommendation 5:

> Guidelines for inclusion and exemption of carrying out Impact Assessments should be made more flexible.

As already stated by Wilkinson et al. (2004), the definition of what constitutes 'major' policy proposals is not entirely clear. Thus, it would be desirable to develop more specific criteria for what constitutes 'significant' initiatives beyond being included in the Commission's Work Programme. Some communications, white papers and strategy documents

currently included in the Work Programme could be argued not to contain any significant proposals for future EU measures, meaning that efforts on Impact Assessment could probably be used more effectively elsewhere. At the same time, other types of initiatives currently exempt from Impact Assessment, for example proposals following international obligations and Commission implementation of decisions agreed under the comitology procedure may involve different implementation options, where Impact Assessment could be highly useful.

Renda (2006) suggests the introduction of a threshold similar to what is in place in the United States. According to this line of reasoning, a detailed assessment should be undertaken if the impact on the EU economy is expected to be above a certain level. This is similar to the argument presented by Hahn & Litan (2005) that the degree of detail in analysis should be proportional to the expected net benefits of a proposal.

Making an explicit preliminary estimate of the economic importance is very relevant. In practice, however, it may entail a practical 'chicken and egg' problem. How should the necessary data for assessing the importance of the proposal be found when this is in fact part of what the Impact Assessment in question should produce it self? How can we be certain that impacts in one particular area are unimportant and therefore omitted from further analysis when we do not yet have the data to sustain that conclusion? Part of the solution could be to make the Impact Assessment process more flexible to the degree that the level of detail of the assessment can be revised, if for example stakeholder consultation points to important impacts or options not included in a preliminary screening (cf. recommendation 3).

To the extent that the Roadmaps can be seen as signposts in an evolving process and not as a fixed first stage where the ambition level of the Impact Assessment (the next stage) is determined, this is already possible. However, this possibility is not clearly described in the Impact Assessment guidelines; nor is how it should take place in practice (who should determine when a change in scope for widening or deepening is relevant when and how?). This ought to be clarified and further specified.

The idea of considering preliminary estimates of net benefits is, however, still sound, since there is no reason to waste resources on detailed analysis of unimportant impacts. Thus, an estimate of the order of magnitude of the net benefits of the proposal should be sought as a minimum. However, this criterion may be developed further.

One perspective could be to look at where the marginal benefits of further analysis are the greatest. This means not only finding out which Impact Assessments should contain more elaborate analysis. But also, more fundamentally, whether the marginal benefits of in-

cluding more (and broader types) of Commission proposals under the system, are as high as the marginal benefits to be obtained from carrying out deeper analysis in the Impact Assessments dealing with more significant proposals. While this perspective could be interesting, these marginal benefits will be very difficult to measure in practice.

Instead, another and more feasible perspective is the following. If very high net benefits of an initiative are expected, it would be relevant to look at relatively many options, since high potential costs of not choosing the best option could be involved. If the difference in net benefits of these options appear to be very high at a preliminary stage, the level of detail of analysis of the options could be relatively low ('obvious option'). If, on the other hand, the difference in net benefits is not perceived as being very significant, this could warrant more detailed analysis of these options ('close race').

If only one option is being analysed, the level of detail of analysis could similarly be determined by the expected net benefits of this option. If net benefits are expected to be close to zero ('close race') it could be relevant to include many impacts and a detailed analysis of these impacts in order to increase the certainty of the results. If, on the other hand, net benefits are expected to be very high or very low, there is little need for detailed analysis ('obvious case'). This reasoning is illustrated in Table 11.1.

Table 11.1 Impact of preliminary estimates of benefits and costs on the level of detail of analysis

Benefits \ Costs	Low	Medium	High
Low	Low detail (unimportant)	Some detail	Low detail (obvious case)
Medium	Some detail	High detail (close race)	High detail (important)
High	Low detail (obvious case)	High detail (important)	Very high detail (close race + important)

When choosing which impacts to assess and not to assess, preliminary assessments of the importance of each individual impact in the overall picture can be a good starting point. This is not far from what is already stated in the 2005 Impact Assessment guidelines: "When valuing impacts, the proportionality principle applies, as in all parts of Impact Assessment: don't devote a lot of energy to putting a value on non-marketed impacts if they are a very small part of the overall impacts" (European Commission 2005e), Annexes, p.37).

However, the value of carrying out monetary quantification of all major impacts involved in an Impact Assessment should not be underestimated (if, again, it can be persuasively argued that these are in fact the most important impacts). This can make the trade-offs involved in the Impact Assessment explicit and transparent.

It will not always be easy to get a good picture of the significance of a proposal at an early stage. This only makes it the more important to argue explicitly in the Impact Assessment what is considered to make it significant or not (cf. Recommendation 1). This will also make it easier to revise the ambition level for the analysis in the light of new information.

11.2.3 Proportionality

Recommendation 6:

> Impact Assessment procedures should be made more customised to where in the policy process it takes place. Analysis of many policy options should be given emphasis at early stages and detailed analysis of impacts at later stages.

Recommendation 7:

> New, clearer guidance should be issued for systematic and transparent implementation of proportionality in practice.

Proportionality as it is observed in practice in this report (see Chapter 6) appears to entail a low level of detail in analyses of initiatives at early stages of the policy process e.g. in communications.[11] Here, a potential trade-off could arise between the need for more detailed analysis due to the importance of the area in question and the practical constraints existing at a very preliminary stage of the policy process, where for example communications are issued. At this stage, policy options may not yet be well defined, and it will therefore be difficult to make very detailed analysis. On the other hand, if it is an area of potentially high importance, it will be important for the detailed analysis to identify the policy options for which further analysis is warranted. Given a need to start the Impact Assessment process at such an early phase that there is a possibility that it will actually be able to inform the policy-making process it is also important for Impact Assessments to be introduced at the communications stage.

[11] This is our interpretation of how proportionality has been applied in practice, since very rarely proportionality considerations have been stated explicitly (cf. Recommendation 1).

At the moment many Impact Assessments of communications are at a level which is so superficial that the value added by these Impact Assessments is very limited (cf. Chapter 9). One use of the proportionality argument would therefore be to not carry out Impact Assessments of communications at all under these circumstances.

Here it could be more relevant, flexible and proportionate not to carry out Impact Assessments for the less important communications described above, and instead to do so for other important initiatives (e.g. following international commitments) not currently included in the Commission Work Programme:

It could also be relevant to tailor-make the Impact Assessment procedure to the point the initiative is in the decision process – i.e. to focus on analysis of many options at early stages of the decision process (e.g. for Impact Assessment of communications), and on more detailed analysis of more impacts (but only for selected options). This would also minimise the risk of narrowing down the number of options for significant proposals too soon, before serious analyses of all relevant options have been carried out.

Another possibility would be to invest considerably more efforts in communications that may lead to significant policies at a later stage and at the same time put less (none) effort into communications that do not appear to be very significant.

The question remains, however, whether the extra gain for future legislative processes can compare to what would be gained from instead using resources on further detailed analysis on more significant initiatives. This could be addressing more options or impacts, or applying more quantitative analysis, or use the resources on initiatives where decisions are difficult due to 'close race' between different options.

The added benefit from a very detailed analysis of only one option can potentially be significantly lower than the gain from covering all relevant options in less detail. The reason is that the potential effect on the decision-making process can be much lower if it is just a question of assessing whether one particular policy option is beneficial or not. If, on the other hand, more options are already being assessed, it is instead important that all relevant options are given the same level of detail of analysis. However, at a late stage of the policy process, where the number of options has been narrowed down, analysing only one policy option will still enable added value by contributing to fine-tuning the details of this option.

Wilkinson et al. (2004) identified data limitations, in particular regarding environmental and social impacts. They suggested that a permanent infrastructure for more extensive data collection be established, since this cannot be established on a short-term ad hoc basis in response to the needs of specific proposals. They also recommended that Mem-

ber States should, at an early stage, be willing to contribute to Commission Impact Assessments with relevant national data and information. The Member States should undertake and make available their own Impact Assessments at an early stage of the Commission's policy development process.

Given the low use of quantification documented in this report, this conclusion still holds. However, the very low information level in the Impact Assessments in respect to the types of data that are missing gives very few indications as to how data availability should be improved in a concrete way. Thus, a first and necessary step towards identifying data needs would be for Impact Assessments to require some documentation of lack of data. This could assess how much effort would be necessary if data were to be produced, and to argue how important the omitted data are for overall uncertainty of the results of the Impact Assessments (cf. Recommendation 2).

Presently, conclusions of Impact Assessment are often not very clear, and very often do not reflect the uncertainties and limitations of the underlying qualitative analysis. Clarity of the conclusion and mention of uncertainties and limitations should be a requirement in Impact Assessments, in order to avoid misunderstandings about what Impact Assessments do and do not offer. Since Executive Summaries are now a requirement in the reporting format of Impact Assessments, and this issue therefore may potentially be addressed in future Impact Assessments, this will not be put up as a separate recommendation here.

The section on proportionate analysis in the 2005 Impact Assessment guidelines does not distinguish clearly between the proportionality of effort put into

- Different categories of proposals
- Number of options covered
- Number (and types of) impacts covered
- Degree of quantification
- Balance of treatment of environmental, economic and social impacts

Nor are the present guidelines explicit about trade-offs between the level of detail of assessment and the certainty with which conclusions can be made. This is only a problem insofar as the Impact Assessment is not clear about why the level of detail of the Impact Assessment is low. If it can be persuasively argued (based on e.g. Table 11.1) that the impact assessment covers an 'obvious case', there need not be a trade-off between the level of detail and the certainty of analysis (cf. Recommendation 1).

Given the limited resources available for Impact Assessments in the Commission, it is important that the resources used are applied as efficiently as possible. If Impact As-

sessment proportionality can be applied transparently and consistently, this should be possible. The question is what aspects of Impact Assessment proportionality are the most important? It is clear that there will be trade-offs between

1) broadness of overall coverage and depth of analysis
2) number of options assessed and depth of analysis of each option and
3) number of impacts assessed and depth of analysis of each impact.

11.2.4 Cost-benefit analysis and a cost-benefit 'perspective'

Recommendation 8:

> Impact Assessments should apply a cost-benefit *perspective* in order to ensure that both costs and benefits are assessed and that all main impacts are compared on as equal footing as possible

Cost-benefit analysis is the most well developed tool to assess the overall net benefits of a proposal on European Union citizens. However, given resource and time constraints, a full cost-benefit analysis will rarely, if ever, be relevant in an Impact Assessment setting. What is more important is to maintain a cost-benefit *perspective* in Impact Assessments. Focus should always be on the overall 'welfare economic' advantages and disadvantages that different initiatives can be expected to entail. This will mean that only the most important impacts will be included in the analysis, and that often not all of these will be quantified. But it is important to keep emphasis on the assessment of both costs *and* benefits. A cost-effectiveness perspective will instead tend to focus too much on cost minimisation and not on whether the costs are actually proportionate to the overall benefits.

11.3 Further studies

We have deliberately not attempted to cover all relevant issues surrounding the quality of Impact Assessments in this report. The purpose of this report has not been to score the different Impact Assessments and rate them as good and bad. Instead it was to learn from the overall process as it has been so far in order to contribute to further development of the Impact Assessment system, and thus more informed EU decision-making.

The present report has constituted what Harrington & Morgenstern (2004) term a 'content test' of the Impact Assessment system. Areas not covered by the present report, which it would be relevant to include in a further and fuller evaluation of how the Impact Assess-

ment system has worked so far – for example in the evaluation to be undertaken on the Commission's initiative during 2006 - include the following:

- A systematic comparison of current Impact Assessment practice with practice prior to initiation of the current system in 2003. What would have happened in the absence of the current system (a 'with-without' comparison)? This is what Harrington & Morgenstern (2004) term a 'function test' of regulatory Impact Assessments. Even though this type of study is very useful, it is also rather demanding since it is very difficult to establish a baseline.
- A test of whether or not the Impact Assessments have improved the basis for decision-making: Do Impact Assessments actually have an impact on legislation design, and if so, does this lead to improvements in the quality (however defined) of legislation? This corresponds to what Harrington & Morgenstern (2004) term an 'outcome test' of regulatory Impact Assessments. Answering this question would require knowledge of how a decision on legislation design has been influenced, if at all, by an Impact Assessment. Observing that the policy option adopted conforms to what was recommended by an Impact Assessment does not necessarily translate into the policy being informed by the Impact Assessment – it could conversely be seen as an indication that it was the only option seriously considered in the Impact Assessment. Similarly, the final Impact Assessment could be seen as the product of a long interactive process, ultimately leading to adoption of the recommended option. Answering the question would thus require detailed ex-post studies of the legislative process also tracking the development process of the proposal in the Commission. What would have happened in the absence of an Impact Assessment?
- A related approach, which would be very relevant when evaluating Impact Assessments, is whether they turn out to be accurate, i.e. if ex-ante Impact Assessments adequately capture the main impacts as documented by ex-post studies. However, since the Impact Assessment system has been in place for only three years, this type of analysis is premature. Also, there is the possibility that the eventual policy adopted may have been subject to quite radical amendments, making it difficult to readily compare the impacts anticipated in an Impact Assessment and the actual outcome.

Other interesting issues to include in further studies could be:

- to follow up on the Studies by Vibert (2004), Wilkinson et al. (2004), Lee & Kirkpatrick (2004) in terms of evaluating whether the impressions in terms of other quality parameters from 2003 Impact Assessments still hold in 2004 and 2005, most notably in terms of the degree of stakeholder involvement.

- to analyse different potential types of organisation of the Impact Assessment process. What would for example be the advantages and consequences of establishing an independent oversight agency or a crosscutting consultative unit, as discussed by Renda (2006)? How can lessons learned from previous Impact Assessments best be captured and communicated?
- to compare the U.S. experience of Regulatory Impact Assessment with the current practice of EU Impact Assessment. What differences in quantification patterns exist, how are proportionality issues dealt with in the United States, what are the main differences in terms of focus of assessment, how many options are covered, and how much stakeholder involvement takes place?
- to look at socio-economic assessment procedures of EU legislation not covered by the Impact Assessment system. The Environmental Assessment Institute is currently undertaking a case study looking at the procedures for socio-economic assessment of authorisation and restriction of chemicals, where different pieces of chemicals legislation have different requirements for assessment of costs and benefits. How have socio-economic assessment been carried out in practice, and what are the differences to what happens under similar legislation in the United States?

12 Conclusions

EU Impact Assessments as carried out in 2004 and the first nine months of 2005 do not in general give an overview of costs and benefits associated with the proposals analysed. In order to make sure that decision-makers get what they think they are getting, this point to a need for adjusting the rhetoric surrounding the system. The EU Impact Assessment system should strive towards getting a fuller picture of costs and benefits of all future EU legislation than they do now, and there is still a long way to go.

The average number of impacts included (five) in the Impact Assessments covered in this report is rather low. Furthermore, the range of impacts covered is often narrow (only 27 out of 58 Impact Assessments cover environmental and economic as well as social impacts), and some form of quantitative analysis is only carried out in 19 out of 58 Impact Assessments.

Even if an overview of costs and benefits is interpreted as an overview in qualitative terms, the conclusion still holds. This is because the qualitative discussions undertaken in Impact Assessments do not cover all impacts. Also, merely mentioning a possible impact hardly contributes to getting an overview, since it does not give any indication as to its importance.

Although the ideal Impact Assessment should quantify costs and benefits, there are legitimate reasons for not carrying out full quantification of all impacts or for all possible policy options due to insufficient data availability and considerations of proportionality. This should, however, always be seen in the perspective of what the added value is of increased efforts in carrying out Impact Assessments.

Given that full quantification will rarely be possible, the concept of proportionality needs further attention and more concrete guidelines. When no quantification takes place, there should be the same or even higher demands for documenting which impacts are relevant. It is essential that restrictions of scope of analysis due to proportionality in Impact Assessments are elaborated and explicit. The limitations following from this should also be reflected in the conclusions of the Impact Assessments.

This should also be the case for how much effort should be put into the analysis of environmental, economic and social effects, respectively. It should be argued and as far as possible documented why one or more of these areas is not covered to the same extent as other areas.

On average, three to four options were covered in the 58 Impact Assessments discussed in this report. It is important that as many relevant options as possible are considered at an early stage of the policy process. Otherwise, there is only little scope for Impact Assessments to improve the overall basis for decision-making.

Lack of data is a highly legitimate reason for not quantifying. But analysis should not stop at this observation. Careful consideration should be given to whether collection of data in the area are worth the effort or not, i.e. how important are the expected impacts when there are no data? If there are considerable uncertainties surrounding how important the impacts are expected to be, this could be used as an argument in favour of using further efforts to gather more data.

We suggest that EU guidelines for determining the proper proportionality of Impact Assessments be developed and included in the overall Impact Assessment guidelines. Already at the 'roadmap' stage, a first indication of the environmental, economic and social costs and benefits of a given proposal should be undertaken, thereby providing a requisite for a more explicit and well-documented restrictions of the scope of the analysis to be performed in the actual Impact Assessment.

Introducing the Impact Assessment procedure in 2003 was a big step forward. The Impact Assessment system has good potential for integrating environmental, economic and social concerns into EU decision-making in a systematic and transparent way. The system is still evolving, and notwithstanding the possible drawbacks of the current practice that are identified in this or other studies, these should be viewed constructively as factors which can ensure continuing development and refinement of the procedures and their implementation in practice via continuous learning-by-doing.

Acknowledgements

The authors would wish to thank Michael Linddal and David Wilkinson (external reviewers), Morten Kohl, Rasmus Brandt Lassen, Henrik Saxe, and Karsten Stæhr (all IMV) for valuable comments and constructive feedback during the preparation of this report. IMV carries the final responsibility for all results, conclusions and views stated in this report.

References

Ackerman, F. & Heinzerling, L. 2004 *Priceless. On knowing the price of everything and the value of nothing.* New York: The New Press.

European Commission 2001a *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development.* COM(2001) 264 final. Commission of the European Communities.

European Commission 2001b *European Governance - A White Paper.* COM (2001) 428 final. Commission of the European Communities.

European Commission 2001c *Improving and simplifying the regulatory environment.* COM (2001) 130 final. Commission of the European Communities.

European Commission 2001d *Mandelkern Group on Better Regulation - Final Report.* Commission of the European Communities.

European Commission 2002a *A Handbook for Impact Assessment in the Commission.* Commission of the European Communities.

European Commission 2002b *Communication from the Commission - Action Plan Simplifying and improving the regulatory environment.* COM (2002) 278 final. Commission of the European Communities.

European Commission 2002c *Communication from the Commission on Impact assessment.* COM (2002) 276 final. Commission of the European Communities.

European Commission 2002d *Environmental Agreements at Community Level Within the Framework of the Action Plan on the Simplification and Improvement of the Regulatory Environment.* COM(2002) 412 final. Commission of the European Communities.

European Commission 2003 *The Commission´s legislative and work programme for 2004.* COM(2003) 645 final. Commission of the European Communities.

European Commission 2004 *Commission staff working paper: Impact assessment: Next Steps.* SEC(2004) 1377. Commission of the European Communities.

European Commission 2005a *Commission staff working document: Minimising administrative costs imposed by legislation - Annex to the Communication on Better Regulation for Growth and Jobs in the European Union.* SEC (2005) 175. Commission of the European Communities.

European Commission 2005b *Commission work programme for 2005.* COM(2005) 12 final. Commission of the European Communities.

European Commission 2005c *Communication from the Commission on an EU common methodology for assessing administrative costs imposed by legislation.* COM(2005) 518 final. Commission of the European Communities.

European Commission 2005d *Communication from the Commission to the Council and the European Parliament: Better Regulation for Growth and Jobs in the European Union.* COM(2005) 97 final. Commission of the European Communities.

European Commission 2005e *Impact Assessment Guidelines.* SEC(2005) 791. Commission of the European Communities.

European Communities 1999 *Selected instruments taken from the Treaties 4.B. Declarations annexed to the final act of Maastricht Declaration 18.* http://europa.eu.int/eur-lex/en/treaties/selected/livre440.html

Hahn, R. W. & Litan, R. E. 2005 *Counting Regulatory Benefits and costs: Lessons for the U.S. and Europe.* Journal of International Economic Law, Vol. 8, No. 2, pp. 473-508.

Harrington, W. & Morgenstern, R. D. 2004 *Evaluating Regulatory Impact Analyses.* Resources for the Future, Discussion Paper 04-04.

Lee, N. & Kirkpatrick, C. 2004 *A pilot study of the Quality of european commission extended impact assessment.* Working Paper Series NO.8. Impact Assessment Research Centre.

Pearce, D. W. 1998 Environmental Appraisal and Environmental Policy in the European Union. *Environmental and Resource Economics* Vol. 11(No. 3-4):489-501

Pearce, D. 2001 *Annex II: Integrating cost-benefit analysis into the policy process.* in: Howard, A., Pearce, David W., Ozdemiroglu, E., Seccombe-Hett, T., Wieringa, K., Streefkerk, C. M., and de Hollander, A. E. M.: Valuing the benefits of environmental policy: The Netherlands. RIVM.

Pearce, D. 2004 Does European Union Environmantal Policy Pass a Cost-Benefit Test? *World Economics* Vol. 5(No. 3):115-137

Renda, A. 2006 *Impact Assessment in the EU.* Centre for European Policy Studies (CEPS).

Vibert, F. 2004 *The EU's new system of regulatory impact assessment - a scorecard.* European Policy forum.

Wilkinson, D., Fergusson, M., Bowyer, C., Brown, J., Ladefoged, A., Monkhouse, C., Zdanowicz, A. 2004 *Sustainable Development in the European Commission's Integrated Impact Assessments for 2003.* Institute for European Environmental Policy.

Wilkinson, D., Monkhouse, C., Herodes, M., Farmer, A. 2005 *For Better or for Worse? The EU's 'Better Regulation' Agenda and the Environment.* Institute for European Environmental Policy (IEEP).

Appendices

Appendix 1: Impact assessments covered

Impact Assessments carried out until October 1· 2005		
Accelerating progress towards achieving the Millennium Development Goals - The European Union's contribution	SEC(2005)452	12.4.2005
Accelerating progress towards attaining the Millennium Development Goals - Financing for Development and Aid Effectiveness	SEC(2005)454	12.4.2005
Animal Health Conditions – Aquatic Animals	SEC(2005)1047	23.8.2005
Civil Society Dialogue between the EU and candidate countries	SEC(2005)891	29.6.2005
COD Regulation Sugar – Protocol accompanying measures	SEC(2005)828	5.6.2005
Communication on "Addressing the concerns of young people in Europe - implementing the European Youth Pact and promoting active citizen-ship"	SEC(2005)693	30.5.2005
Communication on "i2010 - a European Information Society for growth and employment"	SEC(2005)717	1.6.2005
Communication on a EU Drugs Action Plan (2005-2008)	SEC(2005)216	14.2.2005
Communication on eAccessibility	SEC(2005)1095	13.9.2005
Communication on Non-discrimination and equal opportunities for all - a framework strategy	SEC(2005)689	1.6.2005
Communication on the "Tenth Anniversary of the Euro-Mediterranean Partnership: A work programme to meet the challenges for the next five years	SEC(2005)483	12.4.2005
Communication on the Community programmes Customs 2013 and Fiscalis 2013	SEC(2005)423	6.4.2005
Communication on Winning the Battle against Global Climate Change	SEC(2005)180	2005
Council Directive on Community measures for the control of Avian Influenza / Council Decision amending Council Decision 90/424/EEC on expenditure in the veterinary field	SEC(2005)549	28.4.2005
Council Regulation establishing a Rapid Response and Preparedness Instrument for major emergencies	SEC(2005)439	4.6.2005
Council Regulation establishing Community financial measures for the implementation of the Common Fisheries Policy and in the area of the Law of the Sea	SEC(2005)426	6.4.2005
Decision of the European Parliament and of the Council establishing a Competitiveness and Innovation Framework Programme (2007-2013)	SEC(2005)433	6.4.2005
Decision of the European Parliament and of the Council concerning the seventh framework programme of the European Community for re-search, technological development and demonstration activities (2007-2013)	SEC(2005)430	6.4.2005

Decision of the European Parliament and of the Council establishing for the period 2007-2013 the programme "Citizens for Europe" to promote active European citizenship	SEC(2005)442	6.4.2005
EU Rural Development Strategy	SEC(2005)914	5.7.2005
Fundamental Rights Agency	SEC(2005)849	30.6.2005
General Programme on Fundamental Rights and Justice	SEC(2005)434	6.4.2005
General Programme Security and Safeguarding Liberties	SEC(2005)436	6.4.2005
General Programme Solidarity and Management of Migration Flows	SEC(2005)435	6.4.2005
Health and Consumer Protection Strategy and Programme	SEC(2005)425	6.4.2005
Mercury Strategy	SEC(2005)101	28.1.2005
Proposal for a COD Directive on common standards for return procedures	SEC(2005)1057	1.9.2005
Proposal for a Council Directive on taxation of passenger cars in the EU	SEC(2005)809	5.7.2005
Proposal for a new statement on the EC Development Policy	SEC(2005)929	13.7.2005
Protection of chicken kept for the production of meat	SEC(2005)801	30.5.2005
Regulation of the European Parliament and of the Council establishing the European Union Solidarity Fund	SEC(2005)447	6.4.2005
Small Claims Regulation	SEC(2005)351	15.3.2005
State Aid Action Plan - Less and better targeted state aid: a roadmap for state aid reform 2005-2009	SEC(2005)795	7.6.2005
Sugar Reform – CMO Regulation & Single Payment Regulation	SEC(2005)808	22.6.2005
Thematic Strategy on Air Pollution	SEC(2005)1133	21.9.2005

Impact Assessments carried out in 2004		
Capital adequacy Directive	SEC(2004)921	14.7.2004
Communication on an Action plan for the implementation of the legal framework for electronic public procurement	SEC(2004)1639	29.12.2004
Communication on financing Natura 2000	SEC(2004)770	15.7.2004
Communication on interoperability of digital interactive television serv-ices	SEC(2004)1028	30.7.2004
Council Decision establishing the European Refugee Fund for the period 2005 2010	SEC(2004)161	12.2.2004
Council Regulation establishing a Community Fisheries Control Agency	SEC(2004)448	28.4.2004
Council Regulation establishing a voluntary FLEGT licensing scheme for imports of timber into the European Community	SEC(2004)977	20.7.2004
Council Regulation on support for rural development by the European Agricultural Fund for Rural Development	SEC(2004)931	14.7.2004
Decision concerning the implementation of the MEDIA 2007 Programme	SEC(2004)955	14.7.2004

Decision creating the "Youth in action" Programme (2007-2013)	SEC(2004)960	14.7.2004
Decision establishing an integrated action programme in the field of life-long learning	SEC(2004)971	14.7.2004
Decision establishing the Culture 2007 Programme (2007-2013)	SEC(2004)954	14.7.2004
Directive amending Council Directive 91/440/EEC on the development of the Community's railways	SEC(2004)236	3.3.2004
Directive amending Directive 98/71/EC on the legal protection of designs	SEC(2004)1097	14.9.2004
Directive establishing an infrastructure for spatial information in the Community (INSPIRE)	SEC(2004)980	23.7.2004
Directive laying down rules on nominal quantities for pre-packed prod-ucts, prepealing Council Directives 75/106/EEC and 80/232/EEC, and amending Council Directive 76/211/EEC	SEC(2004)1298	25.10.2004
Directive on reinsurance	SEC(2004)443	21.4.2004
Environment & Health Action Plan	SEC(2004)729	9.6.2004
Environment & Standardisation	SEC(2004)206	25.2.2004
Framework Decision on procedural rights in criminal proceedings	SEC(2004)491	28.4.2004
Recast of the gender equality Directives	SEC(2004)482	21.4.2004
Regulation of the European Parliament and of the Council concerning the Visa Information System (VIS) and the exchange of data between Member States on short stay-visas	SEC(2004)1628	28.12.2004
Regulation on medicinal products for paediatric use and amending Council Regulation (EEC) No 1786/92, Directive 2001/83/EC and Regula-tion (EC) No 726/2004	SEC(2004)1144	29.9.2004
Update of eEurope 2005 Action Plan	SEC(2004)608	17.5.2004

Impact Assessments not included in sample (from 2004 until October 1st 2005)		
Communication on the Social Agenda	SEC(2005)177	9.2.2005
Council Regulation on European Fisheries Fund	SEC(2004)965	14.7.2004
Directive amending Directive 2003/88/EC concerning certain aspects of the organistion of working time	SEC(2004)1154	22.9.2004
Regulation of the European Social Fund	SEC(2004)924	14.7.2004

Appendix 2: Checklist used

The following is an exact copy of the checklist used in our analysis

1. Basic information

Title, date and reference of Impact Assessment:

Responsible DG (+ other DGs involved), if stated:

Category of proposal (please circle) Regulation, Directive, Decision, Communication, Action Plan, Mandate, Framework paper, Other (please state)

Lengths of report (pages)?

	yes	no	n.a.	Comments/Description	page(s)
Has external consultants been involved in producing IA?					
Has decision tools (e.g. 'IA-star') been used to support IA?					

2. Problem statement

	yes	no	Comments/Description	page(s)
Is a clear objective / problem of the Impact Assessment stated?				

If yes, objective of Impact Assessment stated clearly, is it stated in terms of

	yes	no	Comments/Description	page(s)
"How is target achieved at least cost"?				
"How can most units of target be achieved at least cost"?				
"Do advantages outweigh drawbacks"?				
Other? If yes, please state				

	yes	no	Comments/Description	page(s)
Is choice between several policy options a stated objective?				
Is there a clear distinction between objective of policy and objective of Impact As-				

sessment?				
Is the 'no policy' option mentioned?				
Is the 'no policy' option assessed?				
Is the 'business as usual' option mentioned?				
Is the 'business as usual' option assessed?				

How many alternative policy options are considered (apart from 'no policy' and 'business as usual' options)?

If yes, more than one alternative policy option is considered (apart from 'no policy' and 'business as usual' options):

	yes	no	Comments/Description	page(s)
Are policy options radically different (no= similar measures, but varying stringency)				

	yes	no	Comments/Description	page(s)
Is a baseline mentioned in description of policy options?				

If yes, a baseline scenario is mentioned:

	yes	no	Comments/Description	page(s)
Is the baseline described in detail?				
Is the status quo (business as usual) used as a baseline?				
Does the baseline include projections of policies etc. (e.g. impacts of a EU-25)?				

If no other policy options are considered (apart from 'no policy' and 'business as usual' options) or options are dismissed early, what (if any) arguments are used for not considering alternative policy options (or dismissing them early)?

	yes	no	Comments/Description	page(s)
Proportionality				
Lack of data				
Widespread agreement on policy option by stakeholders				
Late in the process of decision-making				
Difficult				
Not compatible with other legislation				
Case obvious				

None				
Other? If yes, please state				

	yes	no	Comments/Description	page(s)
Are issues of further information /data gathering / quantification / modelling mentioned?				

If yes, issues of further information are mentioned

	yes	no	Comments/Description	page(s)
Is current available information considered sufficient?				
Is a need for further information /data gathering / quantification / modelling identified?				

3. What areas of impact are covered by Impact Assessment?

Which impacts have been addressed and how (apart from 'no policy' and 'business as usual' options)?

- Briefly mentioned **(Bm)** *[If **Bm** is marked, please do so only under 'General' below]*
- Explicit delimitation (**D**)
- Qualitative discussion (**Ql**)
- Quantification (**Qn**) *[If **Qn** is marked, please fill in part III of checklist]*
- Monetisation (**M**) *[If **M** is marked, please fill in part II of checklist]*

Impact	How addres-sed?	Comments / description (e.g. reason for - delimitation - no quantification - no monetisation)	Time frame - short run (**SR**) - medium run 3-10 years (**MR**) - long run (**LR**)	- Page(s) - Refer. to part II & III of checklist
Economic				
General				
Competitiveness, trade and investment flow				
Competition in the internal market				
Operating cost and conduct of business				
Administrative cost on businesses				
Property rights				
Innovation and research				

Consumers and households				
Specific regions and sectors				
Third countries and international relations				
Public authorities				
The macroeconomic environment				
Other (please state)				
Environmental				
General				
Air quality				
Water quality and resources				
Soil quality or resources				
The climate				
Renewable or non-renewable resources				
Biodiversity, flora, fauna and landscapes				
Land use				
Waste production / generation / recycling				
The likelihood or scale of environmental risks				
Mobility (transport modes) and the use of energy				
The environmental consequences of firms' activities				
Animal and plant health, food and feed safety				
Other (please state)				
Social				
General				
Employment and labour market				
Standards and rights related to job quality				
Social inclusion and protection of particular groups				
Equality of treatment and opportunities, non-discrimination				
Private and family life, personal data				
Governance, participation, good				

administration, access to justice, media and ethics				
Public health and safety				
Crime, Terrorism and Security				
Access to and effects on social protection, health and educational systems				
Other (please state)				

	yes	no	Comments/Description	page(s)
Are direct costs to EU budget of policy options estimated?				

Overall coverage of positive and negative impacts
(not including 'no policy' and 'business as usual' options):

	Positive	Negative	Both	None	Comments
Economic					
Social					
Environmental					

What overall perspectives on problems are covered, apart from impacts only 'briefly mentioned'?
(Please circle - more than one answer possible):

Short / medium / Long run / n.a.

4. Distributional analysis

	yes	no	Comments/Description
Are distribution issues addressed?			

If yes, distribution issues are addressed, how is this done and what categories of variables are covered?

	- Briefly mentioned **(Bm)** - Explicit delimitation (**D**) - Qualitative discussion (**Ql**) - Quantification (**Qn**) - Monetisation (**M**)	Comments/description (e.g. does it cover all relevant groups)	page(s)
Economic?			
Social?			
Environmental?			

If more than briefly mentioned, what kind of distribution is covered?

	yes	no	Comments/Description	page(s)
Geographical distribution between member states				

Geographical distribution EU vs. outside EU				
Distribution between sectors, types of business, consumers/producers				
Income distribution				
Gender distribution				
Ethnic distribution				
Distribution over time				

5) Sensitivity / uncertainty?

	yes	no	Comments/Description	page(s)
Is uncertainty with respect to assumptions or data mentioned?				
Are sensitivity issues addressed				

If yes, sensitivity issues are addressed, how is this done and what categories of variables are covered?

	- Briefly mentioned **(Bm)** - Explicit delimitation (**D**) - Qualitative discussion (**Ql**) - Quantification (**Qn**) - Monetisation (**M**)	Comments/Description	page(s)
Economic			
Social			
Environmental			

Other variables? If yes, please state:

	yes	no	Comments/Description	page(s)
Is there a justification for choice of assumptions / data covered by sensitivity analysis?				
Is/are break-even point(s) identified?				

Is likelihood of changes in parameter variables covered?

	yes	no	Comments Description	page(s)
Best estimates + inner/outer bounds?				
Probability distributions?				
Other, please state				

If no, sensitivity issues are not addressed:

Is a justification for not addressing sensitivity put forward? If yes, please state:

6. Conclusion of Impact Assessment

	yes	no	n.a.	Comments/Description	page(s)
Is there a clear conclusion?					

If yes, there is a clear conclusion

	yes	no	Comments/Description	page(s)
Is there a clear recommendation of one policy option?				
Does conclusion refer to limitations to analysis due to choice of policy options covered?				
Does conclusion refer to limitations to analysis due to underlying assumptions?				
Does conclusion refer to limitations to analysis due to incomplete information or availability of data				

	yes	no	Comments/Description	page(s)
Is conclusion clearly related to problem statement?				
Does conclusion refer to “How is target achieved at least cost”?				
Does conclusion refer to “How can most units of target be achieved at least cost”?				
Does conclusion refer to “Do advantages outweigh drawbacks”?				
Does conclusion refer to precautionary principle?				
Does conclusion make specific reference to environmental costs or benefits?				
Does conclusion make specific reference to social costs or benefits?				
Does conclusion make specific reference to economic costs or benefits?				
Does conclusion refer to possible trade-offs between environmental / social / economic areas?				
Does conclusion refer to possible synergies between environmental / social / economic areas (e.g. by referring to Lisbon Agenda)?				
Other arguments/areas referred to in conclusion? If yes, please state				

Does the conclusion make use of qualitative arguments (Ql), direct quantification (Qn) or direct monetisation (M)?

	yes	no	Comments/Description	page(s)
Is a clear distinction made between a financial ('budget') perspective and an economic ('welfare-economic') perspective in the conclusion?				

If yes, a clear distinction is made,

Does the conclusion involve use (whether quantitative or qualitative) of - financial costs and benefits (F), - economic (welfare economic) costs and benefits (E), - use of both (B)

Comments for internal use:

Overall quality of Impact Assessment, please circle (subjective assessment for internal use)				
Very poor	Poor	Neither	Good	Very good

Checklist Part II (to be completed if an impact is quantified in monetary terms)

7. Monetary quantification:

What impact area:

	yes	no	n.a.	Comments/Description	page(s)
Is economic (welfare-economic) analysis performed (no=financial; n.a.= not stated)?					
Is a consistent base-year applied (e.g. constant 2000 Euros)?					

What is the source of data quantification is based upon?

	yes	no	n.a.	Comments/Description	page(s)
Pre-existing empirical data? - Are references cited? - Is quality of data addressed? - Are underlying assumptions presented?					
Use of pre-existing model? - Are references cited? - Is quality of model addressed? - Are underlying assumptions presented?					
New data collection?					

What methods have been used in quantification?

	yes	no	Comments/Description	page(s)
Method not stated				
Cost-benefit analysis (CBA)				
Cost-effectiveness analysis (CE)				
General Equilibrium modelling				
Sectoral models				
Macro-econometric models				
Environmental Impact Assessment models				
Micro-simulation models				
Others? If yes, please state				

	yes	no	Comments/Description	page(s)
Have justification for choice of method been used? If yes, please state:				

If Cost-benefit analysis have been used:

What methods have been used in benefit valuation?

	yes	no	Comments/Description	page(s)
Method not stated				
Benefit-transfer				
Contingent valuation (willingness to pay)				
Damage-cost-method				
Hedonic pricing / travel cost-method				
Other? If yes, please state				

What methods have been used in cost valuation?

If Cost-effectiveness (CE) analysis have been used:

What is the target used as benchmark for CE-analysis?

	yes	no	n.a.	Comments/Description	page(s)
Does this target correspond with target identified under 'objectives'?					

For all types of monetary quantification:

What is the geographical scope of the underlying analysis?

	Yes	no	n.a.	Comments/Description	page(s)
Case study					
Regional study					
Overall EU-study					
Collection of separate studies					
Other? If yes, please state					

	Yes	no	n.a.	Comments/Description	page(s)
Have nationally /regionally decomposed values been used?					
Have common European values been used (e.g ExternE-estimates)?					
Has extrapolation or generalisation of results (see geographical scope above) been used? - From the specific to the general? - From the general to the specific?					

What discount rate is used (if used)?

	yes	no	Comments/Description	page(s)
Is multi-criteria analysis used?				

Checklist part III (to be completed if an impact is quantified)

What impact area:

8. Physical quantification:

What (if any) arguments are used for not using monetary quantification?

	yes	no	Comments Description	page(s)
Proportionality?				
Lack of data?				
Difficult?				
Case is obvious (e.g. high benefits, low costs)				
None				
Other? If yes, please state				

What are the types of data quantified?

	yes	no	Comments/Description	page(s)
Quality (or Disability) Adjusted Life Years				
Employment effects (numbers / percentages)				
Risks (likelihoods)				
Emissions (physical quantities)				
Other? If yes, please state				

What is the source of the data, quantification is based upon?

	yes	no	n.a.	Comments/Description	page(s)
Pre-existing empirical data? - Are references cited? - Is quality of data addressed? - Are underlying assumptions presented?					
Use of pre-existing model - Are references cited? - Is quality of model addressed? - Are underlying assumptions presented?					
New data collection					

What is the geographical scope of the underlying analysis?

	Yes	no	n.a.	Comments/Description	page(s)
Case study					
Regional study					
Overall EU-study					
Collection of separate studies					
Others? If yes, please state					

	Yes	no	n.a.	Comments/Description	page(s)
Has extrapolation or generalisation of results (see geographical scope above) been used? - From the specific to the general? - From the general to the specific?					

	yes	no	n.a.	Comments/Description	page(s)
Is multi-criteria analysis used?					

Appendix 3: Summary of main results

Reference	Type of Proposal	No. of pages	Options mentioned: All options	Options mentioned: "No policy"	Options mentioned: "Business as usual"	Options assessed: "No policy"	Options assessed: "Business as usual"	Impacts Briefly mentioned, Qualitatively addressed, Quantified and Monetised: Environmental Bm	Environmental Ql	Environmental Qn	Environmental M	Economic impacts Bm	Economic impacts Ql	Economic impacts Qn	Economic impacts M	Social impacts Bm	Social impacts Ql	Social impacts Qn	Social impacts M	Perspective on impacts: Short-term	Perspective on impacts: Medium-term	Perspective on impacts: Long-term	Type of impacts covered: Environmental Positive	Environmental Negative	Environmental Both	Economic Positive	Economic Negative	Economic Both	Social Positive	Social Negative	Social Both
SEC(2005) 795	Action Plan	20	3	x	x			1				1				1						x	x			x			x		
SEC (2005) 454	Communication	11	2		x				3				1								x			x			x			
SEC(2005)452	Communication	3	1						1				1											x			x			
SEC(2005)442	Decision	35	7	x	x			1				1	2				5							x			x			
SEC(2005)693	Communication	7	4	x	x				1							1								x			x			
SEC(2005)689	Communication	15	4		x				1							1					x						x			
SEC(2005)433	Decision	61	3	x	x				8		2			2			1		1		x			x			x			
SEC(2005)180	Communication	51	4		x		x		11		4	3	1		2		1		2						x			x		x
SEC(2005)439	Regulation	6	3	x					1							1						x						x		
SEC(2005)426	Regulation	21	3	x	x				4		1			2			1							x			x			
SEC(2005)717	Communication	90	3	x	x		x	x	9		1			4			4					x			x			x			
SEC(2005)216	Communication	20	4	x	x		x	x	1								1													
SEC(2005)434	Decision	27	5	x	x		x	x	4		1			1			2									x			x		
SEC(2005)436	Decision	17	4		x				3							1	1					x						x		x
SEC(2005)435	Decision	63	5	x			x		8	1				2			5							x			x			x
SEC(2005)447	Regulation	7	2		x				1								1													
SEC(2005)483	Communication	9	1						1				1													x				
SEC(2005)430	Decision	95	3	x	x		x	x	8		1			2		3		1	1			x		x			x			
SEC(2005)549	Directive	21	3		x				5		1			2		1		1			x			x			x			
SEC(2005)425	Decision	79	5	x	x				11		1			4				6			x			x			x			
SEC(2005)423	Communication	12	3	x			x		7	1				3				3							x			x		
SEC(2004)977	Regulation	33	4		x		x		14		4			5		1		3	1					x			x			
SEC(2004)482	Directive	27	5	x	x		x	x	4					1				3			x	x					x			x
SEC(2004)1144	Regulation	61	8		x		x		8					1		4		3			x	x					x			x
SEC(2004)1298	Directive	17	5	x	x				8		1			4		1		1	1						x			x		
SEC(2004)206	Communication	28	4	x	x		x		3		1			1				1							x			x		
SEC(2004)729	Communication	17	1	x		x			4		1			1			1	1					x				x			
SEC(2004)980	Directive	71	6	x		x			6		1			1		1		2		1		x	x			x			x	
SEC(2004)448	Regulation	16	2	x					3		1						1						x			x				
SEC(2004)608	Communication	42	3			x			3								1	1	1		x				x			x		
SEC(2004)1028	Communication	16	5		x		x		7		1					1		2					x								
SEC(2004)161	Decision	26	5	x					7									6												
SEC(2004)491	Decision	38	3		x		x		4									2					x							
SEC(2004)1628	Regulation	32	4		x		x		5									3								x				
SEC(2004)443	Directive	33	3		x		x		4									1												
SEC(2004)921	Directive	41	5	x	x	x	x		3																					
SEC(2004)1097	Directive	48	6	x	x				6								1	1												
SEC(2004)1639	Communication	67	4				x		8									1												
SEC(2004)236	Directive	38	6		x		x		8		1					1		1												
SEC(2004)931	Regulation	59	3						3	1							1													
SEC(2004)954	Decision	42	5	x	x				3										2											
SEC(2004)955	Decision	101	3	x	x				4								1	1												
SEC(2004)960	Decision	39	5	x	x				3									2												
SEC(2004)971	Decision	55	3	x	x		x	x	4									2												
SEC(2004)770	Communication	49	5				x		4	1						1		1					x			x				
SEC(2005)1133	Directive	137	5	x	x		x		16	1	4	2	2					2		2						x			x	
SEC(2005)351	Regulation	37	2		x		x		4									2		1		x				x				
SEC(2005)891	Communication	4	4		x				1								1													
SEC(2005)809	Directive	46	4		x		x		9			1						3		3			x			x			x	
SEC(2005)828	Regulation	14	2		x				6	1							1	1								x			x	
SEC(2005)1095	Communication	26	3		x		x		11									9		2									x	
SEC(2005)929	Communication	18	4		x		x		2								1	1											x	
SEC(2005)849	Regulation	25	5		x		x		2							1			1			x							x	
SEC(2005)1057	Directive	31	4		x		x		5									1		4									x	
SEC(2005)801	Directive	14	3		x				2		1							1						x						
SEC(2005)1047	Directive	47	5	x					6		2							4							x			x		
SEC(2005)808	Regulation	18	3		x		x		7									4	1	2						x			x	
SEC(2005)101	Communication	173	13		x		x		17	1	6					2	1	3			x									x

ABBREVIATIONS:

Briefly Mentioned (BM): The impacts have been only briefly mentioned; *Qualitatively addressed* (Ql): The impacts have been qualitatively discussed; *Quantified* (Qn): The impacts have been quantified; *Monetised* (M): The impacts have been monetised.

Previous reports from IMV

2006

Havbrug – Samfundsøkonomiske fordele og ulemper ved øget produktion af ørred i danske farvande.
Morten Kohl.

2005

Motorways versus Nature – A Welfare Economic Valuation of Impacts.
Olsen, Søren Boye (KVL), Ladenburg, Jacob (KVL), Petersen, Mads Lyngby (IMV), Lopdrup, Ulrich (IMV), Hansen, Anja Skjoldborg (IMV) & Dubgaard, Alex (KVL).

Environmental Harmful Subsidies - Linkages between subsidies, the environment and the economy.
Kjellingbro, Peter Marcus & Skotte, Maria.

Looking Beyond Kyoto – Trade-offs and Disagreements in Climate Policy.
Wrang, Kasper; Busk, Rico; Abildgaard, Jørgen & Stowell, Debbie (ECON Analysis).

Rethinking the Waste Hierarchy.
Rasmussen, Clemen; Vigsø, Dorte; Ackerman, Frank (Tufts University); Porter, Richard (University of Michigan); Pearce, David (University College London and Imperial College London); Dijkgraaf, Elbert & Vollebergh, Herman (both from Erasmus University Rotterdam).

2004
Forsigtighedsprincippet i praksis – Konkrete anvendelser af forsigtighedsprincippet i Danmark.
Hansen, Anja Skjoldborg; Busk, Rico & Larsen, Thommy.

Nyttiggørelse af brændbart affald – Velfærdsøkonomisk analyse af medforbrænding ved cementproduktion på Aalborg Portland A/S.
Rasmussen, Clemen & Reimann, Per.

Pesticidstop på offentlige arealer – En økonomisk vurdering af udvalgte områder.
Petersen, Mads Lyngby & Lassen, Rasmus Brandt.

Økologi og Økonomi – Fordele og omkostninger ved økologisk fødevareproduktion.
Wrang, Kasper; Hansen, Anja Skjoldborg & Egense, Andreas.

A Review of the North Atlantic Circulation, Marine Climate Change and its Impact on North European Climate.
Olsen, Steffen M.; Buch, Erik (both from Danmarks Meteorologiske Institut) & Busk, Rico.

2003
Globale økonomiske tab ved vejrkatastrofer – Årsager til stigende tabsomkostninger i det 20. århundrede.
Busk, Rico; Wrang, Kasper & Strandbjerg Pedersen, Jesper.

Reduktion af radon – En samfundsøkonomisk cost-benefit analyse.
Petersen, Mads Lyngby & Larsen, Thommy.

Dansk miljøstøtte – Udgifter og fordele ved miljøstøtte til Central- og Østeuropa.
Vigsø, Dorte & Hussain, Zubair Butt.

Miljøeffektvurdering for Havmiljøet del 1: Empirisk modellering af miljøtilstanden i de åbne indre farvande.
Markager, Stiig & Storm, Lars (both from DMU).

Miljøeffektvurdering for Havmiljøet del 2: 3D procesbaseret modellering af miljøtilstanden i de åbne farvande.
Hansen, Ian Sehested, Uhrenholdt, Thomas & Dahl-Madsen, Karl Iver (all from DHI).

Miljøeffektvurdering for Havmiljøet del 3: Miljøeffektvurdering ud fra empirisk og procesbaseret modellering.
Hansen, Ian Sehested & Markager, Stiig (both from DHI).

Viden, værdier og valg. Debatoplæg om mål og midler for Vandmiljøplan III.
Hansen, Anja Skjoldborg; Furu, Anita; Kjellingbro, Peter Marcus; Skotte, Maria & Vigsø, Dorte.

Studie af omkostningerne ved regulering af næringsstofforureningen af vandmiljøet – Baggrundsnotat til Viden, værdier og valg – Debatoplæg om mål og midler for Vandmiljøplan III.
Kjellingbro, Peter Marcus.

Litteraturstudie af de samfundsøkonomiske værdier af fordelene ved et renere vandmiljø – Baggrundsnotat til Viden, værdier og valg – Debatoplæg om mål og midler for Vandmiljøplan III.
Skotte, Maria.

BAM-forurening af drikkevandet – Skal vi rense?
Kristoffersen, Anders & Lassen; Rasmus Brandt.

2002
Miljøets pris – Danske miljøudgifter og indtægter.
Vigsø, Dorte; Lynge, Morten Toft; Larsen, Thommy & Jørgensen, Andreas Egense.

Evaluation of the "Global Environmental Outlook – 3" Report by UNEP.
Saxe, Henrik; Rubin, Olivier & Hansen, Anja Skjoldborg.

Assessing the Ecological Footprint – A look at the WWF's Living Planet Report.
Jørgensen, Andreas Egense; Vigsø, Dorte; Kristoffersen, Anders & Rubin, Olivier.

Danmarks omkostninger ved reduktion af CO_2 – En analyse af de forskellige muligheder.
Kristoffersen, Anders.

Pant på engangsemballage? – En samfundsøkonomisk analyse af pantordningen for engangsemballage til øl og sodavand.
Vigsø, Dorte & Andersen, Henrik Thormod.

Tillægsnotat til rapporten "Pant på engangsemballage".
Vigsø, Dorte & Højgaard, Betina.

Samfundsøkonomisk vurdering af partikelfiltre – En cost-benefit analyse af partikelfiltre på dieselkøretøjer.
Larsen, Thommy; Kristoffersen, Anders & Andersen, Henrik Thormod.

Knallerter – Samfunds- og miljøøkonomiske fordele og ulemper.
Saxe, Henrik.

Nyttigørelse af returpapir – En samfundsøkonomisk analyse.
Petersen, Mads Lyngby; Andersen & Henrik Thormod.

Institut for Miljøvurdering
Gammel Kongevej 5, 1. sal
DK-1610 Copenhagen V
Phone +45 7226 5800
Fax +45 7226 5839
imv@imv.dk
www.imv.dk

About the report

The EU Commission Impact Assessment system integrates analyses of environmental, economic and social impacts in order to inform policy-makers about possible positive and negative effects expected from proposed EU legislation. A current topic of discussion is how to ensure that Impact Assessments are proportionate to the significance of the initiatives covered.

This report reviews the extent to which Commission Impact Assessments published in 2004 and the first nine months of 2005 are proportionate. It makes suggestions for further specification of guidance for proportionality with respect to what proposals to cover, what policy options to include, what impacts to include, and the detail of coverage. Suggestions for more explicit consideration of the limitations of analyses are also provided.

About IMV (Environmental Assessment Institute)

IMV is a policy analysis institute. The institute's approach is socio-economic analyses of environmental issues. Forming critical, independent views on the basis of existing knowledge and communicating these to policy makers and public is the core objective of the Institute.

IMV was established in 2002. The Institute employs both environmental economists and natural scientists. In 2006 the Institute turns special focus on environment and growth, on EU policy and on the applicability of socio-economic methods.

All IMV reports are available at www.imv.dk

Viscom as