

SPECIAL REPORT –
**THE STATE OF
ENVIRONMENTAL
IMPACT ASSESSMENT
PRACTICE IN THE UK**

Dedicated to creating a sustainable future through environmental skills, knowledge and thought leadership

About IEMA

The Institute of Environmental Management & Assessment (IEMA) is the UK's leading environmental professional association. IEMA is dedicated to creating a sustainable future through environmental skills, knowledge and thought leadership.

IEMA is an independent and international, not for profit membership organisation that represents the views of 15,000 environmental professionals.

IEMA delivers the following services:

Policy and Legislation – IEMA frequently contributes to the development of key areas of UK policy and legislation.

Professional development, training and qualifications – IEMA sets the standard for the development of environmental skills and knowledge, ensuring that environmental professionals are equipped to make a difference as sustainability becomes a key business driver.

IEMA Environmental Skills Map - a framework of knowledge and skills for the environmental practitioner.

Training courses and continuous professional development covering a range of subjects and spanning many levels from diploma to foundation course, tailored courses for senior executives and for those at the top of their profession, including Chartered Environmentalist.

Central source of information – IEMA acts as a central source of information providing events, publications and knowledge sharing including www.environmentalisonline.com.

Go to **www.iema.net** to find out more.

Ruddocks has been delivering innovative design and print solutions to clients in the private, public and charitable sectors for more than 125 years.

An on-going commitment to caring for the environment is at the heart of Ruddocks' operations. A commitment that was confirmed when it was the first printer in Lincoln, and one of only 5 per cent of printers nationally, to achieve ISO 14001 accreditation. Ruddocks has also achieved Forestry Stewardship Council (FSC) certification and continues to introduce measures to reduce its waste, emissions and energy requirement.

For more information visit: www.ruddocks.co.uk

FOREWORD

The UK faces significant pressure for new development to support a greener and more sustainable economy. The challenges are huge: at least £110 billion investment in new energy infrastructure in the period to 2020 to support the transition to a low carbon economy; £20 billion over the next five years to maintain and improve water supply; £15 billion investment between now and 2020 to divert waste from landfill and generate more energy from waste; and spending on flood defences expected to double from a current level of £0.5 billion a year by 2035 to maintain current risk levels.

Added to the above, the UK population is projected to rise from just over 61 million to almost 72 million by 2033, a 17% increase from 2008, creating significant demand for more homes and supporting transport infrastructure.

Environmental Impact Assessment (EIA) has a huge role to play in ensuring that the environmental impacts of new development are minimised and that key environmental issues are fully integrated into the decision making process. EIA practitioners operate at the interface between local communities, developers and the environment. As a regulated process, the procedural complexities are potentially demanding, especially combined with the additional risk posed by legal challenges.

At its best, EIA helps to shape the design and siting of development such that social value to communities and broader economic value to investors can both be met, without eroding natural capital and pushing the boundaries of environmental limits – a tool that can truly support moves towards sustainability. However, the many competing demands can often serve to stifle the process, resulting in reams of information that mask the key environmental issues that need to be considered.

Environmental practitioners have an opportunity to ensure that EIA plays an enhanced role in engaging communities in shaping new development to find the best environmental outcomes.

Reconciling the competing demands between nationally significant infrastructure and local communities won't be easy, but by sharing experience of best practice, understanding key success factors and reviewing what doesn't work well – we've a better chance of succeeding.

Martin Baxter

Executive Director – Policy
Institute of Environmental Management and Assessment
June 2011

ACKNOWLEDGEMENTS

This report has been made possible due to the valued input of IEMA members, both through their informed and enthusiastic participation during the research workshops, held during 2009 and 2010, and their responses to the IEMA EIA Survey in August 2010. Members have helped IEMA to understand the current state of UK EIA and establish a vision that will shape the future direction of practice.

With the views of over 1800 IEMA members contributing to the findings presented in this report it is not possible to thank everyone; however, there were a number of individuals who volunteered to facilitate research discussions at the EIA workshops during 2009 and 2010, they are Adam Boyden, John Fry, Karl Fuller, Jo Murphy, Ross Marshall, Lisa Palframan and Trevor Turpin.

At these workshops well over 40 EIA practitioners provided presentations of EIA case studies that helped to stimulate debate and share ideas on good practice in assessment. IEMA would like to thank all such contributors and feels there is no better way to do this than by showcasing their presentations as Appendix I to this Report, which can be accessed via www.iema.net/eiareport.

In addition the report includes contributions from, and has taken account of review comments kindly provided by, the following individuals:

- Barbara Carroll, Director, Enfusion (MIEMA)
- Kim Chowns, Policy Adviser, Department for Communities and Local Government
- Peter Cole, EIA Planner – Development Scheme, London Borough of Tower Hamlets (AIEMA)
- Samantha Langford-Holt, Environmental Planning Assistant, Defence Infrastructure Organisation (AIEMA)
- Andrew Mahon, Technical Director, Cascade Consulting (MIEMA)
- Jo Murphy, National Technical Manager, National Environmental Assessment Service, Environment Agency (MIEMA)
- Topsy Rudd, Director, Cascade Consulting (MIEMA)
- Riki Therivel, Partner, Levett Therivel
- Stephen Tromans QC, 39 Essex Street
- Trevor Turpin, Director, Nicholas Pearson Associates (FIEMA)

The report was written and edited by Josh Fothergill - IEMA's senior adviser on Environmental Assessment – who also led the research. He was supported in writing the report by Edward Barlow, with important contributions from Martin Baxter, Nick Blyth, Richard Harada and Jacqueline Stainton.

EXECUTIVE SUMMARY

Over the next decade the UK will engage in a major period of infrastructure renewal and development. The potential environmental and social impacts (both positive and negative) associated with such developments will play a major role in determining both the speed at which such infrastructure is deployed and whether individual applications gain consent. Environmental Impact Assessment (EIA) is the tool that acts as the interface between the environment, development and communities, enabling projects to work within the limits of the natural environment.

During the past 25 years EIA has enhanced the consideration of environmental and social issues in over 10,000 major development projects across the UK and has become crucial to the iterative design process of such projects, ensuring that key infrastructure is delivered with minimal environmental impact and increasingly with environmental gains. The EIA process also allows views from different parties to be taken into account, from scientifically adept environmental bodies to local people with concerns relevant to their communities. However, EIA practice is not perfect and further improvements must be made if it is to continue to offer value in the 21st Century.

Over the past 2 years IEMA has been actively researching the application and effectiveness of EIA across the UK by engaging with practitioners in a variety of ways. This report captures both the current state of EIA practice and looks to the future; identifying how it could develop to make an even greater contribution to the effective integration of the environment into the design and consenting processes. The report is presented in three parts which respectively look at: the basis for EIA practice in the UK; the current state of practice; and its future, including developing a vision to ensure assessments continue to add value to major development consent decisions.

PART I: THE BASIS FOR EIA PRACTICE IN THE UK

The EIA Directive (85/337/EEC) forms the basis of UK EIA practice and has been amended three times in 1997, 2003 and 2009. In the UK EIA has been implemented through secondary legislation, in the form of Regulations that link into a number of existing development consent regimes; with nearly two thirds of all EIA undertaken in relation to applications for planning permission. As the EIA Regulations are mainly procedural a failure to comply with the process can leave a development open to challenge through the courts. Over time the UK's EIA Regulations and practice itself have been shaped by such cases and a review of key cases, provided by Stephen Tromans QC is set out.

The EIA practice has developed considerably since it was formally introduced into the UK in 1988 and numerous different groups have been involved in this process including consenting authorities, developers, consultants, local communities and statutory environmental bodies. All of these groups have played a role in shaping the content and quality of EIA undertaken. Another strong influence on practice is the quality of EIA guidance available, with key guides available from the Government, IEMA and Government bodies, such as the Environment Agency. Alongside over-arching guidance are topic specific guides such as those related to landscape and visual impacts, ecology and climate change. Beyond this the quality of EIA practice in the UK has been influenced by wider developments, such as developments in technology, including Geographic information systems, and the increasing availability of environmental information online.

PART 2: THE STATE OF EIA PRACTICE IN THE UK

Part 2 of the report looks at the four key components of EIA practice: screening; scoping & engagement; assessment; and EIA's outcomes & outputs. This approach allowed IEMA to identify areas where EIA practice is successful and areas where practice could be enhanced further. The conclusions of each chapter are provided below.

Screening - determining the need for EIA

- The ineffective application of EIA screening requirements is the most common area of legal challenge in UK EIA practice.
- The UK lacks accurate information on the number of screening decisions undertaken each year; however, evidence from Northern Ireland indicates that the real level of screening activity is probably ten times higher than that estimated in a recent European Commission study.
- Changes to the EIA Directive in 2009 mean that projects related to carbon capture and its geological storage can now be required to undergo EIA. This development, which will be implemented in the UK's EIA regulations during summer 2011, acts to strengthen the link between the EIA process and action related to climate change.
- There is considerable concern amongst EIA practitioners about the application of the UK's case by case approach to screening. Issues appear to be more acute in England; however, there is a clear need for further research in this area to understand the true scale of ineffective screening practices across the UK.
- There is a need to improve both the consistency and quality of case by case EIA screening undertaken by consenting authorities. As a minimum all consenting authorities should ensure they have access to environmental professionals with sufficient EIA competence to be able to meet their regulatory obligations to screen all Schedule 2 developments.

Scoping & Engagement - focussing the assessment on key issues through effective engagement

- The results of current scoping practice all too often lead to broad assessments that lack appropriate focus leading to long Environmental Statements that add burdens all parties involved in EIA.
- There are three driving factors behind ineffective scoping - risk aversion, poor planning of the assessment, and commercial realities – that act together to lead to broad assessments that fail to focus on the specific environmental effects likely to result from the proposed development.
- Information about the benefits that are delivered by effective scoping already exists, including: shorter Environmental Statements and reduced delays in the consenting process; however, more action is needed to ensure that these benefits are regularly achieved.
- Scoping reports are becoming too long, with examples now regularly including contents that are more closely associated with the regulatory expectations of a complete Environmental Statement. Practitioners must begin to address this issue and look to innovate in scoping and build in more effective engagement.
- All parties must recognise that scoping is a 'live' process that develops through the assessment process and thus practitioners should aim to develop an appropriate terms-of-reference for the assessment that can be maintained and updated as the design of the proposed development is progressed through the pre-application process.
- There is an increasing expectation that engagement should occur from the early stages of pre-application. EIA practice already undertakes consultation and engagement activity beyond the expectations of the EIA Regulations; however, there is a need to develop better ways of engaging to ensure that concerns are heard and can be acted on appropriately.

Assessment – Co-ordinating the iterative process that sees the proposed development's design be assessed and modified to minimise negative and maximise positive environmental effects

- **Baseline:** Effective communication between an EIA co-ordinator and the environmental topic specialists is essential if baseline data is to be proportionate to the assessment. Alongside this the practitioner must increasingly determine whether previously collected environmental data is still useable or whether future baseline scenarios are appropriate. In such circumstances decisions must be project specific and should involve pragmatic discussions with both the consenting body and relevant stakeholders.
- **Alternatives & iterative design:** It is clear that EIA is having a strong and increasing influence on project design helping to avoid negative environmental impacts and build mitigation measures directly into the development proposal. However, current approaches to reporting this information in the ES do not appear to be effective. Where EIA has positively influenced a proposed development's design the ES should reflect this in a clear and transparent manner to allow stakeholders to understand how the concerns they raised during pre-application consultation have been addressed.
- **Significance:** Effective EIA practice ensures that the methods used to evaluate significance can be readily understood by those reading the ES. An over-arching approach to the discussion of significance across all the topic specific assessments can be a useful tool to achieve this; however, the key is to ensure that where different methodologies are used they are clearly justified and explained in a simple manner. EIA practice must avoid confusing those reading the EIA's findings and as such phrases like 'significant in EIA terms' should be avoided.
- **Cumulative effects:** EIA includes the requirement to identify not only the project's direct effects, but also a range of secondary effects including cumulative, synergistic and inter-relationship effects. Practitioners must ensure they consider both intra-project and inter-project cumulative effects. The use of new techniques, such as ecosystem goods and services, may provide enhanced methods to consider such effects, but it is clear that work is needed to improve practitioner knowledge of these techniques. To this end IEMA will produce a briefing note on Ecosystem Services & EIA.
- **Mitigation:** The use of a mitigation hierarchy by practitioners with the aim of avoiding negative impacts in the first instance, followed by the need to reduce or even compensate for such impacts is now fully embedded in EIA practice. However, issues now arise as to what constitutes mitigation, as a result of EIA's increasing influence in the iterative design process of developments. Three categories of mitigation are identified:
 1. Actions undertaken by the EIA that influence the design stage;
 2. Standard construction practices for avoiding and minimising environmental effects; and
 3. Specified follow-up action to be implemented post-consent.

In the case of the latter it is advisable to involve site contractors in their development to ensure the actions are understood and implemented by those responsible for their delivery.

- **Enhancement:** The research has identified that the inclusion of environmental enhancements to increase a development's positive impacts are still much less common than actions to mitigate predicted negative effects. However, with the increasing emphasis on local community involvement in the UK's development consent regimes future EIA practice will need to give greater consideration of opportunities to provide environmental and community enhancements. Developers are increasingly recognising the clear reputational benefits that can be gained from identifying and delivering positive environmental impacts through their developments and the potential influence this can have in generating support for their proposals.
- **The EIA co-ordinator:** An EIA co-ordinator is the individual responsible for delivering an effective, efficient and proportionate assessment of the proposed development. Therefore getting a high quality EIA co-ordinator is one of the most important decisions in commissioning an EIA. Effective EIA co-ordination delivers:
 - Increasing quality of the EIA and overall design processes;
 - Opportunities for environmental enhancements and mitigation; and
 - Efficiencies, costs savings and reduced risks to delivery.

There is a need for greater recognition, amongst developers who commission EIAs, that the EIA

co-ordinator's role is a specialist activity and that contracting a suitable co-ordinator is not only a justifiable project expense, but also likely to pay dividends through the added value it brings to both the EIA and project design processes.

EIA Outcomes & Outputs – Ensuring that the assessment's findings are effectively communicated and that the environmental consequences of consented development are not worse than those predicted

- **Effective Environmental Statements:** An effective Environmental Statement (ES) is one whose content is appropriate to the proposed development and whose length is no longer than that needed to provide the decision-maker and stakeholders with the EIA's findings. ES have many audiences and satisfying their competing demands can prove difficult; however, IEMA's research has found that EIA practitioners recognise the fact that generally the length of a typical UK ES acts to reduce the value of the EIA's findings it contains to the majority of audiences. It is clear that action is needed by EIA practitioners and all those involved in practice to begin to produce more proportionate ES that provide clear and focussed information.
- **Delivering coherent applications:** Applying for a development has become increasingly complex over the past 25 years with the need to complete numerous assessments either as a result of regulatory requirements, national / local policy indications or expectations set out in guidance. As a result there are increasingly calls for a tool that can be used to provide an effective single 'integrated assessment'. However, EIA already provides this opportunity as the scope of issues that can be considered in an assessment is not limited by the Directive or UK Regulations; as such community issues and even socio-economic effects can, and regularly are, included in ES. Developers and consenting authorities alike must recognise the potential the ES offers to provide a single and proportionate integrated document setting out all the significant positive and negative impacts related to a development proposal.
- **Non-Technical Summary (NTS):** Providing a NTS under a separate cover from the main ES has now become standard practice in the UK, allowing wider access to the EIA's findings. However, whilst accessibility has improved other issues have appeared including: documents becoming overly long - regularly exceeding 20 pages in length; and the use of the NTS as a form of public relations for the proposed development rather than accurately presenting the EIA's findings. For NTS to remain effective and credible communication tools EIA co-ordinators must be directly involved in the writing process and more widely practitioners must continue to explore developing effective methods of presenting the assessment findings to engage communities.
- **Environmental Management Plans (EMP):** An EMP is a document that sets out the mitigation, compensation and enhancements actions identified by the EIA in a manner that allows them to be readily implemented during the construction and operation of a development. The research has found that engaging a site contractor to help develop such actions that make up the content of the EMP is a key factor in the successful implementation of an EMP in practice. The inclusion of a draft EMP within ES is becoming increasingly common and IEMA's study has found that nearly 80% of UK EIA practitioners would support making this a mandatory requirement within the revised EIA Directive.
- **Monitoring:** IEMA's research has identified that EIA practitioners would like to see the EIA Directive strengthened to include more emphasis on monitoring the actual environmental effects that result from a development that underwent EIA. However, there are other mechanisms that are beginning to deliver more effective monitoring in practice, although these are yet to become standard practice. They include: recognition amongst developers that the environmental effects of their developments increasingly influence their corporate reputation; and the commissioning of environmental professionals to monitor and manage the implementation and maintenance of environmental compensation and enhancement measures for a number of years after a new development is constructed.

PART 3: THE FUTURE OF EIA PRACTICE IN THE UK

The EIA Directive is currently being reviewed by the European Commission with a new Directive expected to be agreed in 2014. The review is focussing on three areas:

1. Ensuring the current level of environmental protection offered by EIA is maintained.
2. Providing a greater emphasis on quality in the EIA delivered through the Directive, rather than solely focussing on procedural matters.
3. Identifying opportunities to streamline the requirements both within the EIA Directive and between its requirements and those of other European level assessments.

IEMA has already been involved in activities with the Commission to ensure the views of UK EIA practitioners are considered in the Directive review as well as within other aspects of the Commission's EIA work, such as its planned guidance on enhancing the consideration given to climate change and biodiversity impacts via EIA.

Alongside activity in Europe the UK's EIA Regulations continue to develop with the most recent changes to EIA undertaken within the planning regime coming into force during the summer and autumn of 2011. EIA case law continues to develop and will continue to have a strong influence on the future direction of practice. Beyond this IEMA's new EIA Quality Mark scheme (www.iema.net/qmark) and the developers and consultancies registered with the scheme will increasingly act together to enhance the effectiveness of UK EIA practice.

A vision of the future

IEMA has used the findings of its research to establish the following vision for the future of EIA practice in the UK:

EIA practice will influence development proposals to ensure that they work for the developer, community and environment, in order to meet the objective of sustainable development. Practitioners must recognise that getting this right is essential to delivering proportionate assessments that generate improved environmental outcomes.

If this vision is to be achieved it is clear that action is needed to both maintain the existing quality within EIA practice and build upon this to deliver even greater value. IEMA has identified six key action areas where practitioners can take steps to improve EIA practice on both an individual project basis and collective across the profession. The six action areas are:

1. Communicating added value generated by EIA
2. Realising the efficiencies of effective EIA co-ordination
3. Developing new partnerships to enhance EIA activity
4. Listening, communicating and engaging effectively with communities
5. Exchanging knowledge and experience to tackle the difficult issues
6. Delivering environmental outcomes that work now and in the future

IEMA will act to enable the delivery of activities in each of these action areas by working with its members, EIA Quality Mark organisations, the European Commission, the UK Government and devolved administrations and other key partners associated with and involved in Environmental Impact Assessment.

CONTENTS

Foreword

Acknowledgements

Executive Summary

PART 1: THE BASIS FOR EIA PRACTICE IN THE UK

1. Introduction

- 1.1 Why a special report?
- 1.2 Environmental Impact Assessment
- 1.3 IEMA and the research

2. EIA in the UK

- 2.1 The EIA Directive
- 2.2 The UK's EIA Regulations
- 2.3 An overview of the EIA process
- 2.4 The number of EIA undertaken each year
- 2.5 Who's who in EIA practice?

3. Progress in EIA

- 3.1 Changes to the EIA Directive
- 3.2 Case Law
- 3.3 Guidance
- 3.4 Devolution
- 3.5 Other trends that have influenced progress in EIA

PART 2: THE STATE OF EIA PRACTICE IN THE UK

4. Identifying the need for EIA

- 4.1 Mandatory EIA - Schedule 1 Development
- 4.2 Projects potentially requiring EIA - Schedule 2 Development
- 4.3 Screening practice
- 4.4 How much screening and how many EIAs?
- 4.5 Is EIA screening effective?
- 4.6 Other screening issues
- 4.7 Chapter Conclusions

5. Focussing EIA through engagement

- 5.1 The value of current scoping practice
- 5.2 The causes of ineffective scoping
- 5.3 Effective scoping and its benefits
- 5.4 An increasing role for public participation
- 5.5 Community engagement and consultation
- 5.6 Chapter Conclusions

6. The assessment process

- 6.1 Establishing an effective baseline
- 6.2 Alternatives and iterative design
- 6.3 Evaluating the significance of environmental effects
- 6.4 Cumulative environmental effects
- 6.5 Mitigation and enhancement
- 6.6 The role of the EIA co-ordinator
- 6.7 Chapter Conclusions

7. EIA outputs and outcomes

- 7.1 Producing an effective Environmental Statement
- 7.2 Deliver more coherent applications through EIA
- 7.3 The Non-Technical Summary
- 7.4 Environmental Management Plans
- 7.5 Monitoring environmental effects
- 7.6 Chapter Conclusions

PART 3: THE FUTURE OF EIA PRACTICE IN THE UK

8. The basis of future EIA

- 8.1 The EIA Directive
- 8.2 New EIA Regulations for planning applications
- 8.3 Future Case Law
- 8.4 The EIA Quality Mark

9. A vision for EIA practice

- 9.1 Communicating added value generated by EIA
- 9.2 Realising the efficiencies of effective EIA co-ordination
- 9.3 Developing new partnerships to enhance EIA activity
- 9.4 Listening, communicating and engaging effectively with communities
- 9.5 Exchanging knowledge and experience to tackle the difficult issues
- 9.6 Delivering environmental outcomes that work now and in the future

BOXES

- Box 1.3.A:** Percentage of the 1,815 survey respondents with EIA experience in the UK's four nations
- Box 1.3.B:** IEMA's EIA research workshops
- Box 3.1:** The EIA Directive and amendments (1985 – 2010)
- Box 3.2.A:** Major EIA Cases Pre-2008
- Box 3.2.B:** Major EIA Cases 2008-2011
- Box 4.1:** CO2 capture and geological storage projects requiring mandatory EIA
- Box 4.3:** The application of EIA to demolition
- Box 4.4:** Average number of Environmental Statements per million head of population per year submitted in relation to applications for planning consent
- Box 4.6:** Comparison of the old and new approach to screening 'changes or extensions' in Scotland
- Box 5.1:** A comparison between regulatory scoping requirements and the Infrastructure Planning Commission's EIA scoping guidance
- Box 5.2:** The frequency of inclusion of environmental topic chapters in a sample of 100 UK Environmental Statements from 2010
- Box 5.3:** The key benefits be generated through effective scoping
- Box 6.2:** The risks of applying the DMRB approach to residual significance in wider EIA practice
- Box 6.4:** The consideration of the cumulative impact of greenhouse gas emissions in EIA practice
- Box 6.5.A:** Enhancing and mitigating effects
- BOX 6.5.B:** Framing mitigation to deliver effective planning conditions
- Box 6.5.C:** Designing Effective Mitigation
- Box 6.5.D:** A case study of integrated mitigation and environmental enhancement
- Box 6.5.E:** Model of how adaptive management fits into the EIA process
- Box 6.6.A:** The value added to a project by an effective EIA Co-ordinator
- Box 6.6.B:** Example of the savings that can be generated by effective EIA Co-ordination
- Box 7.1.A:** The different audiences that an Environmental Statement must satisfy
- Box 7.1.B:** Practitioner views on how the length of Environmental Statements reduce the value of the information they contain to different target audiences
- Box 7.4.A:** The building blocks for developing a successful EMP
- Box 7.4.B:** Five benefits of preparing an EMP
- Box 7.4.C:** The link between EIA, Environmental Management Plans (EMP) and Environmental Management Systems (EMS)
- Box 8.1:** Modifying the EIA Directive – IEMA's Perspective
- Box 8.3:** Potential Areas of Future Challenge in EIA
- Box 8.4:** EIA Quality Mark Commitments

FIGURES

Figure 1.3: The 50 key words noted during the research workshops

Figure 2.1: The stages in the EIA process

Figure 2.2: Number of Environmental Statements produced in the UK between 1991 and 2008

Figure 6.3: EIA significance evaluation matrix

Figure 7.2: An approach to integrating the majority of documents associated with a planning application within the Environmental Statement

Figure 8.4: The EIA Quality Mark logo

APPENDICES

Appendix 1: EIA case studies presented at the research workshops

Appendix 2: IEMA's EIA survey summer 2010 - complete findings

Appendix 3: Concept diagram linking planning, EIA and the MoD's sustainability objectives

The Report's Appendices are only available online, please visit: www.iema.net/eiareport

I INTRODUCTION

I.1 WHY A SPECIAL REPORT?

Over the next decade the UK will engage in a major period of infrastructure renewal and development. This is likely to include replacing the UK's existing nuclear power stations, developing long-distance high speed rail lines, constructing a complex matrix of offshore renewable energy projects and a major expansion of projects that generate energy from waste. The potential environmental and social impacts (both positive and negative) associated with such developments will play a major role in determining both the speed at which such infrastructure is deployed and whether individual applications gain consent. A failure to deliver such infrastructure will substantially harm the UK's push to be a leading green economy, limit the potential for economic growth and put at risk our strategic environmental goals, such as reducing greenhouse gas emissions.

Environmental Impact Assessment (EIA) is the tool that acts as the interface between the environment, development and communities, enabling projects that work within the limits of the natural environment. The EIA Directive (85/337/EEC, as amended) allows both individual and cross-cutting environmental issues to be considered when consenting major development projects. Over the past 25 years EIA has enhanced the consideration of environmental and social issues in over 10,000 major development projects across the UK. More recently it has become crucial to the iterative design process of such projects, ensuring that key infrastructure is delivered with minimal environmental impact and increasingly with environmental gains. The EIA process allows views from different parties to be taken into account, from scientifically adept environmental bodies to local people with concerns relevant to their communities.

However, EIA practice is not perfect and further improvements must be made if it is to continue to offer value in the 21st Century. In particular, current EIA practice is too often driven by a risk averse approach leading to broad assessments that lack the focus required to demonstrate the true value environmental professionals can add to project design and the decision-making process. With any changes to EIA practice resulting from the European Commission's on-going review of the EIA Directive unlikely to take effect in the UK before 2017 there is a need to take action now. IEMA believes that this action must focus attention on advancing practice to enable the consistent delivery of high quality EIAs that add value, reduce costs and save time for all parties involved in delivering major developments.

As a first step in enabling such progress IEMA has produced this report setting out the current state of UK EIA practice and establishing a vision for its future.

I.2 ENVIRONMENTAL IMPACT ASSESSMENT

EIA is an assessment process applied to both new development proposals and changes or extensions to existing developments that are likely to have significant effects on the environment. The EIA process ensures that potential effects on the environment are considered, including natural resources such as water, air and soil; conservation of species and habitats; and community issues such as visual effects and impacts on the population. EIA provides a mechanism by which the interaction of environmental effects resulting from development can be predicted, allowing them to be avoided or reduced through the development of mitigation measures. As such, it is a critical part of the decision-making process.

EIA has its origins in the United States of America in the late 1960s; however, in the UK it became a legal requirement as a result of the EIA Directive¹. This Directive has been in force for over 25 years and acts as the key regulatory tool to ensure ongoing protection of the environment from development across the European Union (EU). Since it came into effect in 1985 the Directive has been amended on several occasions and as the EU² has expanded it has been applied in a greater number of countries. There are estimated to be 16,000 EIAs undertaken annually across the EU around 600 of which have been conducted in the UK each year since 2000³. EIA has thus proven to be a far more wide reaching tool than the estimate of a 'couple of dozen assessments per year' predicted when the Directive's requirements were first introduced to the UK in 1988.

¹ 85/337/EEC as amended by 97/11/EC, 03/35/EC and 09/31/EC

² Collection of information and data to support the Impact Assessment study of the review of the EIA Directive, GHK for DG Environment (2010) http://ec.europa.eu/environment/eia/pdf/collection_data.pdf

³ Based on data from the DCLG, see Figure 2.2.

EIA is designed to ensure that relevant information about the environment is considered in the decision-making process related to applications for development consent. In 2009 the European Commission stated that EIA both “ensures that environmental considerations are taken into account” and “ensures more transparency in environmental decision-making”. IEMA’s own research has found that, of the 1,671 respondents who offered an opinion 67.2% believe that the EIA Directive always or often contributes to effective protection of the environment and quality of life, with less than 0.5% indicating it never achieves these goals.

This report looks at the application of EIA in the UK and identifies the benefits and challenges faced in practice. The report goes on to set out a vision of how the practical application of EIA can be enhanced to ensure it continues to add value to effective decision making.

1.3 IEMA AND THE RESEARCH

IEMA is the UK’s leading environmental professional membership body with over 15,000 members. Approximately 25% of IEMA’s members are directly involved in environmental assessment with many more taking a professional interest in this area of practice. IEMA is therefore uniquely positioned to present a view of the state of EIA practice in the UK.

Over the past 2 years IEMA has been actively researching the application and effectiveness of EIA across the UK by engaging with practitioners in a variety of ways. This report captures both the current state of EIA practice in the UK and looks to the future; identifying how it could develop to make an even greater contribution to the effective integration of the environment into the design and consenting processes. In conducting the research behind this report IEMA has engaged EIA practitioners, and others involved or interested in EIA through:

- A comprehensive online survey completed by 1,815 IEMA members during August and September 2010. The focus of the survey was the effectiveness of the EIA Directive in practice. The results of this survey have been used to inform this report and provide input to the European Commission’s review of the EIA Directive⁴. The complete findings of the survey can be found online as Appendix 2 of this report, see: www.iema.net/eiareport
- A series of 20 workshops and three conferences were undertaken between April 2009 and November 2010. In total over 800 people attended these events allowing IEMA to undertake more than 30 hours of facilitated discussion that gathered experience of EIA in practice. The events focussed on gathering views on challenges, drivers and solutions for effective practice.

IEMA’s research has gathered information from EIA practitioners from across the UK with Box 1.3.A setting out the proportion of respondents to the online survey with experience of EIA in each of the UK’s administrations. The lower proportion of respondents from Scotland, Wales and Northern Ireland is reflective of the lower number of assessment undertaken per year in these countries. Box 1.3.B lists all of the EIA conferences and workshops used to gather practitioner views and opinion used within this report.

IEMA has also used the knowledge and experience it has gained from reviewing Environmental Statements and responding to EIA queries received from members, consenting authorities and the public over the past 20 years.

⁴ See: <http://ec.europa.eu/environment/eia/conference.htm>

Country	% of respondents with EIA experience in each country
England	70.5%
Scotland	21.2%
Wales	16.0%
Northern Ireland	6.7%

Box 1.3.B: IEMA's EIA research workshops

<p>2009</p> <ul style="list-style-type: none"> • 30th April: London (Environmental Assessment Forum - Conference) • 23rd June: Leeds • 24th June: Cambridge • 25th June: Swindon • 1st July: London • 2nd July: Cardiff • 7th July: Birmingham • 14th July: Manchester • 15th July: Glasgow • 16th July: Newcastle <p>2010</p> <ul style="list-style-type: none"> • 11th February: Bath (EIA Forum – Conference: IEMA and IAIA UK & Ireland Branch) • 6th July: Glasgow • 8th July: Perth • 21st July: Newcastle • 22nd July: Leeds • 27th July: Cardiff • 28th July: Exeter • 29th July: Reading • 30th July: Cambridge • 4th August: Manchester • 5th August: Birmingham • 6th August: London • 1st & 2nd November: London – IEMA 2010 (Conference)
--

Figure 1.3, overleaf, provides a graphic representation of the 50 terms that were most frequently recorded in the notes taken during the EIA workshops conducted during the research. The larger the word appears the more frequently it was used, with each of the words represented having been recorded at least 30 times across the research workshops. EIA is unsurprisingly the most commonly term and was recorded more than 500 times within the workshop notes; other terms such as LPA (Local Planning Authority), Need and ES (Environmental Statement) were all noted more than 150 times, or on average seven times per workshop. Figure 1.3 provides a visual summary of the discussions held with practitioners and includes many positive terms, which reflects the view that those contributing to the research have a strong desire to actively develop EIA practice.

2. EIA IN THE UK

2.1 THE EIA DIRECTIVE

EIA was originally developed as a formal assessment method in the USA, via the 1969 National Environmental Protection Act (NEPA), in response to the increasing concern of the environmental impacts of major developments. In the UK, EIA is derived from a European Directive. Originally introduced in 1985, the EIA Directive (85/337/EEC) has been amended three times since then (Section 3.1); however, its central aim of ensuring that environmental concerns are assessed and considered as part of the development consent process remains the same. The Directive's preamble indicates that: "the best environmental policy consists in preventing the creation of pollution at source", with the text making reference to the assessment being applied to "development consent", which is defined as: "the decision of the competent authority or authorities which entitles the developer to proceed with the project". It is clear that this includes a range of activities beyond activities requiring planning permission and in the UK activities such as forestry, fish farming and land drainage are all within the scope of EIA in addition to more obvious forms of development such as infrastructure and urban regeneration projects.

2.2 THE UK'S EIA REGULATIONS

European directives do not immediately pass into law across the EU, member states are required to pass domestic legislation to implement each Directive. In the UK, EIA has not been applied via a single set of regulations covering all consents; rather EIA Regulations have been introduced within a number of existing development consent regimes. Devolution has meant that there are specific EIA regulations relevant to England, Scotland, Wales and Northern Ireland. As a consequence there are over 20 sets of EIA Regulations, and numerous amendments, that apply across the UK's development consent regimes. Developers, or their consultants, must therefore determine which regulations are relevant on a case by case basis; however, approximately two thirds of all EIA activity is undertaken within the land use planning regime. In spite of this complexity in the regulatory framework of EIA its application is more streamlined and where more than one set of EIA regulations are found to be relevant to a proposal only a single assessment and Environmental Statement is required across the various consents that may be required.

The most frequently applied EIA Regulations are the Town and Country Planning (Environmental Impact Assessment) England and Wales Regulations (SI 293/1999), as amended, with more than 3,500 EIAs having been undertaken under them since they were introduced. As a result of this all references to EIA regulations in this report are specific to these regulations, unless otherwise stated.

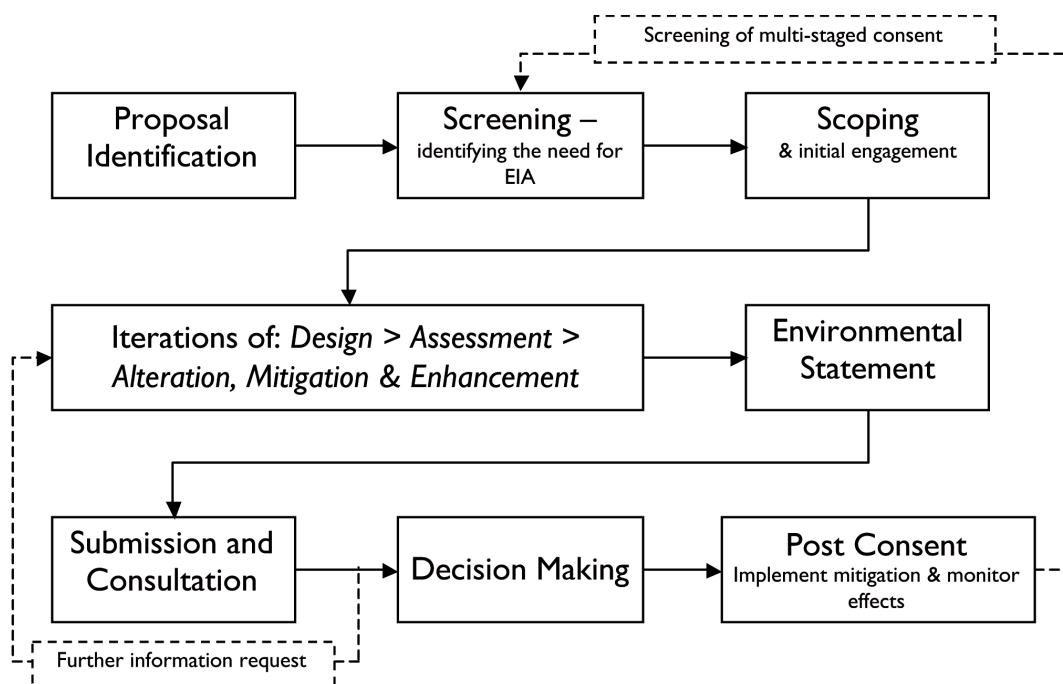
It should be noted that the Department for Communities and Local Government (DCLG) will shortly launch a new set of EIA Regulations to replace SI 293/1999 (as amended). The new EIA Regulations will consolidate all the amendments and update the EIA regime to reflect recent EIA case law, see Section 8.2.

2.3 AN OVERVIEW OF THE EIA PROCESS

EIA is an iterative process in which there are multiple feedback loops. This means that whilst there are a series of commonly accepted and well understood steps within EIA practice, their application will vary between individual assessments. These feedback loops are an important aspect to the EIA process as it is through these that the development's design can be amended to better reflect the environmental sensitivities relevant to the proposed site.

The EIA process is set out in Figure 2.1, which identifies a number of regulatory feedback loops as well as the iterative nature of the assessment process. The process is well understood and some form of each stage can be seen to be universally applied in practice.

Figure 2.1: The stages in the EIA process



A brief explanation of each step in the EIA process, set out in Figure 2.1, is set out below:

- **Proposal Identification:** the need or opportunity for development is identified, alternatives are considered and draft plans are drawn up, which generally include the potential location, proposed land use and initial design concepts.
- **Screening:** in order to determine whether an EIA is needed for a given project it is 'screened' by the relevant consenting authority. The regulations require that some projects are always subject to EIA whilst others may be subject to an EIA where there is the likelihood for significant environmental impacts, see Chapter 4 for further information on screening.
- **Scoping:** where an EIA is required, scoping focuses the assessment onto the key environmental issues that the assessment will consider in further detail. The scoping stage should ensure that only aspects of the environment likely to be significantly affected are included in the later stages of the assessment.
- **Iterations of:** Design > Assessment > Alteration, Mitigation & Enhancement: in order to predict the likely environmental effects of a proposed development the assessment must consider the current condition of the environment and likely future changes to it without the development, the changes the development would have on this and the significance of such effects. Negative environmental effects predicted to result from the development are reduced through alterations to design or through the inclusion of mitigation measures. At this stage opportunities to enhance the environment should also be identified. The assessment also considers the interaction environmental effects caused by the development in order to identify secondary, cumulative and synergistic effects that may occur as a result of taking action to reduce negative environmental effects.
- **Environmental Statement (ES):** this is the document which communicates the results of the EIA to the decision-maker and other stakeholders. Criteria for what must be included are set out in the regulations, with the Non-Technical Summary (NTS) being the most widely distributed component of the document.
- **Submission and consultation:** in order to allow the stakeholders and the public to participate the ES is consulted upon, helping to ensure quality in the EIA process. Where deficiencies are identified the consenting authority should assess their significance to the decision-making process and request further information from the applicant, where necessary.
- **Decision Making:** at this point all the application information is reviewed and the decision whether to grant development consent is taken. The views expressed during the public consultation process and the EIA's findings contained in the ES must be considered in making the decision.
- **Post consent:** if the development is granted consent, mitigation measures should be implemented and the environmental effects of construction and operation may be monitored. An Environmental Management Plan (EMP) is a useful tool to manage this stage of the process and allows the developer to demonstrate that the environmental outcomes are no worse than those predicted by the EIA.

2.4 THE NUMBER OF EIA UNDERTAKEN EACH YEAR

The number of Environmental Statements (ES) submitted per year can be used as an indicator of the level of EIA activity in the UK. Figure 2.2 below shows the number of ES produced per year in the UK, with three different estimates for the period 2006 to 2008. The DCLG have reliable records from 1991 to 2005 after which their data is incomplete with gaps relating to the number of ES submitted under a number of the EIA regulations –the dashed line. IEMA's figures for this period have been calculated by applying the average number of ES conducted under those missing regimes during the period 2000-05. As such IEMA's higher estimate provides a more accurate representation of the likely level of ES submission, and thus EIA activity, across the UK during this period. The Commission's data comes from a report, conducted by GHK, to support their review of the EIA Directive and it is unclear how the much lower estimated level of EIA activity in the UK has been determined.

Two important trends can be seen from this data. The first being the marked increase in the number of ESs being produced after the introduction of the 1999 amendment EIA Regulations. Between 1991 and 1998 no more than 375 ES were submitted in any one year (1994), with the average of 319 ES per year. Following the 1999 EIA regulations the average number of ES per year rose to some 646 per year (2000 – 2005) more than doubling the size of the UK market. By the end of 2006 the UK's EIA and SEA (Strategic Environmental Assessment) sectors was estimated to be worth £170m a year⁵. On average two thirds of the EIA undertaken each year between 1991 and 2008 has been related to developments proposed within the English, Scottish and Welsh planning systems.

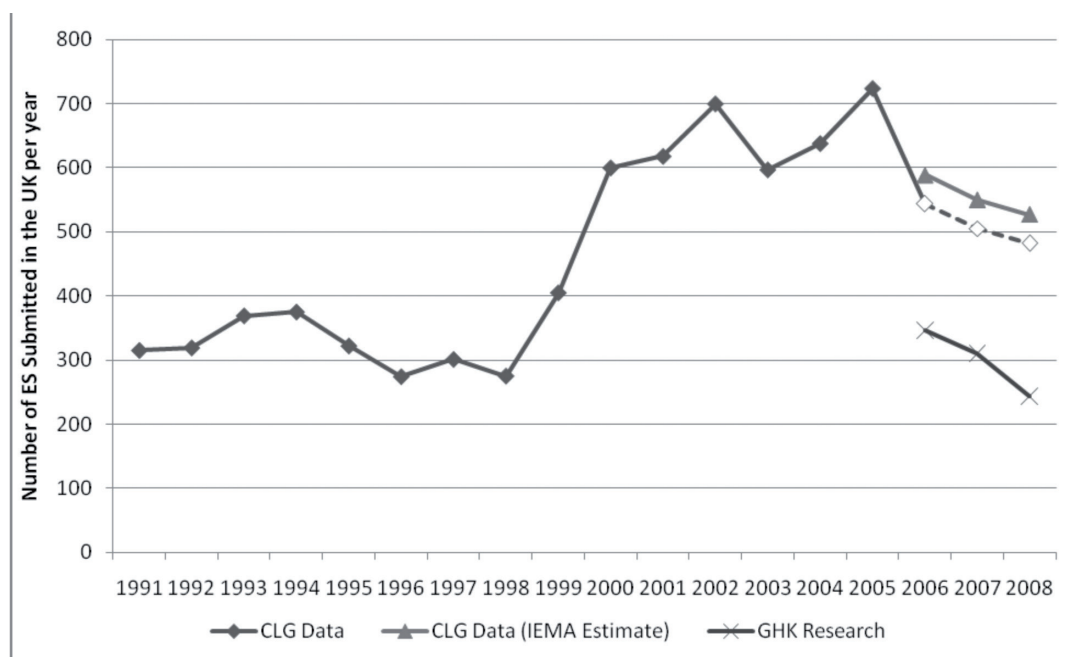
The second trend is the recent, approximately 15%, decline in the number of ES submitted in the UK over the past 5 years. IEMA's data shows that despite the fall in the number of ES submitted between 2005 and 2008 there were still more than 500 EIA being undertaken in the UK per year. Although the Commission's figures are significantly lower than the DCLG sourced data the same trend can still be identified indicating a reduction in the number of ES being submitted in the UK in recent years.

The Commission's research estimates that the total number of EIA conducted across the EU each year is around 16,000⁶. This would appear to indicate that the UK undertakes a relatively small number of assessments each year in comparison to some other Member States; an issue that is explored further in Chapter 4.

⁵ ENDS Consultancy Market Guide (2006)

⁶ Collection of information and data to support the Impact Assessment study of the review of the EIA Directive, GHK for DG Environment (2010) - http://ec.europa.eu/environment/eia/pdf/collection_data.pdf

Figure 2.2: Number of Environmental Statements produced in the UK between 1991 and 2008



2.5 WHO'S WHO IN EIA PRACTICE?

There are a number of different groups involved in EIA, including: government bodies, non-statutory bodies and local communities; an outline of their general roles are set out below:

Consenting Authorities: These are bodies that make decisions on whether a project is awarded development consent or not. In approximately two thirds of cases this will be a local planning authority, but can also be a Government Department, Devolved Administrations, the Infrastructure Planning Commission (soon to become the Major Infrastructure Projects Unit), the Environment Agency or Forestry Commission, etc. Consenting authorities receive the development application and Environmental Statement and, at the request of a developer, are required to provide screening and scoping opinions.

Statutory Consultation Bodies: government bodies with specific environmental responsibilities that are legally required to be consulted during the EIA process; including Natural England, Countryside Council for Wales, Scottish Environmental Protection Agency and the Northern Ireland Environment Agency.

Secretary of State or Devolved Administration: where issues arise related to either a screening or scoping opinion the Secretary of State, or relevant Devolved Administration, is responsible for making the final decision, termed a screening or scoping direction.

Developers: those proposing the development – this could be a private individual, a company, a local authority or a government department (e.g. the Environment Agency, Highways Agency, etc). A developer will generally employ a number of other parties who are involved in preparing the application, including:

- **EIA Team:** usually a consultancy employed by a developer to carry out the EIA. They include an EIA co-ordinator, who leads the process and manages the production of the ES, and environmental specialists, who assess the impact of the project on specific aspects of the environment (e.g. ecologists, archaeologists, etc).
- **Design Team:** employed by the developer to design the development, they work closely with those leading the EIA to navigate the consenting regime ensuring that the environmental information generated by the assessment is integrated into the design, minimising environmental and community effects.
- **Legal Advisors:** employed by the developer to ensure the application is legally compliant, they identify risks that could lead to the application being delayed or rejected.

Non-Statutory Consultation Bodies: in addition to those required to be consulted, there are a range of other bodies that have interests in different aspects of the environment. These often include nature and heritage conservation bodies (e.g. RSPB), community groups and those representing specific user groups (e.g. The Ramblers Association).

IEMA: the UK's largest body for environmental professionals, including over 3,000 members involved in EIA activity. IEMA has a number of areas of activity including professional accreditation for individual EIA practitioners and an EIA Quality Mark for organisations that regularly lead the EIA process. The Institute also undertakes research and produces guidance related to EIA, as well as working with Governments and wider partners to develop EIA practice.

Other Professional Bodies: bodies representing other professionals and environmental specialists that are involved in the EIA process, including bodies such as the Royal Town Planning Association (RTPI), Institute of Ecology and Environmental Management (IEEM), Landscape Institute (LI), etc. They promote best practice within their field and run occasional event related to EIA.

Academia: EIA practice is flexible allowing new techniques and approaches to assessment thus academics help shape future practice by undertaking and publishing the findings of their research. Further, the majority of EIA co-ordinators and environmental specialists have a relevant degree or higher level of qualification, thus academia is essential to the supply of future EIA practitioners.

The Courts: EIA's legislative basis means that it is possible to bring legal proceedings against development consent decisions on the basis on the application, or lack thereof, of the EIA procedure. Court judgements can lead to changes in the way both the EIA Directive is interpreted and can lead to the requirement to amend the UK's EIA regulations.

Local Communities and the Public: at its widest level the EIA process is open to anyone with an interest in a proposed development that is being assessed, opportunities for involvement most frequently arise during scoping and the formal public consultation on the ES.

3. PROGRESS IN EIA

3.1 CHANGES TO THE EIA DIRECTIVE

In the 25 years since the original EIA Directive was adopted by the European Council there have been three key amendments in 1997, 2003 and 2009. Directives do not automatically become law in each Member State, upon them coming into force Member States are given a period of time by which to comply with the requirements of the Directive. Depending on the complexity of the requirements in the Directive this time can vary but tends to be 2 – 3 years. Box 3.1 (below) shows the dates the original directive (85/337/EEC) and subsequent amendments were required to be implemented by and when they actually came into force in England and Wales. Evidently, there have been occasions when domestic legislation has not achieved the implementation date and in the case of Directive 2003/35/EC resulted in infraction proceedings being undertaken by the European Commission against the UK. Such proceedings are the first stage in the process which can eventually lead to significant fines for Member States.

Box 3.1: The EIA Directive and amendments (1985 – 2010)

Directive	Time-limit for transposition	Came into force in the UK's EIA Regulations
85/337/EEC	3 July 1988	15 July 1988
97/11/EC	14 March 1999	14 March 1999
2003/35/EC	25 June 2005	15 January 2007
2009/31/EC	25 June 2011	Scotland – 1st June 2011 England – August 2011 (approximate date) Wales – Autumn 2011 (approximate date) Northern Ireland – Early 2012 (approximate date)

3.1.1 DIRECTIVE 97/11/EC

The revision to the Directive in 1997 introduced a number of changes which increased the number of EIAs being conducted across the EU. The number of projects listed in Annex 1 (mandatory) was increased by 14 and those in Annex 2 (discretionary) by 8. The amendments also meant that extensions or changes to projects in Annexes 1 and 2 would be subject to EIA (discretionary for Annex 2). This amendment was introduced in the UK in 1999 and explains some of the rise in the number of assessments per year set out in Figure 2.

The 1997 revision also introduced changes which brought the Directive in line with requirements under the United Nations Economic Commission for Europe's (UNECE) Espoo Convention on: EIA in a Trans-boundary Context⁷. Where major projects are likely to have effects on other Member States, the amendment requires that country to consult and share information with the authorities in the affected Member States and to take the results of consultation into consideration. This had limited implication for the UK, with recent EU research (GHK, 2010) indicating that less than 1% of UK EIAs are considered to have trans-boundary effects requiring consultation with other Member States.

⁷ <http://www.unece.org/env/eia/>

3.1.2 DIRECTIVE 2003/35/EC

The 2003 revision of the Directive was undertaken to bring it in line with the UNECE's Aarhus Convention on: Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters⁸. Whilst including a number of specific changes the overall effect of this amendment to the EIA Directive was to strengthen public participation and access to relevant information requirements. The revision also provided EU citizens with the right to access a review of the legality of a development consent decision; however in the UK such opportunities existed prior to 2003 and, as such, this aspect of the amendment had little influence on practice.

Some Member States took the wording of the revised Directive to infer that the public must be involved at scoping, and in a few cases screening. However, the UK opted to transpose the EIA Directive's new wording as closely as possible with its amended regulations rather than interpret the meaning, which could have been seen to "gold-plate" the UK's EIA regulations.

3.1.3 DIRECTIVE 2009/31/EC

Directive 2009/31/EC was introduced to regulate the development of carbon capture and storage infrastructure across the EU. It amends the EIA Directive so as to include such projects within its scope. This applies to pipelines for the transport of carbon dioxide, installations for its capture and the geological sites for its storage. As can be seen from Box 3.1 the requirements of this latest amendment are currently being implemented across the UK.

The Environment Agency (England & Wales) will also shortly be launching advice on their expectations in relation to proposed carbon capture and storage developments, which will include information on the issues that need to be considered at the scoping stage of EIA. The latest guidance in this area can be found at: <http://www.environment-agency.gov.uk/research/library/position/120154.aspx>

3.2 CASE LAW

As the UK EIA Regulations are procedural a failure to comply with due process can leave a consented development open to legal challenge. Where a challenge is brought and the consenting process is found to be flawed in relation to compliance with the requirements of the EIA Regulations the consent can be revoked. Whilst such challenges are relatively infrequent a failure to apply EIA, or meet its regulatory requirements, is serious and can stop a development in its tracks.

There have been a number of legal challenges in the past 25 years that have found that the UK's EIA Regulations themselves fail to effectively implement the EIA Directive's requirements. When the courts make such findings there is a need to amend one or more of the UK's EIA Regulations. Boxes 3.2.a and 3.2.b overleaf set out major EIA cases that have had a substantive impact on UK EIA practice. As can be seen from Box 3.2.a there are occasions when the ruling of the European Court of Justice on EIA undertaken in a Member State other than the UK has implications to UK EIA practice (e.g. C-72/95). The European Commission has on occasion provided guides to major rulings from the European Court of Justice, with the latest documents covering interpretation of Annexes I & II, in 2008⁹ and on more wide ranging issues in later 2010¹⁰.

8. <http://www.unece.org/env/pp/>

9. Interpretation of definitions of certain project categories of annex I and II of the EIA Directive, DG Environment (2008) http://ec.europa.eu/environment/eia/pdf/interpretation_eia.pdf

10. Environmental Impact Assessment of Projects: Rulings of the Court of Justice, DG Environment (2010) http://ec.europa.eu/environment/eia/pdf/eia_case_law.pdf

Box 3.2.A: Major EIA Cases Pre-2008

Litigation on EIA got off to quite a slow start after 1988 in the UK, but the mid 1990s saw the start of a rash of important cases both at Community and UK level. The first half of the decade 2000-2010 produced a number of landmark decisions which challenged the UK's approach to transposition.

- Case C-72/95 Kraaijeveld (the Dutch Dykes case) (ECJ, 1996). Certainly the most oft-cited case for its insistence on the 'wide scope and broad purpose' to be attributed to the Directive. The start of a long and successful campaign by the ECJ to narrow down the discretion of member states not to subject projects to EIA.
- R v. North Yorkshire Council, ex p. Brown (House of Lords, 2000). Emphasised at the highest level the crucial significance of Community law in this field and applied the purposive approach of Community law (i.e. interpreting legislation based on the purpose behind it, rather than its literal wording). Held that the procedures for determining the conditions to be applied to old mining permissions constituted a development consent process subject to EIA.
- Berkeley v. Secretary of State for the Environment, Berkeley I (House of Lords, 2001). Applied the principles of Brown to cases where the problem was not transposition but implementation, where the Secretary of State had failed to consider whether the development was an 'urban development project'. Set out clearly the duty of UK courts to ensure effectiveness of the Directive pursuant to Art. 10 of the EC Treaty stated that the remedy for breach of the Directive must normally be to quash the decision. Emphasised the need for full compliance, so that a purported ES which involved members of the public engaging in a 'paperchase' was not good enough.
- R v. Durham County Council, ex p. Huddleston (Court of Appeal, 2000). A vitally important case conceptually in deciding that an individual affected by a planning decision could challenge it on EIA grounds where UK law was defective, by invoking the principle of direct effect, even though that would adversely affect a private third party, the holder of the permission.
- Case C-201/02 R (Wells) v. Secretary of State for Transport, Local Government and the Regions (ECJ, 2004). EIA applied to 'multi-stage consents': it must be carried out at the earliest stage, but if it is not then the member state must remedy the defect by requiring EIA at a later stage. A case with some resonance in later litigation on reserved matters applications. Also endorsed decisively the rights of individuals as in Huddleston.
- Case C-290/03 R (Barker v. London Borough of Bromley) (ECJ, 2006). Applied the Wells principle to the multi-stage process of outline permission and reserved matters. The UK had to undertake a protracted and fundamental re-think of how it transposed the Directive in that respect.

Stephen Tromans QC, 39 Essex Street

Box 3.2.B: Major EIA Cases 2008-2011

The first phase of litigation up to 2008 established the key legal principles underlying EIA. However, there have continued to be further important cases fleshing out these principles and illuminating some of the darker corners of the law. In particular, a theme of growing importance has been public participation, and the synergy between EIA and the UNECE Aarhus Convention on that topic.

- Case C-2/07 Paul Abraham v. Région Wallonne (ECJ, 2008). An agreement between a government authority and a developer may amount to a "development consent". When considering the effects of works to modify an existing project, consideration must be given to the totality of the effects, not simply of the new works themselves (i.e. in that case the consequent increase in activity at the airport).
- Case C-215/06 Commission of the European Communities v. Ireland (ECJ, 2008). Implementation of the Directive must include effective enforcement procedures for development executed without EIA. The Irish system for "retention consents" was in breach of the Directive.
- Case C-75/08 R (Mellor) v Secretary of State for Communities and Local Government (ECJ, 2009). Whilst the Directive does not require reasons to be given for a screening opinion that EIA is not required, sufficient reasons must be given if an interested member of the public requests.
- Case C-263/08 Djurgården-Lilla Värtans Miljöskyddsförening v Stockholms kommun genom dess marknämnd (ECJ, 2009). National rules must ensure "wide access to justice" and render effective the provisions of the Directive on judicial remedies. On that basis, the Swedish rule limiting review to associations with at least 2000 members was not acceptable. Nor can access be limited by reference to the role played in the original consenting process.
- Case C-205/08 Umweltanwalt von Kärnten v. Kärntner Landesregierung (ECJ, 2009). The Directive requires comprehensive assessment of the effects of projects irrespective of whether they are transboundary in nature.
- R (Birch) v. Barnsley MBC (Court of Appeal, 2010) – emphasised need to have regard to cumulative effects of related development, in that case the spreading on land of waste composted material derived from the project under consideration.
- Mageean v. Secretary of State for Communities and Local Government (Administrative Court, 2010) – obligation to reconsider former screening directions in the light of changed circumstances.
- "Save Britain's Heritage" v. Secretary of State (Court of Appeal, 2011) - works of demolition are capable of being a project under the Directive and may require assessment."

Stephen Tromans QC, 39 Essex Street

3.3 GUIDANCE

The production of guidance on EIA has allowed information on effective approaches to different stages of the assessment process to be shared across the UK. Given that EIA has been formally undertaken in the UK for over 20 years and the last major change in the EIA Directive occurred in 1997 it is perhaps not surprising that many of the major guidance documents are over 5 years old. More recent guidance has tended to focus on specific areas of practice or on the assessment of particular environmental topics, such as climate change, ecology and noise.

3.3.1 GOVERNMENT GUIDANCE

The key piece of EIA guidance published by the Government is DETR (Department for Environment, Transport and the Regions) Circular 02/99: Environmental Impact Assessment and its associated guidance document. This document gives guidance on the procedure required under the Town and Country Planning (EIA) (England and Wales) Regulations 1999 for use by local planning authorities. It should be noted that the Circular and associated guidance will shortly be revoked, to be replaced by a shorter piece of guidance, see Section 8.2.

Devolution has meant that the respective administrations have implemented their own regulations and consequently produced their own guidance. The Scottish Executive has produced two main pieces of guidance surrounding the EIA process. They are Circular 8/2007 and Planning Advice Note (PAN) 58. Both documents cover the EIA process, with Circular 8/2007 being focussed on the EIA regulatory requirements of the EIA process, whilst PAN 58 is more practical in nature providing advice on good practice in the EIA process and including further guidance on the content of an Environmental Statement. The Scottish Government plans to update these documents during 2011.

3.3.2 GUIDELINES FOR ENVIRONMENTAL IMPACT ASSESSMENT (IEMA)

In addition to issuing guidance on specific assessment areas within EIA, IEMA (in association with RPS Group Plc) developed a best practice guide to the whole EIA process in 2004. The guide sets out the fundamentals of practice and goes through each step of the EIA process providing both an indication of what is expected to achieve regulatory compliance and what the aims are behind such compliance. Due to the publication date of the document more recent regulatory amendments and additions are not covered; however, the practical advice remains highly relevant to today's EIA practitioner.

IEMA is investigating options for updating the guidelines and is already taking steps to make concise principles documents, advice notes and case studies relevant to specific aspects of EIA practice available via its website.

3.3.3 DESIGN MANUAL FOR ROADS AND BRIDGES – VOLUME II (HIGHWAYS AGENCY)

EIA applies to many different types of development and as a result it is applied across numerous sectors, some of which have developed their own bespoke approaches to either the whole process or the assessment of specific environmental issues. The best known sectoral EIA guide is that set out in the Design Manual for Roads and Bridges (DMRB). Originally published in 1992 by the Department for Transport, the Design Manual for Roads and Bridges (DMRB) includes Standards, Advice Notes and other materials related to the construction of roads and bridges across the UK. Volume II of the DMRB covers the environmental assessment process for motorway and trunk road development in England, Scotland and Wales. DMRB sets out the approach to EIA used by the Highways Agency and presents a prescriptive approach to each stage of the assessment process. The EIA process established in DMRB has served the sector well and is probably the most regularly updated publicly available guide to EIA practice.

A number of the assessment concepts established in the DMRB have influenced wider EIA practice, beyond the highway's sector. Where this occurs EIA practitioners must be cautious and ensure that the piecemeal application of assessment concepts, established in the DMRB, will continue to offer effective environmental protection even when applied outside the comprehensive approach set out in the manual. Box 6.2 provides an example of the issues that can arise in wider EIA practice as a result of the piecemeal application of DMRB assessment concepts.

3.3.4 SCOPING GUIDELINES FOR THE EIA OF PROJECTS (ENVIRONMENT AGENCY)

In 2002 the Environment Agency produced its scoping guidelines consisting of an over-arching guide and a series of 76 scoping guidance notes. The guidance is targeted at developers, consultants, local planning authority staff and others involved in the assessment of proposed projects likely to have a significant environmental effects. The documents provide scoping guidance to a comprehensive range of different types of development.

It should be noted that the guide has not been updated since 2002 and, as such, it does not include legislative developments in EIA, planning or the wider environmental field (Strategic Environmental Assessment, Water Framework Directive, etc) since that time, nor does it give great direction regards the need to consider climate change. However, the guide still has relevance to current EIA practice as the principles and technical issues it is based on have not changed greatly since its publication. Whilst initially costing £95 this guidance is now freely available; further information can be found at: <http://www.environment-agency.gov.uk/research/policy/33013.aspx>

3.3.5 OTHER GUIDANCE

Climate Change: In 2010 IEMA produced two concise sets of 'EIA Principles' on considering climate change mitigation and climate change adaptation within the EIA process. This new form of guidance is designed to act as an easily accessible stimulant to more effective practice in EIA. IEMA's EIA and Climate Change Principles have been presented both nationally and internationally and are currently being considered by the European Commission in developing their forthcoming guidance in this area (see Section 8.1). The need to enhance the consideration of climate change in EIA practice has been recognised by IEMA and alongside the Principles the Institute has set up a publicly accessible EIA and Climate Change sub-section of its website in order to aid the development of practice in this area, see: www.iema.net/eia-cc.

Landscape & Visual: The 2nd edition of guidelines for landscape and visual impact assessment was published in 2002 by IEMA and the Landscape Institute. The guidance covers both techniques for identifying and assessing landscape and visual impacts, methods for presenting findings and mitigation strategies and has become an industry standard for best practice for landscape and visual impact assessment.

The third edition of the guidance, due to be published in mid-2012 will ensure that the guidance remains relevant and up-to-date with developing techniques and changes in legislation.

Ecology: The Guidelines for Ecological Impact Assessment in the UK, produced by the Institute of Ecology and Environmental Management (IEEM) in 2006, is the key guide in relation to this aspect of EIA practice. The document covers the handling of ecological impacts at each stage of the EIA process from screening and scoping, through assessment techniques and onto mitigation measures. Endorsed by a wide range of bodies, including IEMA, the guidance document has become an industry standard for best practice for ecological impact assessment.

A new version of this guidance (entitled: Guidelines for ecological impact assessment in Britain and Ireland – Terrestrial, Freshwater and Coastal) is currently in production with its launch due in late summer 2011.

Noise: IEMA is currently working with the Institute of Acoustics to develop guidelines for the assessment of the impact of noise. Whilst standards and guidance on noise are already available, these have not specifically addressed how to conduct a noise impact assessment as part of an EIA. This document will draw on previously established principles and apply them to the impact assessment process covering baseline assessment techniques, methods for the predication of future noise levels and the assessment of the potential impacts along with mitigation measures.

Whilst sections 3.3.1 to 3.3.5 cover many of the more widely applied EIA guidance documents there are numerous other guidance documents that are regularly referred to by practitioners, including a number of sector and issue specific guidance documents. Beyond this other assessments often undertaken in relation to EIA exist, such as BREEAM, the Building Research Establishments Environmental Assessment Method.

The risks of over reliance on guidance documents: It should be noted that guidance is just that, it should steer the direction of the assessment not become a burden that must be prescriptively applied. Practitioners must ensure that the context, scale and complexity of the proposed development and information related to the receiving environment have a substantial bearing on identifying the most appropriate assessment methodology to be applied. As such, it should be recognised that whilst guidance is an aid to the EIA practitioner it is no substitute for appropriate professional expertise.

3.4 DEVOLUTION

In 1998 the Scottish Government, National Assembly for Wales and Northern Ireland Assembly were established by law. This meant that powers relating to making environmental regulations passed to the relevant national administrative body rather than via a UK Governmental Department. As a result of this differences have begun to appear in the application of EIA across the UK.

Scotland: The Scottish Government is responsible for EIA regulations in Scotland and has begun to develop its own direction in amending its EIA regime following the outcome of recent case law. This is in part due to differences in the Scottish consenting regimes, in particular the planning system, when compared to other parts of the UK. This is most noticeable in the approach taken to the application of EIA to multi-staged consenting regimes with the Scottish Regulations specifying the requirements for each multi-stage consent regime, whereas the equivalent amendment in England, Wales and Northern Ireland applied a catch-all approach to such consents terming them 'subsequent applications'.

The Scottish Government has also taken a considerably more proactive approach to Strategic Environmental Assessment (SEA) when compared to the rest of the UK. This included implementing its own Environmental Assessment Act in 2006 which expanded the application of SEA beyond the minimum requirements established by Directive 2001/42/EC.

Wales: The Welsh Assembly Government is responsible for EIA regulations in Wales and the result of the recent result of the February 2011 referendum will gain greater control over environmental policy. However, the EIA regulations that are relevant to the Welsh planning system were still based on the joint England and Wales Regulations set out in 1999, although this may change later in 2011, see Section 8.2. As a result amendments to EIA Regulations in Wales have, up to now, tended to replicate the wording of the equivalent amendments made in their English counterparts.

Northern Ireland: Northern Ireland development consenting regimes are more centralised than in the other countries of the UK. As a consequence of this Northern Ireland is the only country in the UK that has highly accurate data on specific stages of the EIA process, in particular the number of screening opinions issued, see Chapter 4. Since its creation in July 2008 the Northern Ireland Environment Agency has played an active role in assisting in screening and scoping EIAs and reviewing Environmental Statements alongside the Department for Environment's Planning Service. Arguably the most notable difference in Northern Ireland's EIA regime is that it is the only one of the four UK countries that shares a land border with another Member State. This means that issues related to trans-boundary consultation are considerably more relevant here than in the other parts of the UK.

3.5 OTHER TRENDS THAT HAVE INFLUENCED PROGRESS IN EIA

3.5.1 PRACTICAL EXPERIENCE

When EIA regulations were first introduced in the UK, there was understandably a lack of experience at managing the process. Although the majority of the separate environmental specialisms that contribute to the process had existed before it was introduced, EIA was in itself a new process that needed new knowledge, skills and capabilities to be developed. In the very early days some EIAs were undertaken by a single individual with an in-depth knowledge of one, or perhaps two, of the environmental specialisms that are brought together in the modern EIA process. This approach led to lopsided assessments which were comprehensive in some areas and woefully inadequate in others.

However, as experience developed in the early 1990s this approach to practice soon fell away and was replaced by a more comprehensive approach led by multi-disciplinary environmental consultancies. This approach to EIA is the model that remains the main stay of the EIA market today. A further development is recognition of the need for an EIA co-ordinator; an individual who may have originated in a particular environmental discipline, but has over time developed the skills, knowledge and experience that ensures the EIA process is effectively tied together. Today, with over 10,000 EIAs having been undertaken across the UK, there are many EIA practitioners that have a wealth of experience, which when shared has allowed good practice approaches to be developed in relation to some of the more complex areas of the assessment process.

3.5.2 AN INCREASINGLY CROWDED FIELD OF ASSESSMENTS

In the early 1990s EIA was one of a limited number of assessment tools that could be required in relation to a development proposal in order to assess its potential impacts on the environment and society. However, since then there has been a significant increase in the number of assessments that a developer may be asked to undertake when seeking development consent. As a consequence the field of pre-application environmental and social assessment has become increasingly crowded. In today's market place EIA sits alongside an expanding list of potential assessments, including:

Habitats regulation assessment, article 4(7) water framework directive assessment, equality impact assessment, transport assessment, flood risk assessment, design and access statement, economic assessment, landscape assessment, rural proofing, ecological impact assessment, sustainability appraisal, alternative sites assessment, statement of community engagement, health impact assessment, historic environment report, landscaping strategy, need assessment, BREEAM, report on natural features, urban proofing, carbon and efficiencies of scale report, travel plan, energy statement, site waste management plan, code for sustainable homes assessment, etc.

Many consent regimes appear to be missing a 'sense check' that would kick in should more than one environmental or social assessment be required; such a process would help avoid unnecessary effort or submission of duplicate documentation. Given that EIA was introduced in the late 1980s and outdates the majority of the other assessments set out above it is unfortunate that more has not been done by Government or decision-making bodies to identify opportunities for more effective integration of assessments. Over the past 5 years the problem of duplication of effort and the expectation that additional assessment will be produced beyond EIA would appear to have got worse, particularly with the introduction of the ubiquitous design and access statements, which often duplicates or even removes key information from EIA documentation.

Whilst recognising that many of these assessments provide valuable information on their own, when they are required alongside the broad scope of EIA inevitably overlaps occur. The consequence of this expanding range of environmental and social assessments has been a considerable increase in the number of documents submitted alongside planning applications; which itself increases the burden on developers, decision-makers and anyone wishing to engage in the process.

In recent years the Government has initiated reviews of various consent regimes, including Eddington (2006), Baker (2006), Killian Pretty (2008), and Penfold (2010), all of which have looked into streamlining the decision-making process. The Government now plans, partly in response to the findings of these reviews, to develop a national planning framework for England, which has the potential to begin to address the problems of overlapping assessment requirements. However, there is a clear need for the Government to recognise EIA's over-arching remit and, as such, provide direction on how it can be used to help streamline the requirement for other assessments when a development proposal has been identified as having likely significant environmental effects.

3.5.3 INCREASING ACCESS TO INFORMATION

The final large scale trend to influence EIA practice has been the trend toward greater transparency and access to environmental information and justice. The Freedom of Information Act (2000) was followed by the Environmental Information Regulations (2004), which helped to implement requirements in the Aarhus Convention¹¹, both of which allow the public greater access to information on the environment held by public bodies. In EIA terms this has increased the amount of information about the current state of the environment that is available to EIA practice, alongside the expansion of the internet (see below). Further to this trend there has been an increase in the need to allow interested parties and the public the opportunity to provide their views on applications for development consent. In EIA this led to changes to the EIA Directive (see 3.1.2) expanding the role of public participation, the influence that this trend has had on practice is discussed further in Section 5.4.

3.5.4 DEVELOPMENTS IN DATA AND TECHNOLOGY

The last 20 years have seen the appearance and rapid expansion of the internet. This has meant that large amounts of data have become available online allowing EIA practitioners to access data rapidly and in a more efficient manner. This has included information essential for the early stages of EIA and has allowed initial desk-top studies to be delivered more rapidly and without the need to request data from Councils. A major advancement in this area has been the development of online mapping data and access to citations for designated sites and listed buildings, etc. In more recent times the volume of data available either via free sites, such as Government Agencies, or through paid access tools has increased significantly. A more recent example of high quality online data can be found on the UK Climate Impacts Programme (UKCIP) website¹², which sets out data for projected climate conditions across the UK.

This trend is set to continue and will mean that greater consideration on the source of environmental information gathered online will begin to become a more important issue for practice. One of the future drivers of this trend will be the 2007 INSPIRE Directive¹³, which relates to establishing infrastructure for spatial information in the European Community. The Directive is designed to create greater standardisation and transferability of environmental data and, as such, it is expected to provide a substantial boost to the volume and accessibility of the type of environmental information used in the EIA process.

11. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (The Aarhus Convention) – UNECE, 1998

12. <http://www.ukcip.org.uk/>

13. Directive 2007/2/EC <http://inspire.jrc.ec.europa.eu/>

4. IDENTIFYING THE NEED FOR EIA

The primary driver behind the need to undertake an EIA is the list of projects set out in Annexes I and II of the EIA Directive, which are transcribed into UK law as Schedules 1 and 2 in each of the main UK EIA regulations¹⁴. Development proposals that meet or exceed the Schedule 1 thresholds automatically require EIA. Whereas developments of the type set out in Schedule 2 present a more testing challenge for UK EIA practice requiring a screening decision.

4.1 MANDATORY EIA - SCHEDULE 1 DEVELOPMENT

Schedule 1 developments include major infrastructure projects and other such schemes which are considered to always be likely to generate significant environmental effects. As such, developments meeting or above, the Schedule 1 thresholds automatically require an EIA; e.g. new nuclear power stations, major airport creation or expansion, long distance gas pipelines (over 40 km in length).

For these projects the decisions to undertake EIA are relatively simple with both developer and consenting authority clear as to the need case for assessment. It should be noted that there are a limited number of exclusions relating to national defence projects and the Government has powers that allow it to specifically exclude a project from EIA, in exceptional circumstances, as set out in Article 2 of the EIA Directive¹⁵.

The biggest change to influence this area of UK practice in recent years occurred when additional project types were added to Annex I of the EIA Directive in 2009, via Directive 2009/31/EC (on the Geological Storage of Carbon Dioxide). These changes must be transposed into UK law by 25th June 2011 and the amendments to the English and Scottish Regulations were consulted upon during 2010. The main EIA Regulations in Wales and Northern Ireland will also need to be amended shortly to ensure that they include the provisions set out in Box 4.1, otherwise the UK may be at risk of infraction proceedings.

Box 4.1: CO₂ capture and geological storage projects requiring mandatory EIA

Directive 2009/31/EC on the geological storage of carbon dioxide added the following project categories to Annex I of the EIA Directive:

- Pipelines with a diameter of more than 800 mm and a length of more than 40 km for the transport of carbon dioxide (CO₂) streams for the purposes of geological storage, including associated booster stations
- Storage sites pursuant to Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide

Installations for the capture of CO₂ streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations covered by this Annex, or where the total yearly capture of CO₂ is 1.5 megatonnes or more.

14. <http://www.legislation.gov.uk/ukxi/1999/293/contents/made>

15. Directive 85/337/EEC <http://ec.europa.eu/environment/eia/eia-legalcontext.htm>

4.2 PROJECTS POTENTIALLY REQUIRING EIA - SCHEDULE 2 DEVELOPMENT

In transposing the list of projects that can be subject to an EIA (as set out in Annex II of the EIA Directive) the UK chose to apply a set of minimum thresholds above which case by case examination is required to determine whether EIA is required. This case by case assessment is termed screening and is regularly undertaken by local planning authorities and other consenting bodies. However, this area of EIA also attracts legal challenges and is therefore not without risks and complexities, as discussed from 4.3.

The type of projects that fall under Schedule 2, of the Regulations, are wide ranging and fall into 13 broad categories that cover: Agriculture and aquaculture; Extractive industry; Energy industry; Production and processing of metals; Mineral industry, Chemical industry, Food industry; Textile, leather, wood and paper industries; Rubber industry; infrastructure projects; other projects; Tourism and Leisure; and changes or extensions to Schedule 1 and 2 development.

The UK's minimum screening thresholds¹⁶ generally mean that a proposed development below such a threshold cannot have EIA applied to it; however, there are a couple of exceptions to this. The first is Regulation 4(8) which gives the Secretary of State the power to designate any development, of a type listed in Schedule 2, as EIA development, even if it does not meet the relevant threshold. The second exception relates to the proposed location of the development. Certain locations, termed sensitive areas¹⁷, require any development, no matter how small, whose proposed boundary is within or encroaches upon the sensitive area to undergo a case by case screening decision. Sensitive areas are locations of high environmental value and include:

- Natura 2000 sites (e.g. Special Protection Area, Special Areas of Conservation and Ramsar sites);
- Sites of Special Scientific Interest;
- National Parks;
- The Broads;
- Areas of Outstanding Natural Beauty (AONB);
- World Heritage Sites; and
- Scheduled Monuments.

Where a proposed development is above the Schedule 2 threshold, or is associated with a sensitive area, the consenting authority (often a local planning authority) must make a case by case assessment – termed a screening opinion – indicating whether EIA is required. Until the authority has undertaken such an assessment they are prohibited from granting development consent¹⁸. Further, such screening opinions are a matter of public record and, following a decision by the European Court of Justice in 2009¹⁹, the reasons for deciding whether EIA is or is not required must be made available to the public if requested. Prior to this ruling the UK's EIA Regulations had only indicated that a consenting authority was required to disclose their reasoning when EIA was found to be required; as a result the Regulations are currently being amended (see Section 8.2).

The decision that a consenting authority makes, in case by case screening, is whether the development is or is not likely to have significant effects on the environment. Such environmental effects can be either positive or negative, as such a development proposal designed to specifically enhance the environment can be required to undertake EIA. The EIA Directive includes information, in Annex III, to advise a consenting authority on the issues that should be considered when determining whether significant environmental effects are likely to result from a development. The UK's EIA regulations also include this information²⁰, which broadly covers:

- the characteristics of the project;
- the proposed location of the project;
- the status of the existing environment in that area; and
- characteristics associated with the impacts that are likely to occur as a result of its construction, operation and, where relevant, decommissioning.

The consenting authority uses information about the specific development proposal to develop their screening opinion, which identifies whether the proposal requires an EIA.

¹⁶. As set out in the second column of Schedule 2 of the EIA Regulations

¹⁷. As defined in Regulation 2 of the EIA Regulations

¹⁸. Regulation 3, of the EIA Regulations - Prohibition on granting planning permission or subsequent consent without consideration of environmental information

¹⁹. Case C-75/08 R (Mellor) v Secretary of State for Communities and Local Government (ECJ, 2009) – See Box 3.2.B

²⁰. Schedule 3 of the EIA Regulations

4.3 SCREENING PRACTICE

It should be noted that consenting authority screening opinions are challengeable in two different ways. The first, being that anyone is able to make a request to the relevant Secretary of State, or devolved administration, to request a screening direction; the findings of which would override a previous screening opinion. Secondly, both screening opinions / directions can be challenged through the courts alongside challenges where a screening opinion has not been produced.

Due to this, after nearly 25 years of regulatory EIA, a lack, or ineffective application of, screening remains the most common reason behind EIA development being challenged through the Courts. In some cases the grounds for such challenges relate to the wording of the EIA Regulations. For example, in early 2011 a case ²¹ related to the potential application of EIA to the use of poly-tunnels on a farm in an AONB, was rooted in a lack of clarity behind the definition of semi-natural areas in Schedule 2 (1)(a). Where such issues arise they are clearly not simply down to the individual screening decision challenged, but relate to deficiencies in the wording of either the EIA Regulations or the EIA Directive itself. Unless the review of the EIA Directive acts to address such 'grey areas' in its wording, such legal challenges will undoubtedly continue to occur. A further example of a recent expansion of the application of EIA as a result of legal challenge is presented in Box 4.3.

Box 4.3: The application of EIA to demolition²²

On 25 March 2011 the Court of Appeal declared that demolition of buildings can constitute a project under the terms of the EU Environmental Impact Assessment Directive. The case related to the former Mitchell's Brewery site in Lancaster, with the ruling referring to a European Court of Justice ruling against Ireland related to demolition (CJEU Case C-50/09).

The Court ruled that paragraph 2(1)(a) to (d) of the Town and Country Planning (Demolition - Description of Buildings) Direction 1995 was unlawful. The ruling will influence demolition activities that were previously covered by the permitted development rights provided under paragraph 2(1). Such demolition activities may now require screening to determine whether the proposed demolition activity is likely to lead to significant environmental effects. Where such effects are found to be likely an EIA will need to be undertaken before a decision is made as to whether the demolition process can proceed. The judgment may also mean that proposals for demolition of listed buildings and buildings in conservation areas may need EIA.

As a consequence of the ruling any proposed demolition that is considered to have significant impact on the environment will be subject to the EIA process and therefore have any permitted development rights withdrawn.

There are, however, cases of successful legal challenge resulting from issues that are clearly within the control of those responsible for the screening decision. For example, where local authorities have failed to delegate the power to make EIA screening opinions from its Planning Committee to its Officers development consents have been overturned. Such cases have impacts not only on the environment and the developer (additional costs and delay), but also on the wider perception of EIA. This is because those cases that end up in the courts tend to be widely reported and thus contribute to the view that EIA development is commonly subject of legal challenge. Whilst it is not unusual to hear of such challenges, in reality only a small proportion of the 500+ EIA undertaken annually (see Figure 2.4) end up in the courts. However, this widely held view contributes to a general 'fear of legal challenge' within EIA practice, which itself generate negative consequences in later stages of the assessment process e.g. scoping and the length of Environmental Statements (see Chapter 5 - Focussing EIA through Engagement).

As a consequence of the above it is IEMA's view that all bodies with EIA screening responsibilities should ensure that:

- i) Their application review systems are capable of readily identifying all proposals that are at or above the Schedule 2 thresholds or located in a sensitive area.
- ii) They have sufficient the evidence to justify the findings of each case by case EIA screening decision they make in relation to Schedule 2 proposals identified by the application review systems.

21. R (on the application of Wye Valley Action Association Ltd) v Herefordshire Council [2011] EWCA Civ 20

22. Developed from LexisPSL Case Law box, Issue 115 of the Environmentalist - <http://www.environmentalstonline.com/article/2011-06-12/case-law-saving-britain-s-heritage>

4.4 HOW MUCH SCREENING AND HOW MANY EIAs?

There is a lack of clarity over the number of screening decisions made each year in the UK. A 2010 study undertaken for the European Commission²³ estimated that approximately 2,750 EIA screening decisions take place in the UK each year. However, these figures were based on a mathematical regression of screening decision data from other European countries whose consenting regimes are very different from those in the UK. IEMA's own research, based on data from the DCLG, indicates that annually between 2000 and 2008, nearly 1000 screening decisions were taken in Northern Ireland alone. Whilst recognising that Northern Ireland's planning system is distinctly different to the systems in the UK's other administrations its smaller population, ~3% of the UK's total, and consequent lower volumes of development indicates that the UK's true level of EIA screening activity could easily be ten times higher than that estimated in the European Commission's research!

The DCLG's data for Northern Ireland shows that only 7% of screening decisions between 1991 and 2008 identified that EIA was required. This indicates that, in Northern Ireland at least, a development proposal above a relevant Schedule 2 threshold (e.g. an urban development >0.5 ha) is 13 times more likely to progress without the need for EIA than it is to require an assessment. However, these statistics cannot tell us whether the UK's screening process accurately identifies those development proposals that are likely to have significant environmental effects from other proposals. IEMA's EIA survey (see Section 1.3) was therefore designed to assess practitioner views in this area.

IEMA's survey found that 80% (of the 1,509 respondents who gave an opinion) agreed that the UK's screening process is an effective tool to ensure that only projects likely to have significant environmental effects are subject to an EIA. A further question asked respondents their views on whether improvements should be made to Annex I (Schedule 1 - section 4.2) and Annex II (Schedule 2 - section 4.3) of the EIA Directive. Two-thirds of respondents indicated that changes should be made to the structure of the Annexes with a slim majority (55%) of these respondents indicating a preference for amendments to Annex I (the trigger for mandatory EIA). Such amendments could include the inclusion of new project categories or the reduction of thresholds related to certain types of development. Practitioners would therefore appear to be satisfied that the current basis of the UK's EIA screening process, subject to some minor amendments, provides an effective basis for determining whether there is a need to apply EIA to a specific development proposal.

However, when compared to the European Commission's research the UK appears to have the lowest level of EIA activity of the EU's Member State that have a population over 20 million (GHK, 2010). The study shows that both Spain and Germany undertake over a 1,000 EIAs a year, nearly twice that of the current level of UK EIA activity (see Figure 2.2), with both Poland and France undertaking nearly 4,000 EIAs a year. As such, it would appear that the UK is undertaking hundreds or fewer EIAs each year than Member States with similar sized populations.

The reasons behind such differences are clearly driven by numerous factors, including differences in consenting regimes, levels of development, environmental sensitivity and cultural values. As such, the lower level of EIA activity in the UK does not necessarily indicate there are problems with the UK approach to screening. In order to try to further understand whether this apparent gap in UK EIA activity should be a cause for concern IEMA has undertaken its own analysis of Government's EIA data²⁴.

The analysis focussed on the number of EIAs undertaken in the planning system in England, Scotland, Wales and Northern Ireland, with the findings in Box 4.4 presenting the number of ES submitted each year per million head of population for each country. In order to allow comparison with the European Commission's data, discussed above, the same methodology would indicate that Germany produces approximately 11.8 EIA per million head of population, which would be the second lowest level of EIA per head of population, after the UK, of the EU's most populous Member States.

23. Collection of information and data to support the Impact Assessment study of the review of the EIA Directive, GHK for DG Environment (2010) - http://ec.europa.eu/environment/eia/pdf/collection_data.pdf

24. DCLG data on numbers of Environmental Statements submitted in relation to the UK's various EIA Regulations between 1991 – 2008.

Box 4.4: Average number of Environmental Statements per million head of population per year submitted in relation to applications for planning consent

UK Nation	EIA per million head of population
England	6.9
Scotland	13.1
Wales	13.0
Northern Ireland	29.2
Notes: England data 1999-08, Scotland 1999-08, Wales 1999 - 2005 (between 2006-08 no welsh data was available within the DCLG data), Northern Ireland 2005 - 2008 (between 1999-04 the DCLG's data did not provide sufficient clarity to identify only those EIAs related to planning applications from Northern Ireland).	

IEMA's analysis of the Government's data (Box 4.4) indicates that within the English planning system there are fewer EIAs undertaken, per head, than within the equivalent planning systems in the UK's devolved administrations. Whilst some of the difference is likely down to economies of scale that can be achieved in relation to the need for certain types of development with a larger population base, this may not explain the whole difference given the equivalent figure for Germany would be 11.8 EIA per million people. The indication of a considerably higher rate of EIA activity, per head, in Northern Ireland is likely to be partly driven by the period when data was available (2005-2008), which related to a period of substantial development based on economic prosperity in Northern Ireland at that time.

The results in the European Commission research and Box 4.4 may indicate that there are problems in the application of the screening process, particularly amongst English planning authorities. However, further in-depth research into UK EIA screening is needed to further understand the discrepancy between the level of EIA activity between the UK and other Member States and also between different consenting authorities within the UK.

4.5 IS EIA SCREENING EFFECTIVE?

Section 4.3 showed that IEMA's survey results indicate that practitioners appear to be satisfied that the regulatory approach to screening is effective; as such we must look at how this approach is applied within screening practice to understand whether UK screening is effective. This involves considering how effectively case by case screening is applied by consenting authorities, e.g. local planning authorities. In particular there is a need to consider whether screening's application, by consenting authorities, is consistent in accurately identifying whether individual proposals are likely, or unlikely, to lead to significant environmental effects.

In England and Wales the main screening advice for planning authorities has not changed since 1999 and is set out in DETR Circular 02/99 (section 3.3.1). The Circular set out indicative thresholds, higher than those included in Schedule 2 of the Regulations. For example: Schedule 2, of the EIA Regulations indicates that proposals for urban development over 0.5 ha must be screened; however, the Circular's indicative threshold identifies that proposals over 5.0 ha are more likely to require an EIA. Whilst these higher thresholds are indicative, with the Circular indicating that "the question must be considered on a case-by-case basis"²⁵, it is clear that, when introduced, a number of planning authorities used them as their only screening method.

It can be seen that the origins of the UK's current screening practice developed from an approach that was insufficiently robust to generate high quality case by case decisions on the need for EIA. IEMA has found that the use of an entirely indicative threshold based approach to screening is now infrequent; however, it is considerably less clear whether the case by case examinations that have evolved from this approach are themselves effective. IEMA's research has identified considerable anecdotal evidence, from EIA practitioners, that screening of development proposals, above the Schedule 2 thresholds, may not be being regularly undertaken by all planning authorities in every case.

The DCLG has informed IEMA that they plan to cancel Circular 02/99 during 2011, which will finally see the formal revocation of indicative thresholds from EIA practice in England and Wales. The Scottish Government has already taken action in this area; having revoked indicative thresholds in 2007, replacing them with an example of a checklist style methodology that can be used to undertake case by case screening.

To understand the effectiveness of case by case screening IEMA's survey included questions on whether screening practice leads to EIA being applied to appropriate development proposals. The survey asked whether case by case screening ensured that only projects likely to have significant environmental effects were found to require EIA. Of those who gave an opinion 58% agreed that case by case screening only led to EIA being applied to projects with likely significant environmental effects. It should be noted that this is noticeably smaller than the 80% who considered the regulatory screening process to be effective. This finding also indicates that over 40% of practitioners believe case by case screening decisions have required EIA be undertaken for a proposal, which in their view, was unlikely to generate significant environmental effects.

However, IEMA's findings in relation to another question on the survey raise greater concerns. The survey asked whether case by case screening ensured that all Schedule 2 projects likely to have significant environmental effects are found to require EIA. In this case the majority of practitioners (55%) believed that EIA had not been required for projects with, what they considered to be, likely significant environmental effects.

IEMA's findings appear to indicate that the current application of the case by case screening more frequently leads to EIA not being applied, when it should have been, compared to those occasions when EIA is applied when it may not have been necessary. More detailed analysis of responses to Question 10.3 identified that over 80% of respondents from consenting authorities had experience of cases where they believed a project required EIA, but it did not undergo an assessment.

IEMA has found that whilst practitioners appear to consider the regulatory approach to screening to be appropriate its case by case application is considered to be less effective. The causes behind the ineffective application of case by case screening were explored during discussions with practitioners at the research workshops (Section 1.3). At these workshops practitioners raised concerns about the level of competence related to EIA amongst local planning authorities. For example: it is not unknown for EIA consultants, employed by the developer, to have to explain the EIA screening process to local planning authority staff in order to progress a screening request. Feedback at the workshops also highlighted that developers are often unable to get timely responses to screening requests and that the regulatory response time of 21 days, to respond to a screening request, is rarely achieved.

25. Paragraph 43 of DETR Circular 02/99

The workshops also highlighted some examples of effective screening practices amongst planning authorities. In particular, where planning authorities have staff with EIA knowledge undertaking their screening duties or have agreements with a consultancy that provides EIA expertise to assist their screening activities. However, IEMA's research has clearly found that the quality of case by case EIA screening practice across the UK can at best be considered to be variable. EIA practitioners views indicate that ineffective case by case EIA screening occurs across the UK and in some cases can vary within a planning authority, dependent on the individual assigned to screen a development proposal.

Where the ineffective application of screening is limited to a delay in the developer receiving their screening opinion the consequences may be limited to minor delays to the individual development proposal in question. Of substantially greater concern are cases where screening is either not undertaken or is of such a cursory nature that its findings are not viable. Examples of such situations are still relatively common with the former situation having been found to occur in March 2010 when a planning permission for a major redevelopment in Prudhoe town centre was quashed²⁶ as a result of the development having not being screened for EIA by the former Tynedale Council. A recent example of the latter situation was uncovered in early 2009 when Bath & North East Somerset Council²⁷ conceded in court that their approach to screening was insufficiently comprehensive to form a screening opinion.

Where such circumstances occur the consequences of ineffective screening are considerably more serious for the developer, environment and local community. Where a development receives consent, but has not been screened for EIA, it is at risk of having that consent overturned, which would result in substantial costs, potentially putting its viability at risk. For the environment and local community a lack of effective screening can lead to significant environmental and social effects occurring without appropriate consideration of potential mitigation or compensatory measures.

There is considerable concern amongst EIA practitioners about the application of the case by case approach to screening, particularly between planning authorities. Issues may be more acute in England; however, there is a clear need for further research in this area to understand the true scale of ineffective screening practice in the UK.

26. [2010] EWHC 373 (Admin) (Co-operative Group Ltd v Northumberland County Council)

27. Case C-290/03 R (Barker v. London Borough of Bromley) (ECJ, 2006) – See Box 2.3.B

4.6 OTHER SCREENING ISSUES

A number of additional issues were raised by EIA Practitioners in relation to UK screening practice during the research these included:

Screening developments that undergo a multi-staged consent process

As a result of the *Barker* case²⁸ the UK had to change the way EIA was applied to the consenting process. Prior to this ruling there had effectively only been a single opportunity to determine whether EIA should be undertaken on a multi-stage consenting process. For example, where a project was screened for EIA at the outline permission stage and found not to require EIA it could not be re-screened for EIA at the reserved matters stage, even if the scale of the project had substantially changed. The *Baker* case changed this and since late 2009 the UK's EIA Regulations have been amended to ensure that EIA applies to each stage of a multi-stage consent process.

In England, Wales and Northern Ireland this has been dealt with through a process termed a 'subsequent application', whereas in Scotland their 2011 Regulations (see Section 8.2) set out the different multi-stage consents that EIA screening must be applied to. Both approaches have the same consequences, acting to ensure that EIA screening is no longer a single use tool, but can instead be revisited at different stages of the development process to take account of how design changes may affect the environment. Developers and consenting authorities need to be aware of the different forms a multi-staged consents could take, which can include so called 'Grampian conditions' and could potentially include design changes resulting from other environmental regimes, such as the requirements of a Integrated Pollution Prevention and Control (IPPC) permit.

The consequences of this potential need to re-screen a development multiple times during design, application and even post-consent have made the screening process more complicated in recent years. As a result consenting authorities need to improve their screening records for each development and the detailed reasons behind each screening opinion. Where records are not well maintained it will prove difficult for a consenting authority to simply review an old screening opinion to determine whether it is still valid in light of any changes to the proposed development or the receiving environment, thus leading to the need to undertake a completely new screening opinion. Given the concerns Section 4.5 identified in terms of the variable quality of screening practice amongst consenting authorities there are concerns amongst practitioners that 'subsequent applications', and their Scottish equivalent, will be even less rigorously applied than screening of single-stage applications. If this proves to be the case, the associated consents will be exposed to an increased risk of legal challenge generating uncertainty for developers as they move into the construction phase of a development.

Making the new approach to 'changes or extensions' work in practice

During 2011 the approach to screening 'changes or extensions' to Schedule 2 development will change across the UK²⁹, with new English and Scottish Regulations anticipated in June 2011. The changes mean that where a development of any of the types listed in Schedule 2 is changed or extended after the original development has gained consent, then the full boundary of the whole development, rather than just the boundary of the change or extension, will need to be considered when identifying whether a screening decision is required (see box 4.6). It should be noted that in order to ensure the EIA Regulations are consistent these changes will also influence Schedule 1 developments - where a proposed 'change or extension' to such a development is not, in itself, a Schedule 1 development.

28. Case C-290/03 R (*Barker v. London Borough of Bromley*) (ECJ, 2006) – See Box 2.3.B

29. [2009] EWHC 595 (Admin) (*Baker v Bath & North East Somerset*)

Box 4.6: Comparison of the old and new approach to screening 'changes or extensions' in Scotland

Pre-June 2011 approach - a developer operating a 4.0 ha urban retail park with plans to add additional stores and car parking extending the site by 0.4 ha would not have required a screening decision. Whilst such a development is an urban development, under Schedule 2 10(b), because the area of the proposed extension was below 0.5 ha it was below the regulatory EIA threshold and did not need to be screened.

Post-June 2011 approach – using the same example the local planning authority would need to consider the existing retail park area (4.0 ha) together with the proposed extension (0.4 ha) when assessing whether the application needs to be screened. The combined area of the existing development and proposed extension is 4.4 ha and thus above the 0.5 ha threshold; as such, this development proposal would now require a screening decision before making a decision on whether to award development consent.

Whilst changing the UK's EIA Regulations in this way will ensure they align with the requirements of the EIA Directive, regulatory change will not be sufficient to see this change implemented effectively in practice, particularly given the problems identified in Section 4.5, above. It is apparent that more needs to be done, beyond sending letters to the Head of Planning at each local authority, if the UK is to ensure that changes to the UK's EIA screening regime are effectively applied in practice. There would appear to be a need to ensure that staff with screening responsibilities at all consenting authorities are provided with training related to recent developments in EIA screening. Alongside this better advice should be provided on potential pitfalls and practical solutions likely to arise as a result of applying the new approach to 'changes or extensions' to Schedule 2 development.

IEMA has raised these concerns with the DCLG and Scottish Government in response to consultations on amending their respective EIA Regulations. The Scottish Government have responded and are taking action to enhance EIA knowledge amongst consenting authorities. However, it is unclear whether similar action will be taken in other areas of the UK particularly given the impact of Government's austerity measures.

Justifying screening decisions that indicated EIA is not required

Planning officers in England raised concerns that Government Office, responsible for making screening directions (section 4.3), too frequently overturns their screening opinions without providing sufficient justification of why EIA is no longer considered necessary. Additionally, there are concerns that the officials making screening directions are often much less aware of local environmental and community sensitivities and, as a result, may overlook potentially significant environmental effects relevant to the screening decision.

Two changes are likely to have a bearing on the scale of this issue in the future. Firstly, the abolition of England's regional Government Offices due to the Government's move to localism in the planning system and the programme of Government cuts. As such, Government officials responsible for making future EIA screening directions in England are likely to be even more geographically detached from the proposed site. This action has the potential to exacerbate the problems raised by local authority planning officers as decision-makers will arguably be even less aware of relevant local environmental sensitivities that should be considered when screening a project for EIA.

Secondly, the European Court of Justice has ruled that, where requested, the reasons behind a decision that EIA is not required for a project must be made available to the public. The latter will at least make it possible for the public, or an affected local planning authority, to find out why a screening opinion that indicated EIA was required was subsequently overturned by the Secretary of State. However, the public already had powers, under the Environmental Information Regulations³⁰ to request such information prior to the Court ruling. It is therefore arguable as to whether this judgement will have a substantial influence on future UK EIA screening practice.

Of the over 1,500 respondents who gave an opinion to IEMA's EIA survey the vast majority indicated they would like to see this ruling taken further. The survey found that over 95% of practitioners want to see the reasons why EIA is not considered required to be automatically set out in screening opinions / directions, rather than the information only being available upon request. At this time it appears the UK's EIA regulations will only be amended to align with the Court's ruling rather than establishing the greater level of transparency desired in practice. As such, it will be down to individual consenting authorities to determine whether it is more efficient to automatically provide their reasoning behind every screening opinion or whether they should only release such information when it is specifically requested.

The right of 'the public concerned' to request a screening direction

In his verdict on the 2009 Baker case³¹, Mr Justice Collins indicated that the UK's EIA Regulations failed to effectively transpose Article 10a of the EIA Directive. The Article gives members of the public, concerned with a development, access to a review procedure to challenge EIA decisions. Whilst Regulation 4(8)³² would not appear to preclude 'the public concerned' from requesting a screening direction it does not make it clear that such an opportunity exists. As a minimum the Government should therefore provide the public with greater clarity in this area. To achieve this, the wording of the UK's EIA Regulations could be amended or effective advice on this subject could be made available to the public (e.g. via the Planning Advisory Service website).

It is unclear what the impact of greater public awareness of their right to challenge EIA screening opinions will have on EIA practice or on the number of EIA undertaken each year. However, it would appear that the Government should be prepared for a substantial increase in workload for those officials responsible for making screening directions on behalf of the Secretary of State. IEMA's research has found that issues related to screening appear on a relatively frequent basis within local newspapers. The Institute has recently seen a number of newspaper articles discussing locally controversial proposals (Schedule 2 developments) that have been screened and found not to require an EIA. In many cases members of community groups interviewed in the articles express concerns about the potential local environmental effects of the proposal in question and their concerns that such issues may not have been adequately considered in making the screening decision. However, IEMA has found no evidence that such groups are aware of their rights to either:

- Request a copy of the reasons for the negative (no EIA required) screening opinion; or
- Request that the Secretary of State make a screening direction in relation to the project.

As such, it is clear that further action is needed to ensure that 'the public concerned' are made aware of their rights in relation to EIA screening decisions if the Government is to meet the spirit of Mr Justice Collins ruling.

30. The Environmental Information Regulations 2004, SI 3391

31. [2009] EWHC 595 (Admin) (Baker v Bath & North East Somerset)

32. Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999, as amended

4.7 CHAPTER CONCLUSIONS

- The ineffective application of EIA screening requirements is the most common area of legal challenge in UK EIA practice.
- The UK lacks accurate information on the number of screening decisions undertaken each year; however, evidence from Northern Ireland indicates that the real level of screening activity is probably ten times higher than that estimated in a recent European Commission study.
- Changes to the EIA Directive in 2009 mean that projects related to carbon capture and its geological storage can now be required to undergo EIA. This development, which will be implemented in the UK's EIA regulations during summer 2011, acts to strengthen the link between the EIA process and action related to climate change.
- There is considerable concern amongst EIA practitioners about the application of the UK's case by case approach to screening. Issues appear to be more acute in England; however, there is a clear need for further research in this area to understand the true scale of ineffective screening practices across the UK.
- There is a need to improve both the consistency and quality of case by case EIA screening undertaken by consenting authorities. As a minimum all consenting authorities should ensure they have access to environmental professionals with sufficient EIA competence to be able to meet their regulatory obligations to screen all Schedule 2 developments.

5. FOCUSSING EIA THROUGH ENGAGEMENT

The general approach to EIA has not changed greatly since it was first introduced, after the need for an EIA is established through screening (Chapter 4), the next step is to identify the environmental issues that will be the focus of the assessment. This process is known as Scoping. Over time the approach to scoping has evolved and improved and, whilst not a regulatory requirement, the level of consultation and engagement that occurs with statutory bodies, NGOs and local communities has grown considerably in recent years.

Scoping is often seen as a stage of the EIA process that occurs early on during the process. However, the aims of scoping – to hone and focus the assessment – are in fact relevant throughout the EIA process; as such, information and concepts raised in this Chapter are relevant to many of the activities described in Chapters 6 (The assessment process) and 7 (EIA Outputs and Outcomes).

The initial parts of this Chapter explore current scoping practice, considering both the causes of ineffective scoping and how the added value of effective scoping can be achieved. After this, the role of public participation, community consultation and engagement are discussed identifying the advantages that can be generated from this area of practice. Together the Chapter sets out practitioner views on the current state of scoping and engagement practices in EIA.

5.1 THE VALUE OF CURRENT SCOPING PRACTICE

In EIA the scoping process provides a justified explanation of the environmental issues that will be assessed and those that will not be considered further. Practitioners clearly view scoping as one of the most important activities undertaken during the EIA process as it was raised in discussions at every one of IEMA's 20 research workshops. Effective scoping is one of the keys to the delivery of quality in EIA practice, a view confirmed by a 2006 DCLG research report, which indicated that effective scoping:

- saves time, money and resources for both the developer and consenting authority.
- can help to shorten the length of Environmental Statements (see Table 5.2)
- can reduce the need for consenting authorities to require developers to submit further environmental information after an application has been submitted.

Scoping can act as an effective vehicle through which key stakeholders and local communities can be actively engaged at the outset of a development proposal. It therefore provides a potential tool to meet the increasing desire, from Governments across the UK, to see public engagement 'front-loaded' into the pre-application stages of large and / or controversial development proposals. However, if it is to deliver such benefits, scoping practice must be effective and be applied as an on-going approach to the assessment rather than being seen as the initial step in the EIA process.

IEMA's research has highlighted that whilst many practitioners recognise the need for on-going scoping they find it hard to achieve this in practice and often end up undertaking the majority of scoping activity in a single step, the findings of which are brought together as a Scoping Report. Such documents are then submitted alongside a scoping opinion request to the consenting authority. Whilst such requests are voluntary on the part of the developer, they trigger a formal regulatory process that the consenting authority must then act upon. Whilst acknowledging the valuable opportunity scoping provides it must also be recognised that the simple act of submitting a formal scoping request generates inherent administrative burdens to a consenting authority and that the longer the document submitted the greater the burden. The standard practice approach of producing a scoping report is demanding an ever increasing amount of information, some of which now goes beyond the regulatory requirements surrounding the Environmental Statement that is submitted alongside the application itself!

The expectation that all this information will have been produced and collated at such an early stage of the EIA also adds time and cost burdens to developers. Further, it can be seen to reduce the amount of time the EIA co-ordinator has to ensure environmental information is considered in the developing design, having to instead focus their efforts on producing long and expansive scoping reports. Burden is also felt by the consenting authority, and other bodies or individuals consulted at this stage, as the length of the scoping report, which can be well over 100 pages, is entirely inappropriate to the ultimate question posed by a scoping request poses: *Are the environmental issues identified appropriate to this assessment and are there any additional environmental issues that should be given consideration?*

The resources required to draft and finalise a long scoping report could arguably be used more effectively on engaging key parties and the community so as to ensure that the EIA is based on the most effective environmental information available. An example of the potential growing burden related to scoping can be seen in the Infrastructure Planning Commission's Advice Note 7 from August 2010. When compared to the regulatory requirements, related to a scoping request, the expectations set out in this advice clearly add considerable increased expectations (see: Box 5.1). These will be felt by the applicant funding the scoping report's production, the Commission and statutory consultees in the consultation process and the community, where they are provided opportunity to comment on the EIA's scope.

It is therefore perhaps not surprising that a number of leading EIA practitioners are beginning to question whether this standard practice approach to scoping adds sufficient value to the modern EIA process to negate the burdens it imposes. Whilst recognising that applications to the IPC relate to Nationally Significant Infrastructure Projects, the expectations set out in Advice Note 7 go well beyond the regulatory requirement and could be considered to be over burdensome as they bear closer resemblance to an 'early review' of the Environmental Statement itself. Whilst other consenting bodies do not tend to have such detailed expectations of a scoping report IEMA's research has found evidence that even local planning authorities are beginning to set out scoping report expectations that bear closer resemblance to the contents of an Environmental Statement than a scoping request. In the end the scoping process should be an opportunity to allow wider parties than the design team to provide their views on environmental, and related community, issues that will need to be considered and may need to be assessed as part of the EIA process. The primary focus of the scoping should not be to act as a health check for the EIA, as a whole; it should instead act to concentrate the practitioner's energy on continuously defining the most efficient assessment of significant issues related to the proposed development.

Box 5.1: A comparison between regulatory scoping requirements and the Infrastructure Planning Commission's EIA scoping guidance

Regulatory Requirements:

Regulation 10(2) sets out the documents required to be submitted when making a scoping request:

- a plan of sufficient detail to identify the land;
- a brief description of the nature and purpose of the development and of its possible effects on the environment; and
- any further information the developer may wish to provide.

The Infrastructure Planning Commission's guidance sets out its expectations related to scoping

The advice provided to applicants on the content of a scoping report includes:

- A description of the scheme or proposal;
- Interpretation of the site settings and surroundings;
- Outline of alternatives and methods used in reaching a preferred option;
- Results of desk-top and baseline studies where available;
- Methods to predict impacts and the significance criteria framework;
- Mitigations and residual impacts to be considered;
- Key topics covered as part of the scoping exercise; and
- An outline of the structure of the proposed ES.

Further, it goes on to state that the scoping report should also:

- Identify all the issues to be addressed in the ES ... the scoping request should include as a minimum a brief description of the possible environmental effects;
- Make clear what topics have been scoped out and for what reason;
- Identify possible environmental effects, their significance and any other issues identified as part of this process considered to be relevant; and
- Outline the main elements of the development likely to have a significant environmental effect [and].. where there is uncertainty... provide as much detail or assume the worst case i.e. maximum height of a building or feature.

Finally, the advice indicates that applicant:

- May wish to consider highlighting in the scoping report where dialogue with key stakeholders has informed the scope of the proposed EIA and guided their decisions on the alternatives considered.

Notes:

1. Regulation 10(2) - as set out in the Town & Country Planning (Environmental Impact Assessment) (England and Wales) 1999, as amended.
2. Infrastructure Planning Commission Scoping Guidance – as set out in: Identifying the right environmental impacts - Advice Note 7: Environmental Impact Assessment, screening and scoping (August, 2010)

During the research workshops a number of experienced EIA practitioners questioned whether there is now too much focus on the, perceived, need to produce a scoping report and gain a scoping opinion; indicating that perhaps more resource should be put to engaging relevant stakeholders and planning an appropriate and effective assessment. A number of practitioners argued that for a fraction of the budgets spent producing lengthy scoping reports they could instead undertake focussed consultation, with consenting authorities and statutory consultees, and engagement activities, with community and environmental groups. This activity would allow agreement to be reached on a terms of reference for the assessment that established the initial scope of the EIA. This approach was considered to be able to generate more valuable environmental information of direct relevance to the assessment at a lower cost.

Whilst discussions with EIA practitioners indicated that many still feel the production of a scoping report is an essential step in the EIA process the majority do voice their own concerns about the process. IEMA's survey found that 86% of respondents believe that a scoping opinion should be issued as part of the EIA process; however, this number falls substantially, to 50%, when asked whether gaining a scoping opinion should become a mandatory step. Interestingly 85% of respondents indicated they would support the requirement for systematic scoping consultation with statutory environmental bodies (e.g. Environment Agency – England & Wales, Scottish Environmental Protection Agency, Northern Ireland Environment Agency, etc). This finding supports the views of more experienced EIA practitioners that the environmental information and opinions gained as a result of discussions that occur during scoping are considerably more valuable than the approach used to gain such information.

Beyond the issues related to scoping reports, discussed above, other practitioner concerns raised during the workshops related to the production of scoping opinions by consenting authorities; the most common issues raised in this regard were:

- i) **Generic scoping opinions**, taking little or no account of the specific project being proposed.
- ii) **Information being cut and paste from the scoping opinion for a different development**, the worst example highlighting a case where the scoping opinion issued of an urban regeneration project contained substantial sections related to the potential impacts associated with a wind farm development.
- iii) **Failure to respond within five weeks**, there appears to be an almost uniform failure to respond to scoping requests within the time period stipulated by the EIA Regulations.

The main cause of the above issues appears to be a lack of resources within consenting authorities and statutory consultees to dedicate to EIA proposals combined with a lack of knowledge as to the purpose of a scoping request. Given the forthcoming Government cuts, which will inevitably further stretch the resources available to public bodies to put to EIA scoping responses, it is likely that scoping opinions may get worse before they get better. There may be one source of hope for improvement in the planning field with the Government encouraging local authorities to charge for pre-application services, such as issuing screening and scoping opinions. With many authorities having already begun to do this, and the Government having consulted, in late 2010, on the potential to provide new regulatory powers to make such charges, it would appear that there will be opportunities to purchase screening and scoping services in the future.

It should be noted that where a developer is required to pay to receive a consenting authority's scoping opinion their expectation of a quality service, provided in a timely manner, will be enhanced. As such, consenting authorities that charge for scoping opinions will need to consider whether the cost of their time - needed to read and respond to a long scoping report - is efficient when compared to the time that would be needed to hold one or more focussed scoping meetings. As such, under a future system, which may see the costs of scoping opinions rise, there could well be an economic imperative that adds fuel to the debate over the most effective approach to engaging and gaining the views of the decision-maker and consultees during scoping.

The research also regularly heard from EIA practitioners that were frustrated because, despite having gained a scoping opinion, consenting authority and statutory consultees frequently identify additional environmental information they want to see added to the EIA after submission. Whilst it is recognised that there are situations where an EIA's scope will need to be expanded at a late stage (e.g. where a late design change could influence the environmental impacts of the proposal) the frequency with which further information requests³³ are issued appears to be higher than would be expected. IEMA's research has found that practitioners believe that further information requests increasingly relate to environmental issues that could easily have been highlighted much earlier in the process. There is a strong imperative for all parties involved in the EIA to scope the assessment effectively early on in the process as this: gives the greatest opportunity to alter designs to avoid impacts; saves both time and resources in compiling and reviewing documents; and acts to speed up the decision-making process.

If action is not taken to enhance the quality of scoping opinions, and manage down the frequency of further information requests, there is the potential that their associated delays will become endemic in the majority of UK EIA practice. IEMA has identified a number of steps that should be taken to improve this area of practice:

1. Use scoping to develop and maintain a 'live' terms of reference for the assessment

The view from EIA practice is clear: ineffective scoping regularly generates impacts for all parties that can be avoided through dedicated input at an early stage; a view that mirrors the findings of the DCLG's 2006 study³⁴. Given the Government's cuts it will become increasingly difficult for consenting authorities and statutory environmental consultees to provide sufficient resources to respond to scoping requests. However, it must be recognised by all parties that developing a high quality and accurate scope for an EIA repays the resource inputs of all involved many times over through savings generated later on in the application process. To achieve this there is a need to see scoping as an on-going engagement process that aims to develop, and maintain, a 'live' terms-of-reference for the assessment. EIA practitioners will need to determine whether scoping reports, focussed scoping workshops, or other methods are best placed to develop such EIA terms-of-reference.

2. Improve the level of EIA knowledge amongst those developing scoping opinions

A lack of understanding about the role of scoping and the consequences of generic scoping opinions acts to inhibit improvement in practice. As such, there is a need to ensure all consenting authorities have access to clear advice to improve their knowledge of EIA and their confidence in developing focussed scoping opinions. In the meantime, those consenting authorities that currently have a lack of EIA knowledge may need to consider outsourcing such services to organisations that already have appropriate capabilities.

3. Recognise that effective scoping avoids delays later in the application process

The DCLG's 2006 study into scoping clearly found that ineffective scoping leads to increased use of local authority powers to request that the developer submit further environmental information later on in the application process. All parties involved in EIA must acknowledge this relationship and actively work to avoid the need for the consenting authority to issue such a request. The powers given to consenting authorities to request further information are designed to act as a safety valve, in order to avoid consent decisions being taken without sufficient environmental information. Where all parties effectively contribute to developing and maintaining the scope of an EIA the need to use this safety valve should be rare. However, this is not the case in much of UK practice. Greater advice may therefore be needed to highlight the relationship between ineffective scoping and the increased resources consumed as a result of the need to request further environmental information.

Beyond this, EIA practitioners must also improve their actions by ensuring that environmental issues raised during scoping are clearly visible in the Environmental Statement. IEMA's own experience from reviewing Environmental Statements has found that it is not uncommon that some of the environmental issues, set out in a scoping opinion, are not adequately discussed. In some cases this may be down to the developer, particularly where a scoping request was submitted shortly before the submission date of the application. In such circumstances by the time a scoping opinion is received the majority of the assessment will often have been completed meaning there is limited opportunity to act on any additional issues raised. Further, there are still many cases where Environmental Statements fail to either adequately explain either where issues raised by consultees are included in the document or set out a clear justification as to why an issue has not been assessed. EIA practice must therefore also act to enhance its actions in relation to effective scoping; as well as looking at ways it can contribute to resolving the difficulties experienced in relation to scoping opinions.

33. Regulation 19 of the EIA Regulations (1999, as amended) – Further information and evidence respecting

34. Evidence review of scoping in Environmental Impact Assessment (DCLG, 2006)

5.2 THE CAUSES OF INEFFECTIVE SCOPING

Ineffective scoping acts to broaden the number of environmental issues considered by the assessment to include topics of only vague relevance rather than focussing the assessment on issues where significant effects are likely to occur. Ineffective practice also fails to provide adequate justification as to why such expansion is required and how its inclusion will add value to the EIA, design or decision-making processes. IEMA's 2009 Environmental Assessment Forum initiated a discussion amongst practitioners about the drivers behind ineffective scoping. At this conference ERM provided considerable initial direction to this debate and subsequent to this IEMA's research workshops have allowed these initial thoughts to be tested and further developed to identify the three key drivers of ineffective scoping practices. They are:

1. Risk Aversion
2. Poor Planning
3. Commercial Reality

Risk Aversion: Many of the parties involved in the EIA scoping process tend to act in a risk averse manner when it comes to scoping the assessment. Consenting authorities and statutory environmental bodies, with limited resources or a lack of experience in EIA, find that retaining a broad scope provides a level of reassurance that they have not missed any potentially relevant environmental issues. Legal advisers will tend to act to ensure that all issues are rigorously assessed in case the project needs to be defended at a public inquiry and developers are unlikely to act against such advice. Less experienced EIA practitioners also tend to err on the side of caution and include a broader scope, in particular where environmental specialists push for additional surveys. This 'just in case' culture tends to extend both the number of environmental topics covered by the EIA and the sub-issues that each topic is assessed against. IEMA recognises that everyone is acting to ensure an effective decision is made; however, there is a need for all parties to recognise that if EIA is to be effective it needs a single leader and that role should be played by the EIA co-ordinator, as discussed in Sections 5.3 and 6.6.

Poor Planning: EIA is not simply a standard framework that is applied regimentally to all proposals in the same manner. The EIA process must be specifically aligned to each proposal considering:

- the specifics of the development and receiving environment;
- the stage in the design process when the EIA is initiated; and
- the time available to complete the assessment.

There is a need to see EIA as a bespoke product, which must be designed to fit with the development proposal being assessed. Where the individual leading the assessment (ideally an EIA co-ordinator) does not dedicate thinking time to considering such issues the assessment will often be ineffectively planned with knock on consequences to establishing an appropriate scope and gathering relevant information in a timely manner. In many cases the dedication of a small amount of resources to enhance EIA planning, e.g. additional thinking time, will considerably reduce the resources needed to generate an appropriately focussed assessment.

Commercial Reality: Two main factors can be seen to occur under this heading. Firstly, funding new development proposals is expensive and thus developers aim to avoid delays to the planned application, construction and operational schedule of their future developments. Where a request to undertake additional assessment, on top of the EIA's existing scope, arises developers must weigh up whether the risk of trying to negotiate an appropriate scope for such an assessment outweighs the risks that would result should the lack of such information lead to a delay in the consent decision. In many cases the costs associated with undertaking additional environmental assessment are relatively small compared with those that would be associated with a delay to the proposed development's programme. EIAs can therefore end up being broadly scoped and, as a result, contain considerable amounts of potentially irrelevant additional environmental data.

The second factor in relation to commercial reality relates to the companies undertaking the EIA with virtually all UK EIAs being produced by environmental consultants, planners or architects. Whilst the goal of such organisations is to add value to their client, through the services they provide; ultimately, they are businesses that need to generate cash flow and profit to survive. As a consequence where either risk aversion or poor planning in EIA generates a call for additional information to be collected the consultants involved have a dilemma. Do they: act as the voice of reason and aim to keep the EIA appropriately focussed? Or, agree with the call for additional assessment that will generate their company additional fee earning work?

IEMA's research workshops found that a large number of practitioners do try to act as the voice of reason on projects. However, they indicate that despite this more often than not the additional work is commissioned anyway despite the EIA co-ordinators advice. Once a few such decisions are made in relation to an EIA it is understandable to see why an EIA co-ordinator may not continue to challenge their client quite as vigorously when similar situations arise later in the assessment. As a consequence it can become easier for practitioners to get used to agreeing to extend the scope of EIAs, and take on the associated additional fee earning work, rather than to always act to maintain the assessment's focus.

Synergistic Consequences...

The three drivers, discussed above, act synergistically and thus have a far greater combined effect than they would on their own. The research has identified that the main consequence of this synergistic effect is that many UK EIAs have an unwritten 'assumed scope' before they even begin. IEMA reviewed 100 Environmental Statements submitted in the UK during 2010, around 20% of the total number ESs submitted. The review found that over 90% included chapters assessing ecology, noise and water effects (Box 5.2) with a further five environmental issues being found to have their own chapter in nearly 80% of all the ES reviewed. Overall it was found that the average UK Environmental Statement in 2010 had 9.63 environmental topic chapters. Whilst IEMA's analysis did not extend to assessing whether the inclusion of each chapter was appropriate, it is clear that current practice in scoping rarely leads to an assessment focussed on a handful of key environmental issues.

Box 5.2: The frequency of inclusion of environmental topic chapters in a sample of 100 UK Environmental Statements from 2010

Environmental Topic	Occurrence rate in 100 UK Environmental Statements from 2010
Ecology (Flora & Fauna)	92%
Noise (& Vibration)	92%
Water	90%
Landscape / Townscape / Visual Analysis	88%
Transport	88%
Cultural / Built Heritage (Inc: Archaeology)	82%
Soil and Land Quality / Ground Conditions	81%
Air	79%
Socio-Economic	64%
Cumulative Effects (Interactions / inter-relationships)	46%
Waste	28%
Climate Change	17%
EMP, Summary - Residual Effects & Mitigation	17%
Population / Human Beings	13%
Amenity, Access, Recreation, Rights of Way	12%
Daylight / Sunlight	11%
Material Assets	10%
Micro- climate / Wind	9%
Electronic Interference (Radio & TV)	7%
Sustainability	7%
Public Health	6%
Lighting	5%
Aviation	5%
Geomorphology & Coastal Processes	4%
Energy	3%
Shadow Flicker	3%

*Bold text denotes that the topic is included in either Article 3 or Annex IV of the EIA Directive

5.3 EFFECTIVE SCOPING AND ITS BENEFITS

The above section may present a negative picture of trends in scoping practice; however, IEMA's research also found that UK EIA practice already has the knowledge required to deliver effective scoping. This being the case the question arises: Why do EIA practitioners not act to improve the current state of scoping?

The research workshops found that there is a need to both agree the type of actions that help to generate an effective scope and provide better access to information on the benefits generated through effectively scoping (see Box 5.3). IEMA has identified five key steps that are considered essential to delivering effective scoping practice:

1. **Enable a culture of focussed scoping:** There is a need for practitioners to spend more time planning the scoping process so as to ensure that it avoids undertaking unnecessary work. This is an approach that has been embodied in changes to the Design Manual for Roads and Bridges approach to EIA in the past few years (section 3.3.2). The EIA co-ordinator should ensure that all specialists contributing to the assessment focus on only undertaking work and providing findings needed to enable the consenting decision to be taken. Efforts of all those involved in the EIA must be tailored towards providing directed contributions. In some cases this will mean forgoing the need for initial surveys, where it is clear a detailed assessment will inevitably be required, or in other cases at the end of one phase of assessment questioning whether the existing findings are enough to identify the appropriate action needed. Where the EIA produces a scoping report a framework and style for the report can help to keep the scope of the assessment focussed. This approach helps to ensure the ES only includes information that has been accepted by the EIA co-ordinator rather than providing a reference document for every action the topic specialist has undertaken.
2. **Develop an effective terms of reference:** Effective EIA scoping is bespoke and takes account of the individual environmental issues that arise each time EIA is undertaken. To do this efficiently there is a need to view scoping as a 'live' process that initially establishes a terms of reference for the assessment and maintains this in an iterative way as the design of the proposed development progresses. To do this there is a need to both intelligently scan the baseline information and be open to the views of consultees in order to focus on relevant environmental issues and close down those that are found to require assessment. However, in order for this activity to remain effective practitioners must ensure the EIA process manages stakeholder expectations to avoid unnecessary assessment work being undertaken.
3. **Increase co-operation:** The EIA process is the combined effort of a number of different parties. Any changes in design of the proposed development have the potential to influence the activity of those undertaking each component of the assessment. Further, the information and findings of any aspect of the assessment has the potential to influence the proposed design. The EIA co-ordinator sits at the nexus between the design team and the environmental specialists undertaking components of the assessment. As such, the co-ordinator plays an essential role in facilitating the exchange of information that can influence the 'live' scope of the EIA. Practitioners undertaking this role must ensure that information is exchanged efficiently so as to avoid duplication of effort. There is a need to avoid 'silo working' amongst environmental specialist involved in the assessment, as a lack of communication can also generate duplication or lead to unexpected delays where up-to-date information has not been taken into account. By enabling more effective co-operation and exchange of information both between the design and EIA teams and within the EIA team itself the EIA's scope can be more effectively managed throughout the assessment. Further to this, greater co-operation ensures that any information gaps can quickly be identified and resolved rather than the EIA carrying such gaps into the application process and providing the consenting authority with reasons to use their powers to request further information.
4. **Enhance stakeholder collaboration:** EIA practitioners recognise that consenting authorities, statutory consultees, stakeholders and the local community are all valuable resources. By allowing the scoping process to work with such parties in a more collaborative way, support for the proposal can be enhanced and objections avoided. However, such collaboration needs to make effective use of their limited time and resources. As such, there is a need for EIA practitioners to question whether the approach they are taking to scoping at different points during the assessment will make best use of stakeholder input and provide the assessment with the information it needs. This can mean activity that is undertaken to 'tick a box' can be avoided in favour of action that adds value to the assessment and the development's design process. EIA practitioners must therefore learn to listen to stakeholders and negotiate with them to ensure their expectations and input align with a realistic view of what the EIA and design process can work in unison to deliver.

5. **Utilise other assessments:** There are many other assessments undertaken prior to the application of EIA, in particular different forms of Strategic Environmental Assessment (SEA), including Sustainability Appraisal (SA) and Appraisal of Sustainability (AoS). Such strategic assessment processes can be used effectively to integrate with EIA and avoid the risk of duplicating strategic assessment at the project level. At the early stages of an EIA practitioners should undertake a rapid review of strategic assessment processes that have been undertaken to inform plans or programmes relevant to the proposed project. There is also a need for SEA practitioners to produce more effective and accessible outputs that can be readily picked up by project level assessments to inform both the EIA screening and scoping processes.

An example of such activity³⁵ can be seen in the Appraisal of Sustainability undertaken for the draft Energy National Planning Policy on Nuclear (Draft NPS: EN6). The draft NPS identified potentially suitable sites for new nuclear power stations in the UK. Its Appraisal of Sustainability focussed on identifying strategically significant sustainability issues to assist this process; however, the assessment also recognised more localised potential significant effects related to each site, which will need to be picked up and considered during any later EIA. As such the actions undertaken during the AoS process should help to streamline the EIA scoping process by providing an initial focus to the project specific assessment.

Synergistic Consequences...

Through better communication of the benefits generated by effective scoping and by undertaking activities in line with the five areas identified, EIA practice can evolve to a point where the issues discussed in section 5.2 no longer act as the key drivers of scoping practice. The synergistic effect of such actions would enable a culture of 'live' scoping aimed at identifying an effective terms-of-reference for the assessment that in turn enables effective decisions to be made. Such a change in practitioner culture will help to enable the current risk averse approach to scoping to be replaced by an effective process that helps create projects that work for all parties. Once developers and consenting authorities are regularly exposed to the benefits gained through effective scoping practice it is unlikely that they will continue to accept the time and resource costs they currently experience as a consequence of the problems generated by aspects of the UK's current approach to scoping practice.

Box 5.3: The key benefits be generated through effective scoping

Effective scoping provides opportunities to:

1. **Reduce costs:** By allowing the EIA co-ordinator to avoid duplicated effort and ensure that topic specialist proposals and stakeholder expectations are proportionate.
2. **Reduce objections:** By listening to consultee views.
3. **Avoid delays:** By taking onboard relevant information from consultees to tailor the assessment.
4. **Build relations with stakeholders:**
 - Stakeholder benefits include enhanced trust in the competence of EIA co-ordinator and thus the quality of Environmental Statement.
 - Practitioner benefits include improved quality of inputs into the assessment and development of contacts that could generate efficiency in future work.
5. **Speed up decision-making:** By setting a marker for the content of the Environmental Statement and potentially reducing the number of documents submitted alongside the application.

35. Adapted from Barbara Carroll's (Enfusion) EASIG Article in Issue 94 of the Environmentalist

5.4 AN INCREASING ROLE FOR PUBLIC PARTICIPATION

The above section has focussed on the scoping process and the main parties involved in it, namely EIA practitioners, consenting authorities and statutory consultees. However, there is a growing trend to involve the public and local communities in the early stages of the EIA process. This section explores the reasons behind this trend, with section 5.5 going on to examine practitioner views on the value of consulting and engaging local communities in the EIA process.

IEMA's research has found that 50% of survey respondents believe that undertaking EIA always or often generates support for the development amongst communities; with only 3% indicating that EIA never achieves enhanced community support. This is a promising finding and provides further evidence of the value that effective EIA can add to the development process. It will undoubtedly also provide encouraging reading for the European Commission given that the EIA Directive was amended in 2003 to enhance the opportunities for public participation. The introductory clauses to Directive 2003/35/EC indicate that as a result of the amendments contained within it the EIA process should enable:

“Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and **contributing to public awareness of environmental issues and support for the decisions taken.**” [Emphasis added]

In the 5 years since this amendment to the EIA Directive was enacted in UK Regulations there have also been changes to a number of development consent regimes that have also acted to increase local communities and stakeholder participation during the pre-application process. This enhanced activity appears to be driven by two factors. The first is the need to ensure the UK's development consent procedures are compliant with the 1998 UNECE Aarhus Convention³⁶.

The second factor is a broader socio-political trend in the UK to allow interested parties, in particular local communities, have a greater say in decisions that will be taken affecting the area where they live. Whilst the most recent manifestation of this trend is encapsulated in the Coalition Government's Localism agenda, the roots of this trend go back well before the 2010 general election. The 2008 Planning Act sets into law concepts highlighted in both the Eddington³⁷ and Barker³⁸ reviews, i.e. the need to provide enhanced opportunities for local community participation during the pre-application stages when planning a nationally significant infrastructure project in England or Wales.

The Scottish Government's 2006 Planning (Scotland) Act also established requirements to undertake pre-application consultation for all developments classed as national or major developments³⁹. Both development types are likely to require EIA and the Act sets out the following minimum requirements related to pre-application community participation:

- All relevant Community Councils must be consulted;
- A minimum of one public event must be held; and
- Opportunities for the submission of written comments during the pre-application phase must be advertised to the public.

Additionally, local authorities are able to require developers to undertake further activities to enhance community participation. The result of all this activity must then be set out alongside the application for development consent and any Environmental Statement. Issues related to the Scottish system and its links to EIA are discussed further in box 5.5

36. Aarhus Convention – On access to information, public participation in decision-making and access to justice in environmental matters (UNECE, 1998)

37. Eddington Transport Study (2006)

38. Barker Review of Land Use Planning (2006)

39. National developments are those specified in the appropriate annex of the second National Planning Framework (<http://www.scotland.gov.uk/Publications/2009/07/02105627/0>) and major developments are categorised in the Town and County Planning (Hierarchy of Developments) (Scotland) Regulations 2009 (<http://www.legislation.gov.uk/ssi/2009/51/contents/made>)

5.5 COMMUNITY ENGAGEMENT AND CONSULTATION

IEMA's EIA survey explored whether the EIA Regulations provided for sufficient public involvement. The majority of regulations only **require** the public to be consulted when the Environmental Statement is submitted to the consenting authority alongside the development proposal. The survey findings indicate a split in practitioner views with 47% indicating that the EIA Regulations provide sufficient provision for public involvement whilst 34% disagreed with this statement.

In addition, when asked whether the EIA Directive should be modified to require public consultation during scoping the responses were even closer with 43% in favour of such a requirement and 38% against. An additional question asked whether public consultation should be extended to the EIA screening process (see Chapter 4), as is already the case in a small number of other Member States. The findings show that there is substantially less support for such an extension in the UK with only 34% in favour of statutory public consultation during EIA screening and 46% against such an extension.

Analysis of the data by respondent type identified that EIA co-ordinators, those who lead the EIA process, have substantially different views to the general survey respondent. The data shows only 34% of EIA co-ordinators are in favour of mandatory public consultation during scoping compared to 59% who are against such a requirement.

At first this result may appear counter-intuitive as mandatory public participation in scoping would be likely to generate greater demand for the services of EIA co-ordinators. However, an explanation of this survey finding can be seen in the views that EIA practitioners provided to IEMA during the research workshops. Practitioners indicated that wider scoping consultation activities, than those set out in the EIA Regulations, has been standard EIA practice in the UK for a number of years, as described in Section 5.1. Practitioners indicated that they have concerns that a regulatory approach to scoping consultation may lead to a 'one size fits all' process that would prove ineffective, a view echoed by Planning Aid's 2010 advice on public engagement:⁴⁰ As such, it appears EIA practitioners are concerned that should a statutory requirement to undertake public scoping consultation be introduced it may end up being counterproductive.

In terms of consultation and engagement during the earlier parts of the EIA process a number of practitioners did highlight that caution was needed in how such activities were planned. In particular examples of where consultation activities and public exhibitions had not been effective or generated confusion and frustration in the local community as they had not clearly set out what issues would be discussed. It is clear that concerned local communities want to understand the likely implications of EIA development proposals; however, they are also unlikely to limit their questions to the current point in the project's design and assessment. As such, if those EIA and wider professionals taking part in a public exhibition do not have a strong knowledge of the whole picture of the proposal and effective facilitation, communication and engagement skills there is the potential a number of the questions that arise will not be able to be answered effectively. It is therefore essential to plan engagement activities effectively beforehand and ensure that those taking part are well versed to talk about the core elements of the project and its EIA and know who else in the team they can pass more detailed questions onto, rather than failing to provide answers or providing inaccurate information.

Consultation and engagement can provide substantial benefits to a project, from enhanced buy in within stakeholder groups and the local community, to access to high quality local environmental information that would otherwise not have been available to the assessment. Where engagement is given a greater focus there are opportunities to get local community members even further involved, including providing input into design and access details, as well as helping to develop mitigation measures that are more likely to be trusted and effectively implemented as they have community buy in. By engaging a small number of community representatives to provide input into both the EIA process and project design there is an opportunity for these engaged individuals to understand the various competing forces that influence the modern day development process.

40. Good Practice Guide to Public Engagement in Development Schemes (Planning Aid, 2010), see: http://www.rtpi.org.uk/download/9516/PAE_good_practice_guide.pdf

Feedback from practitioners indicates that when individuals are exposed to and begin to recognise these various factors - from environmental, sustainability and access issues through a raft of both central and local government policies to the engineering, design and economic realities of development – they begin to understand the issues faced by a developer. Whilst this does not mean that community concerns become any less important it does mean that key members of the community, engaged in this way, are able to talk to a much wider audience about how the EIA process is being used by the developer, alongside effective design, to try to minimise a development's impacts. In some cases this can generate support for the development; however, of more importance it develops increased trust within those directly engaged and by proxy helps build confidence in a much wider group of stakeholders.

As indicated above, however, there are risks with engaging people too early, when there is limited EIA or design information available. At the very earliest stages of the process there may be more value in information provision about the project that provide contact points where interested parties can gain further information, raise their concerns or request to be kept informed of future consultation and engagement activities. Such an approach can help manage expectations amongst the local community who may otherwise lose trust and confidence in the proposed developer and or both the design and EIA professionals involved.

Whilst it was clear from practitioners that both the need and desire to undertake local community consultation and engagement is increasing, the research identified concerns that it can be hard to actually engage with communities e.g. get people to attend consultation events. Further, a number of practitioners raised concerns that those who often engage 'on the community's behalf' present their own views, or those of only a small section of the community, rather than representing the views of the community as a whole. EIA practice must therefore work together to develop better ways of engaging communities to ensure all concerns are recognised and handled appropriately.

5.6 CHAPTER CONCLUSIONS

- The results of current scoping practice all too often lead to broad assessments that lack appropriate focus leading to long Environmental Statements that add burdens all parties involved in EIA.
- There are three driving factors behind ineffective scoping - risk aversion, poor planning of the assessment, and commercial realities – that act together to lead to broad assessments that fail to focus on the specific environmental effects likely to result from the proposed development.
- Information about the benefits that are delivered by effective scoping already exists, including: shorter Environmental Statements and reduced delays in the consenting process; however, more action is needed to ensure that these benefits are regularly achieved.
- Scoping reports are becoming too long, with examples now regularly including contents that are more closely associated with the regulatory expectations of a complete Environmental Statement. Practitioners must begin to address this issue and look to innovate in scoping and build in more effective engagement.
- All parties must recognise that scoping is a 'live' process that develops through the assessment process and thus practitioners should aim to develop an appropriate terms-of-reference for the assessment that can be maintained and updated as the design of the proposed development is progressed through the pre-application process.
- There is an increasing expectation that engagement should occur from the early stages of pre-application. EIA practice already undertakes consultation and engagement activity beyond the expectations of the EIA Regulations; however, there is a need to develop better ways of engaging to ensure that concerns are heard and can be acted on appropriately.

6. THE ASSESSMENT PROCESS

Once the focus of the EIA has been established through initial scoping and engagement activities, set out in Chapter 5, the assessment process can begin. The assessment process is iterative, but is generally presented as having the following activities:

- developing an understanding of the baseline environment (section 6.1);
- identification of environmental effects and evaluation of their significance (section 6.3);
- considering whether cumulative environmental effects will occur (section 6.4); and
- designing actions to minimise negative impacts (section 6.5).

There is a strong link between the need to assess alternatives and the iterative relationship between design and assessment that occurs in EIA practice (section 6.2). Beyond this, there is a trend in practice to look at how EIA can also enhance a project's positive environmental effects (section 6.5). As a result of improvements in the assessment process, current EIA practice is considerably more advanced than that undertaken in the early 1990s when the UK's statutory process was in its infancy.

This chapter sets out practitioner views on the current state of assessment practice. The final part of the Chapter explores the essential role the EIA co-ordinator plays in adding value to each step in the EIA.

6.1 ESTABLISHING AN EFFECTIVE BASELINE

To allow EIA to predict the significance of environmental effects that are predicted to occur, if a development proposal gains consent, developing a good understanding of the state of the receiving environment is a pre-requisite. EIA practice has therefore always needed to develop an understanding of the baseline situation for each environmental issue scoped into the assessment. This area of practice has until recently been a relatively uncontroversial part of the assessment process, often left to the environmental specialist alone to determine the appropriate information needed. However, over the past few years this has begun to change and there is increasing debate around identifying the appropriate baseline for different assessments.

As discussed in Chapter 5 there is an increasing desire in EIA practice to be more proactive in managing the scope of the assessment and ultimately the length of the ES submitted alongside the application. Related to this, practitioners have raised concerns that a number of topics, most notably ecology, are almost automatically included in every assessment (Table 5.2). Further, once a topic is scoped into an EIA it tends to trigger the need for both general and more detailed surveys. Many practitioners raised concerns that this 'semi-automatic' sequence of actions will regularly generate large amounts of data, which would be reported in the ES, but was often not essential to identifying the proposed development's significant environmental effects.

In response to these concerns, practitioners have developed techniques that aim to 'scope down' a topic assessment at the start of the process. This approach involves a little more thinking time once a topic has been scoped into the assessment, but it results in savings as the process ensures that the sub-topic scope is appropriately focussed on the information needed by the EIA.

Another issue raised during the research related to whether baseline information in EIA needs to develop 'use by dates' to ensure the assessment findings remain reliable should the consent decision be delayed. This issue is particularly relevant in a number of different circumstances, including where:

- a development would be implemented over a long period of time;
- the decision to seek development consent has a stop-start nature; or
- the environment is already in a rapid state of change due to other influences.

Given the recent economic climate it is not surprising to learn that EIA practitioners are seeing an increasing number of assessments that are initiated and then put on hold. Where baseline data has already been collected prior to a proposal being put on-hold there can be thousands of pounds worth of data that has been collated. When the same project's application process is re-initiated the developer will clearly prefer to be able to use any previously collected baseline data rather than find this data is no longer considered reliable and thus have to fund repeat baseline surveys.

However, there are currently no over-arching rules to define a 'use by date' for EIA baseline data, or to assess the reliability of the findings of an assessment based on such data. Whilst the research identified that further consideration is needed in this area it also found that practitioners do not believe a single universal rule on the shelf life of all EIA data would not be appropriate. This is because some environmental data is less susceptible to change (e.g. soil types and geology) when compared with more dynamic baseline issues (e.g. on-site ecology and noise). It is therefore clear that EIA practitioners need to be aware of the potential for data to become 'out of date' and thus need replacing. Further, there is a need for effective communication between the EIA co-ordinator and developer to ensure that the collection of dynamic baseline data is not initiated if a project is expected to be put on-hold and to also ensure sufficient budget is set aside to repeat surveys should it become clear that environmental data already collected is likely to pass its 'use by date'.

Effective communications between EIA co-ordinator and environmental topic specialists is essential to ensure that such data risks are recognised early so appropriate action can be planned. In the end the decision as to whether previously collected data is still acceptable will be project specific and should involve pragmatic discussions with the consenting authority and relevant consultees. However, action can be taken on a broader scale by those producing guidance on topic specific assessments to set out what a practitioner needs to look out for in judging whether previously collected data is still reliable. IEMA's view is that any such guidance should aim to avoid setting specific periods after which data should be re-gathered. This is because guidance documents can become adopted as 'rules', thus by establishing specific 'use by dates' for certain types of baseline data practitioners find themselves required to re-gather existing environmental data simply to meet guidance, rather than focussing on whether the data is still acceptable in the context of the specific assessment at hand.

Related to the above is the increasing need to ensure that EIAs of very large projects with elongated application and construction periods are based on appropriate baseline information. In such cases an EIA undertaken today may need to assess the impacts of construction activities on the environment 10 years or more into the future. As such, the notion of simply assessing a proposal against the current state of the environment is unacceptable and practice has developed to ensure an appropriate future baseline is established. This is a complex process as it involves predicting the likely evolution of the baseline into the future and is made more so by the need to consider the effects of climate change. The use of scenarios can assist in this process, as can consultation with appropriate stakeholders to gain information about any likely future changes that may affect the assumptions that are used to develop a future baseline. Given the UK's need to undertake a significant amount of infrastructure development over the coming decades the need to develop more effective techniques to establishing appropriate future baselines is a trend that will continue to develop in practice.

Finally, concerns were raised during the research workshops as to how EIA practice will established the environmental baseline when assessing changes or extensions to existing developments. These concerns are driven by changes to the EIA screening requirements (see Section 4.6) that will come into force during 2011. The EIA of a change or extension to an existing development will need to include an assessment of the cumulative effect of the development as a whole following the change or extension. To assess the cumulative effects on the environment of the extension and the existing development there will be a need to understand the environment baseline situation prior to the current development existence. Unfortunately, in many cases this information will not be available as the original development will not have undergone an EIA.

One solution, regularly adopted where uncertainty exists in EIA, is to develop a worst case scenario; however, this approach will not prove useful in this situation as a 'worst case environmental baseline' is unlikely to provide a realistic scenario, which would be of little value to decision-making. Therefore, where an EIA is required for a change or extension to an existing development those leading the assessment may need to develop and agree an 'appropriate baseline scenario' with consenting authority and relevant consultees. To develop these scenarios, existing approaches, used to predict the future state of the baseline without a proposed development, may be able to be adapted to develop a 'previous state of the baseline environment without the existing development'.

6.2 ALTERNATIVES AND ITERATIVE DESIGN

EIA is now regularly integrated into the design process and is an effective contributor to the iterative design process. This is a positive trend and will ensure early and more effective consideration of the environment and community within the project design. Environmental information is also being used to decide between alternative approaches on a much more regular basis than in the early days of EIA practice.

IEMA's survey supports these findings with 66% of respondents indicating that EIA is either always or often an effective instrument at addressing environmental concerns in project design; only 1% of respondents felt EIA was never effective in this area. Further to this, a later question asked whether EIA contributed to significant modifications to projects. Of those who gave an opinion, 53% agreed EIA always or often contributed to significant modification to take account of the environment, again only a very small number of respondents (4%) indicated EIA never achieved such influence. It is therefore clear that EIA practice is having a strong influence on projects during the design process.

However, in general the valuable role EIA plays in improving development is often underplayed. The approach to alternatives established in the EIA Directive was regularly cited as the reason for this. The Directive only requires the ES to present a discussion of alternatives where the developer has considered them. IEMA found that a proportion of practitioners appear to assume that this is a reference to large scale alternatives, such as different sites where the development could be located, thus if the applicant currently owns a proposed site then the ES may include little in the way of information about alternatives.

However, in reality there are few, if any, developments where the proposal does not evolve between the start of the pre-application process and submission of the proposed development. It is therefore reasonable to expect ES to include discussion of alternative layouts for a site or different architectural designs, for example. These choices are usually refined over time, by the iterative process of impact assessment and adjustment of the design. In order to demonstrate and communicate its effectiveness, the ES must clearly explain how environmental and community effects have been used to influence such decisions over design alternatives and improve overall environmental outcomes.

IEMA's research has identified two factors that have led to the mainstreaming of environmental design over time. The first is greater recognition by developers that it makes good economic sense to avoid, or at least reduce, negative environmental and community effects early on in the design process. The second is the greater awareness of the increased likelihood of gaining consent for difficult proposals that have taken a greater account of the environment, via the EIA process.

As a consequence of this success story, EIA practice has generated new challenges for itself. Firstly, should the ES discuss the influence the EIA has had through iterative design process? And if so, how would such information be incorporated into the ES without both distracting the reader from the proposed development's significant effects or lengthening the document? The traditional step by step model of EIA sees mitigation as the step between the initial evaluation of significance and its re-evaluation, post mitigation, to establish the development's residual significance. IEMA's research has found that the experience of the majority of EIA practitioners is that this model is no longer appropriate in UK practice. This is because EIA's increased influence on the iterative design process means that many significant negative environmental effects are either reduced or avoided through design before the proposal is finalised, and thus the impacts are no longer relevant to the development as set out in the application for consent.

Where EIA has positively influenced a proposed development's design the ES should reflect this in a clear and transparent manner to allow stakeholders to understand how concerns raised during consultation have been addressed. However, current approaches to reporting this information do not appear to be ineffective. One approach is to initially present the development's significant effects from an earlier design stage within the ES and then set out the influence the assessment had on the design as 'mitigation'. However, such an approach could be seen to act against the aims of the EIA Regulations, which expect the ES to set out an assessment of the significant environmental effects of the development **as proposed**, rather than the development as it was a number of months before the application was submitted.

Another approach, which is becoming increasingly common, involves only presenting the residual significance of effects. The approach assumes that all actions to avoid or reduce environmental effects are an inherent part of the proposed development, whether such actions are design amendments that have already been implemented or post consent mitigation measures that require specific action to be taken in the future. This approach appears to originate from an update to Volume II, Section 2 - Part 5 of the Design Manual for Roads and Bridges⁴¹:

“2.9 The significance should be assigned after consideration of the effectiveness of the design and committed mitigation measures (in line with the Overseeing Organisation’s requirements). That is, significance is assigned with mitigation in place allowing for the positive contribution of all mitigation that is deliverable and committed. In Scotland and Wales, the assignment of significance before the consideration of the effectiveness of the design and committed mitigation measures should also be undertaken, allowing for the case or reason for and the effectiveness of mitigation to be described.”

As can be seen from the quote Highways Agency Environmental Statements in England are only expected to present a project’s significance having assumed all mitigation measures are successfully implemented (the residual significance). However, it is clear that this approach is not universally accepted within the Highways Agency, with the Manual indicating that ESs in Scotland and Wales should follow the more traditional approach of presenting the significance of impacts, prior to mitigation, and then set out residual significance, having taken the effect of mitigation into account.

These approaches are, however, only partly successful in communicating how the environment was taken into account within the proposed development’s design and what issues remain that need further action in the future, they also have the potential to generate confusion amongst stakeholders. This is because they mix activity that has already been completed to avoid or reduce impacts directly through the proposed design of the development with mitigation measures that require specific action in the future to ensure they are implemented in practice. It was clear during the workshops that whilst some practitioners have adopted the DMRB approach in general EIA practice, many others remain concerned that this is not an appropriate solution as discussed in Box 6.2.

This area of practice will continue to develop into the future; however, the current level of debate in this area is a clear sign that EIA is no longer seen by developers as an add-on to the consenting process. EIA, in a UK context, is now seen by a majority of developers as a key iterative design tool that helps to enable sound development consent decisions.

41. Section 2.9, Chapter 2, Part 5, Section 2 of Volume II Design Manual for Roads and Bridges (Highways Agency, 2008)

Box 6.2: The risks of applying the DMRB approach to residual significance in wider EIA practice

In England, EIAs conducted under the DMRB are only required to present the residual significance of any environmental impacts after proposed mitigation has been taken into account. Whilst this approach raises concerns with some practitioners in relation to both compliance with Schedule 4 (4) and (5) and good practice, the DMRB does provide a structured methodology for both undertaking EIA and delivering environmental mitigation measures. It also includes requirements to build mitigation into the development's consent and even where such mitigation is not conditioned it should become embedded in the contract requirements of the principal contractor that will construct the scheme. Given that Highways Agency projects are required to follow the DMRB's structured approach to both assessment and the post-consent delivery of mitigation delivery, the 'residual significance only' approach it establishes can be seen to be robust in this context.

A project whose environmental impacts are assessed and addressed under the scrutiny of the DMRB's requirements is unlikely to fail to implement mitigation. Further, should such mitigation fail to be effective, additional DMRB requirements related to the implementation of an environmental management plan would kick in to ensure appropriate additional actions would be taken.

Outside of the Highways Agency the DMRB can only provide general guidance to EIAs. Despite this its 'residual significance only' approach to presenting findings is becoming more prevalent in wider EIA practice. However, wider practice is not required to follow the DMRB's other requirements, which would act to compel the developer to implement all mitigation set out in the Environmental Statement. Equally in wider EIA practice there is no formal requirement for a developer to produce or implement an environmental management plan (see Section 7.4). In fact in some cases the developer seeking consent may not be the organisation that will construct or operate the final development. Under such circumstances the confidence that can be placed on the likely implementation and success of the post-consent mitigation used to establish the EIA's residual significance findings is considerably lower.

Thus where a non-DMRB Environmental Statement only presents a description of the residual significance of a proposed development's impacts it fails to give the consenting authority and the public an understanding of the environmental consequences should the mitigation fail to be delivered or fail to be effective. Therefore, applying this approach outside of the DMRB's control lacks transparency as there is both less clarity about the significance of impacts prior to mitigation and less certainty as to whether the mitigation is truly 'committed'. Finally, outside the DMRB approach, systems to check that post-consent mitigation is delivered may not exist and, where they do, may not be under such rigorous control as set out by the DMRB's 'total approach'.

Practitioners considering applying this approach in their Environmental Statements should ensure they are confident it will provide evidence of compliance with both Schedule 4 (4) & (5) of the Regulations:

Schedule 4(4) - A description of the likely significant effects of the development on the environment...

Schedule 4(5) - A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

6.3 EVALUATING THE SIGNIFICANCE OF ENVIRONMENTAL EFFECTS

EIA provides environmental information to assist decision-making. The primary method for communicating information related to environmental effects is to describe and evaluate the **significance** of individual effects on different aspects of the environment.

IEMA's Guidelines⁴² on EIA indicate:

'There is often not a single, definitive, correct answer as to whether an impact is significant or not. Significance is influenced by the values of the individual, how the changes to the environment affect them and whether they have a stake in the project or not.'

The evaluation of significance in EIA is often subjective. In order to provide justifiable results, EIA practitioners gather evidence to inform and explain the evaluation of the individual effect. Effective EIA practice ensures that the methods used can be readily understood by those reading the ES. EIA does not tend to discuss significance in absolute terms. Instead, the assessment's findings are regularly set out as different levels of significance (e.g. major, moderate, minor, etc).

This approach is considered good practice; whilst recognising the inherent subjectivity of the assessment, it attempts to aid communication of the scale of the impact by introducing a classification. This approach also allows the practitioner to identify and discuss effects that some groups may consider significant, whilst others would not. For example, a negative landscape effect described as being of 'minor significance' might be considered to indicate that a majority of people would not consider the effect to be significant; however, a smaller group, perhaps within the local community, may disagree and consider the effect to be significant. It also allows for the comparison of impacts across seemingly incomparable topics by providing a consistent basis for the assessment's terminology.

Practitioners consider a range of different factors in evaluating the significance of each effect, including:

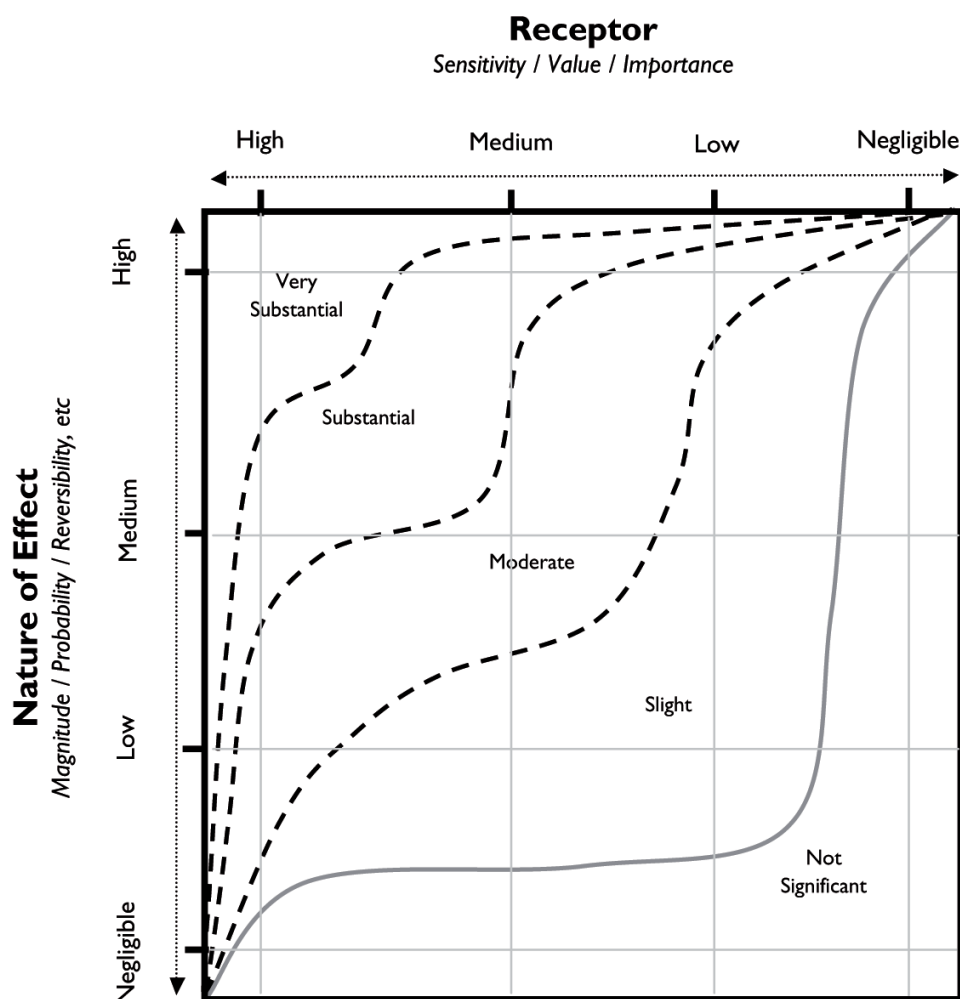
- the practitioner's knowledge and experience of significance evaluation from previous assessments;
- details of the development proposal, such as construction and operational activities, and the nature of the effect associated with such activity;
- details about the environmental sensitivity of the area that will be affected (section 6.1);
- feedback from scoping and consultation, often including views from the local community (Chapter 5); and
- the wider legal and policy context, which offers protection to the environment and community.

The most common methodology used to evaluate significance is to compare the magnitude of the predicted effect with the sensitivity of the receiving environment. In this approach 'magnitude' and 'sensitivity' are used as descriptors of a wide range of different factors. 'Magnitude' includes the spatial extent of the effect; the time period over which the effect will occur; and whether the effect is permanent or reversible.

In reporting the EIA's findings, ESs often set out a generic methodology at the start of the document indicating that significance has been assessed using a standard matrix style approach, with magnitude on one axis and receptor sensitivity on the other, see Figure 6.3, below. Despite this, it remains relatively common for one or more ES chapters to use an alternative approach. This is not a legal concern, as there is no regulatory requirement to apply the same methodological approach to significance evaluation across an EIA. In some cases significance may be linked to whether the predicted effect passes a quantified threshold established in a relevant standard.

42. Section 11.4 of Guidelines for Environmental Impact Assessment, IEMA (2004)

Figure 6.3: EIA significance evaluation matrix



Problems arise in practice when the ES fails to either: justify the use of different methods to evaluate significance between topic chapters, or present the significance of effects related to a particular environmental issue. IEMA's experience indicates the latter issue is generally confined to the assessment of socio-economic and sustainability effects. Where consenting authorities feel they do not have sufficient information on a proposed development's significant environmental effects, they have the power to delay the consenting process whilst further environmental information is submitted. As such, there is a clear need to ensure that all the findings set out in the ES are evaluated in terms of their significance; ideally this would be in a format that allows them to be readily compared with the EIA's other findings.

IEMA's research also identified another trend, in the increasing use of caveats related to an EIA's significance findings. The most common example is the use of "not significant in EIA terms" in relation to the assessment's findings. It is most often used during the standard matrix-led approach to indicate that findings of 'minor significance' are considered to be "not significant in EIA terms". This approach clearly presents substantial scope for confusing the reader, particularly when the assessment identifies an effect as having 'minor significance', but that same effect is later presented as not being significant "in EIA terms". Given that the EIA regulations do not set out terms for evaluating whether the assessment's findings are significant or not, the phrase could also be seen to be misleading as those considering an EIA's findings may assume that the results have not reached a specified legal threshold.

The use of such caveats, unless very carefully explained and transparently justified within the ES, is likely to reduce confidence in the findings, potentially risking delays to the consent process as further information may need to be submitted.

The most common usage of the term appears to be within the assessment of infrastructure developments, particularly wind farms, where these developments are in line with national policy goals but impact negatively on local community and environment. Given the increase in the requirements for pre-application consultation and the enhanced role local communities are expected to play in decision-making there may well be a need to be more innovative in the way significance is evaluated in EIA and presented in the ES.

IEMA has seen examples of EIA practice using a twin track approach that evaluates the significance of an effect in terms of national / regional significance and local significance. Such approaches can allow local community views to be more easily represented in the EIA process. Whilst two significance findings relating to each effect can be confusing, significance is a subjective judgement and more than one perspective on the significance of an effect can be given, so long as this is clearly explained and consistently applied.

What is clear is that EIA must embrace the increasing role of local communities in decision-making. Practice will need to continue to be an effective early adopter of new techniques and approaches that integrate community views into the EIA process.

6.4 CUMULATIVE ENVIRONMENTAL EFFECTS

EIA includes the requirement to identify the full range of environmental effects that are likely to result from a development. This includes not only the project's direct effects, but also a range of secondary effects including cumulative, synergistic and inter-relationship effects. This wider range of effects is often simply grouped together under the term "cumulative environmental effects" for communication purposes, as is the case in this Report. EIA practice recognises two major sources of cumulative effects: intra-project effects and inter-project effects. The assessment of both types has proved to be a very challenging area, in many different forms of assessment across the world.

Intra-projects effects: These effects occur between different environmental topics within the same proposal, as a result of that development's direct effects.

In general, simple secondary effects are effectively considered. For example, if a development proposal is likely to pollute a watercourse, the impact that pollution will have on freshwater ecology will be assessed as a secondary effect. However, where the inter-relationships are more complex, such as the consideration of greenhouse gas emissions (see Box 6.4) or the impact of pollution on recreation activities and human well-being, the impacts are often less effectively considered.

New assessment techniques present opportunities to improve practice in this area. Ecosystem services assessment provides a methodology for readily identifying some of the more complex inter-actions or secondary effects, both positive and negative. There is, however, a need for practitioners to ensure they are up-to-date with such developments if the UK is to continue to be seen as a leading country in the global EIA community. A survey undertaken during the 2009 workshops indicated that just under 40% of EIA practitioners were aware of ecosystem services assessment and only 15% had a view as to how it could be integrated into EIA practice. In 2010 IEMA assisted with a World Resource Institute survey on ecosystem services assessment in impact assessment. The findings of this second survey indicated that nearly 70% of the practitioners who responded were aware of the technique. Whilst this indicates a substantial increase in practitioner awareness in just over a year, the 2010 survey was self-selecting and thus those practitioners who were aware of ecosystem services were more likely to respond to it than the 2009 survey. Despite this, it is clear from discussions during the 2010 workshops that practitioners want to try new assessment techniques to improve the assessment of cumulative effects in EIA. New partnerships will therefore be needed to ensure that the ecosystem services assessment process is effectively and efficiently integrated into existing EIA practice.

Inter-project effects: This form of cumulative effect occurs as a result of the likely impacts of the proposed development interacting with the impacts of other developments in the vicinity.

The main difficulty is identifying which 'other developments' need to be considered. The response from EIA practice, based on the USA's National Environmental Protection Act has been to consider relevant existing developments and reasonably foreseeable future actions. The majority of Government guidance defines such future actions in a focussed manner limiting it to only those developments that have already gained development consent.

By following this guidance, numerous other likely future developments are often ignored, including proposals already being considered by consenting authorities; other developments in the pre-application stage; and development sites identified in local authority plans. However, the Infrastructure Planning Commission's Advice Note Nine⁴³ provides such a broader view of what constitutes 'reasonably foreseeable future actions' than that previously presented in other Government guidance.

Discussion during the research indicates that applicants are often unwilling to fund the EIA process to assess effects beyond the limits set out in UK guidance and, therefore, some potentially significant impacts are not being reported. As such the Infrastructure Planning Commission's advice is welcomed by the majority of EIA practitioners. Further, it is hoped that the experience of nationally significant infrastructure projects will lead to improvements in this aspect of assessment in other consent regimes.

A number of case studies and discussions on new techniques that could be applied in cumulative effects assessment were presented during the 2010 workshops. These presentations are available as part of this report's online appendices. In addition, IEMA plans to develop a short guide setting out principles for assessing cumulative effects in EIA practice in late 2011.

43. Using the 'Rochdale Envelope' – Advice Note Nine (Infrastructure Planning Commission, 2011)

Box 6.4: The consideration of the cumulative impact of greenhouse gas emissions in EIA practice

IEMA's principles on climate change mitigation & EIA indicate that: greenhouse gas (GHG) emissions from all projects contribute to climate change; the largest inter-related cumulative environmental effect. Despite this the Institute's research (Box 5.2) has found only 17% of ES, from a sample of 100, submitted in the UK during 2010 included a chapter that clearly focussed on the proposed development's GHG emissions. A more in-depth research study⁴⁴, conducted with IEMA's help, looked at 75 ES submitted between 2007 and 2009 and found that two thirds of ES included some reference to GHG emissions within the document. However, the study found that such references were often only found in the introductory chapters or in the policy context, rather than including an assessment of GHG emissions. The study noted that even development proposed to assist the UK's climate change mitigation actions, such as wind farms, did not always include an assessment of GHG emissions within a topic chapter.

There is a clear need for EIA practice to take steps to ensure greater consideration is given to the assessment of climate change in EIA, both in terms of impacts on GHG emissions (climate change mitigation) and consideration of the influence climate change will have on the project and the environmental receptors it will have impacts upon (climate change adaptation). This issue has been recognised by both IEMA and the European Commission. In 2010 IEMA launched Principles on considering Climate Change in EIA and a series of web-pages dedicated to providing advice to practitioners (www.iema.net/eia-cc). The European Commission's review of the EIA Directive⁴⁵ identified the need to enhance the consideration of climate change issues in assessment practice across Europe, as a result they are developing guidance in this area, which is expected to launch in late 2011, see Section 8.1.

As a result of IEMA's principles, and the EC's forthcoming guidance, UK EIA practice is well placed to begin to develop effective approaches to considering the complex issues related to the assessment of this complex cumulative effect. The Institute's EIA and climate change web-pages, above, will continue to be developed in the future. This will include the development of case studies - on the consideration of GHG emissions in EIA practice - and through the production of supplementary advice notes – on issues like approaches to evaluating the significance of a proposed development's GHG emissions.

44. The emerging role of Environmental Impact Assessment (EIA) in mitigating climate change (Laura Seymour, 2010) – Dissertation submitted to University of Manchester for MA in EIA & Management

45. See Section 3.5.4 of the European Commission's report:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0378:FIN:EN:PDF>

6.5 MITIGATION AND ENHANCEMENT

Section 6.2 discussed the increasing complexity around defining mitigation as a result of EIA's increased ability to influence the iterative design phase of development. This section considers current practice in mitigation, including practical approaches to defining distinct methods to avoid and reduce negative effects and ensuring mitigation measures are capable of being implemented. The section then discusses the role of EIA in enhancing the environment as a result of development. The section concludes by discussing the need to improve the 'future-proofing' of mitigation and enhancement measures, both in terms of the implementation and on-going success of mitigation and in relation to future trends, such as climate change.

6.5.1 CURRENT PRACTICE IN EIA MITIGATION

Box 6.5.A sets four different ways EIA can alter the environmental effects of a development. In terms of negative effects, action can be taken to **avoid** impacts altogether, or to **reduce** their significance, or where the environmental effects remains significant some form of **compensatory measures** may be required. In terms of positive environmental effects EIA practitioners should always consider opportunities to **enhance** the environment as a result of development. In some cases this can occur alongside compensatory action, but the two should never be confused.

IEMA's research has found that ESs now regularly split the definition of mitigation measures into three distinct categories, broadly defined as:

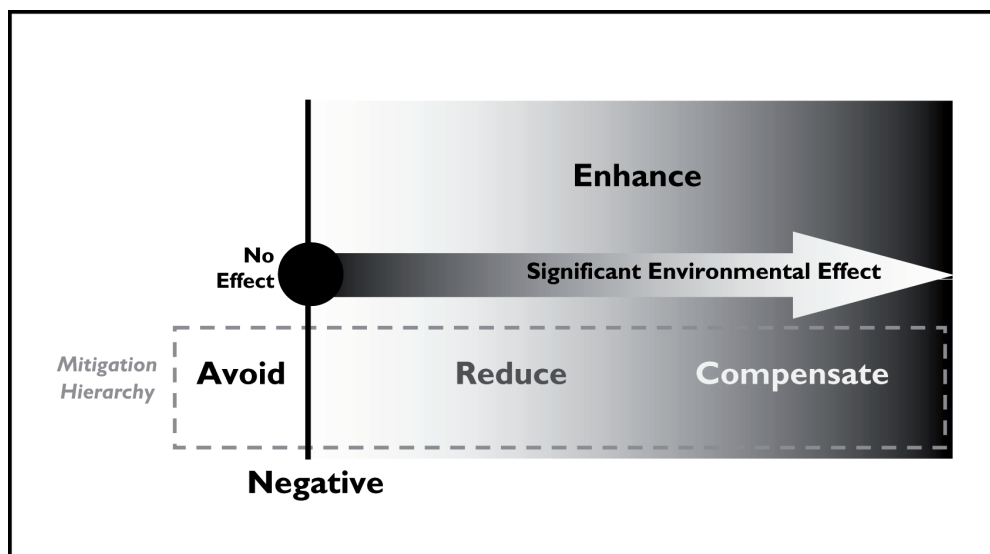
1. Actions undertaken by the EIA that influence the design stage (see section 6.2);
2. Standard construction practices for avoiding and minimising environmental effects; and
3. Specified follow-up action to be implemented post-consent.

(Adapted from Atkins, 2009)

The first two categories of mitigation, avoid and reduce, are generally considered to be embedded in the development and construction process and thus are included in the initial evaluation of significance. Mitigation under the third category will not be automatically implemented post-consent and requires actions to be taken post-consent. It is this third form of action that has the greatest likelihood of failure. This is because the mitigation may not be implemented, particularly where it is not made a formal condition of the consent. Further, even where such mitigation is conditioned and implemented the successful operation of the scheme is unlikely to be influenced if the mitigation fails to work in the long-term. As such, whilst EIA practitioners should ensure they promote all the above categories of mitigation it is the third form where most attention must be paid during the latter parts of the assessment process.

Beyond this it is clear that practitioners should aim to take action to mitigate environmental impacts from developments as high-up the hierarchy as possible (see Box 6.5.A). Thus taking actions to avoid environmental impacts in the first place are ideal, but often require involvement at the earlier stages of the design process. Where action is required post-consent, to implement mitigation or compensation, there is a need to ensure it is delivered and arguably greater enforcement of monitoring of the implementation of such action is required if we are to truly understand whether the environment is sufficiently protected by the EIA process, monitoring is discussed further in Section 7.5.

Box 6.5.A: Enhancing and Mitigating effects



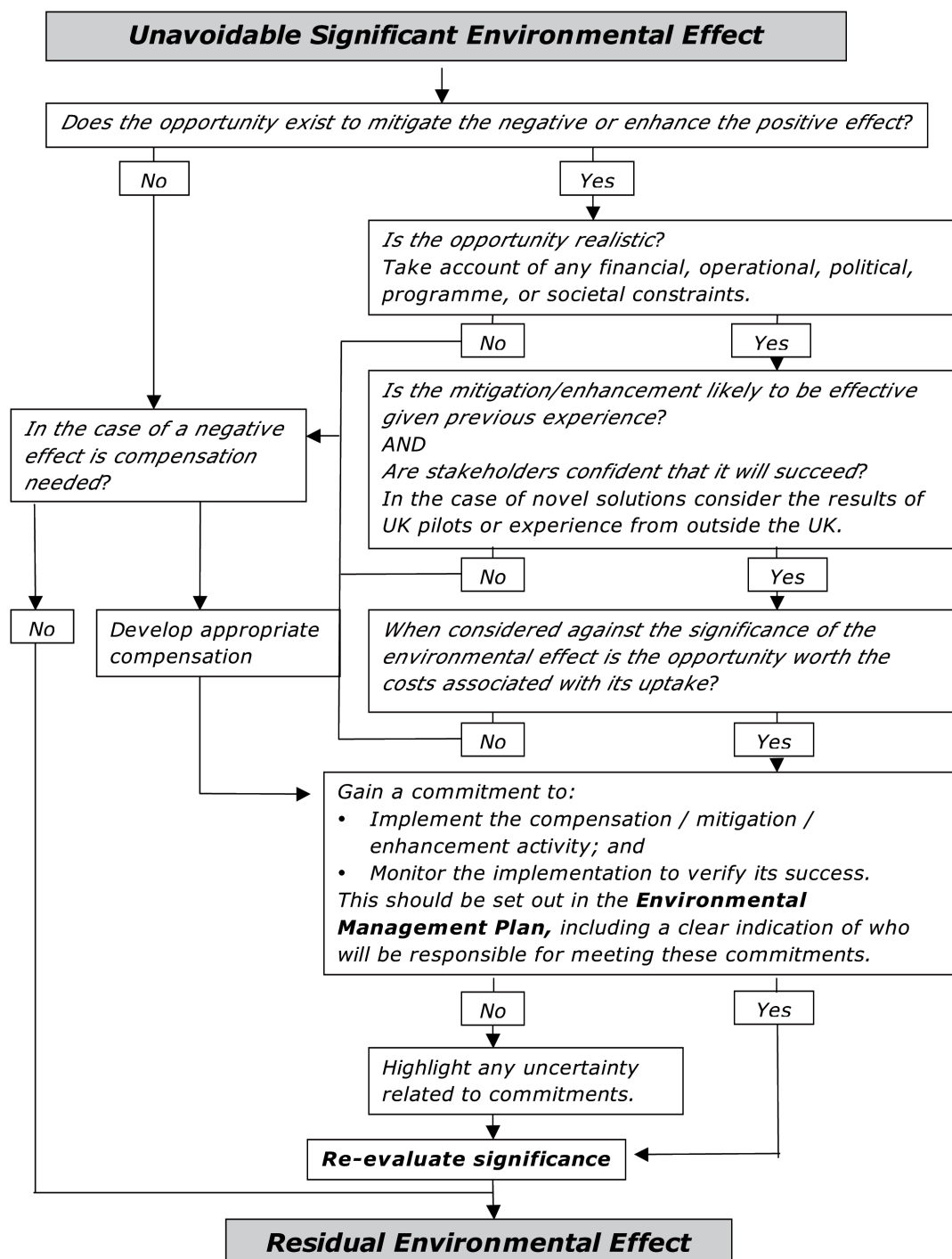
In developing specified follow-up mitigation, EIA practitioners must ensure that the action associated with the mitigation is implementable by those tasked with its delivery. As such, it is now considered good practice to involve site contractors in the development of mitigation measures. This approach generally relates to non-standard construction mitigation and ensures that the mitigation developed can be implemented and is understandable to those who will be responsible for its delivery on the ground. A further approach that has become standard practice is to ensure this type of mitigation is designed in a way that allows the consenting authority to condition it as part of the development consent. Box 6.5.B sets out advice on framing mitigation to allow it to be conditioned by planning authorities. Further to this Box 6.5.C sets out a flow diagram showing how the EIA co-ordinator should work with topic specialists and the design team to develop effective mitigation that is likely to succeed.

Box 6.5.B: Framing mitigation to deliver effective planning conditions

- Mitigation should be clear and specific;
- Compliance with the condition must be possible;
- Inclusion of a requirement to report on the completion of mitigation works or on monitoring can encourage self-policing by project proponents;
- Any monitoring expectations should be specified, including what is to be monitored, how it is to be achieved, who is responsible for carrying it out and how the results will be used to effect necessary action; and
- It should be clear to the planning authority how they will monitor and enforce such mitigation and also how the results of its implementation and the findings from monitoring will be communicated to third parties.

[Adapted from Practitioner Volume 12: Environmental Management Plans, 2008]

Box 6.5.C: Designing Effective Mitigation



6.5.2 ENHANCING THE ENVIRONMENT THROUGH EIA

Whilst practitioners are clearly capable of identifying opportunities for environmental improvements that could be generated as a result of development, specified actions to enhance the environment are rarely seen in UK EIA practice. Practitioners explained that the reasons behind this are that developers often see environmental enhancements as additional costs to the development without necessarily seeing direct benefits. Whereas the benefits of reducing or avoiding negative impacts are clear, the same is not necessarily true for a development that incorporates environmental benefits. Further to this, whilst the EIA Regulations require mitigation measures to be presented in the ES, there is no requirement to discuss potential enhancement opportunities.

IEMA has found evidence from discussions with practitioners and by reviewing ESs that some confusion remains in EIA practice as to the difference between environmental enhancement measures and mitigation or compensation measures. Enhancement measures are actions that are specifically designed to achieve net environmental gain, i.e. to move the environment from its baseline state to an improved state as a result of implementing the development. Mitigation or compensation measures are actions that aim to reduce, remedy or compensate for the negative environmental consequences of a development. The confusion tends to arise where a mitigation measure is predicted to be so effective that not only will it reduce the development's negative environmental effects, but it may also lead to an improvement in the environment. This often occurs in relation to landscaping and planting regimes around sites. Confusion between enhancement and compensation is also common in habitat replacement, where habitat is replaced at perhaps a ratio of 2:1. EIA practitioners can on occasions present this as environmental gain, rather than recognising it as the action required to adequately compensate for negative effects elsewhere, i.e. to achieve a functioning habitat.

With the increasing emphasis on local community involvement in decision-making and Government initiatives related to living within environmental limits, it is likely that future EIA practice will need to give greater consideration to the environmental enhancement opportunities a development can deliver. Many public sector schemes such as the Environment Agency's flood risk management projects already have a duty to enhance the environment and such information is recorded in an environmental value register. Increasingly private firms are beginning to recognise the reputational benefits that can be gained from designing in measures that meet community or environmental needs in the local or wider area. An example of how an EIA helped to generate substantial improvements to the water environment in enabling a private warehousing development is set out in Box 6.5.D.

Box 6.5.D: A case study of integrated mitigation and environmental enhancement**Minworth Sewage Treatment Works Redevelopment**

This case study is of a river restoration scheme that was designed to mitigate major impacts from the redevelopment of part of Minworth Sewage Treatment Works near Birmingham for a business park, ProLogis Park Midpoint. It shows how an innovative approach can be taken to multiple problem-solving in EIA and how EIA can be used to generate environmental enhancement.

The site comprised abandoned sludge lagoons that provided excellent habitat for over-wintering birds. The site was directly adjacent to the River Tame, with lagoons right up to the riverbank, and lay almost entirely within its floodplain. The River Tame in this stretch was canalised, fast flowing and lacked ecological interest.

The three key issues associated with the development were the loss of the wetland bird habitat; loss of floodplain; and Birmingham City Council's requirement for a 50 m riparian buffer strip along the Tame. Providing adequate mitigation for these could have taken up a large proportion of the site, substantially reducing the developable area. An integrated mitigation solution was therefore developed, in close consultation with the Environment Agency, in the form of a river restoration scheme. This comprised the formation of a back channel and a series of islands along the Tame, together with an attenuation pond to control runoff from the developed area.

With Birmingham City Council's approval, the channel, islands and attenuation pond were located within the 50 m buffer area, and the excavated channel area was sized to provide the required flood storage volume to compensate for that lost to the development. The Environment Agency agreed to waive the "level for level" requirement for flood storage compensation in view of the benefit of the scheme in restoring this stretch of the Tame to a more naturalised state. The permanent new habitats to be created by the river restoration scheme, i.e. shoals and riffles in the channel, marginal wetland areas along the riverbank, undisturbed terrestrial habitat on the islands, and still water in the pond, were considered to mitigate the loss of the lagoons, which were effectively a temporary and artificial (man-made) habitat.

The scheme thus met all the mitigation requirements through an integrated and innovative approach, while minimising the loss of developable land. The river restoration scheme allowed the developer, ProLogis, to obtain planning consent while providing considerable environmental enhancement to a degraded reach of the River Tame.

Topsy Rudd, Director, Cascade Consulting

Note: A presentation about this case study was presented at IEMA's EIA Workshop in Birmingham (July, 2009) and can be accessed via this report's online appendices

6.5.3 FUTURE PROOFING MITIGATION

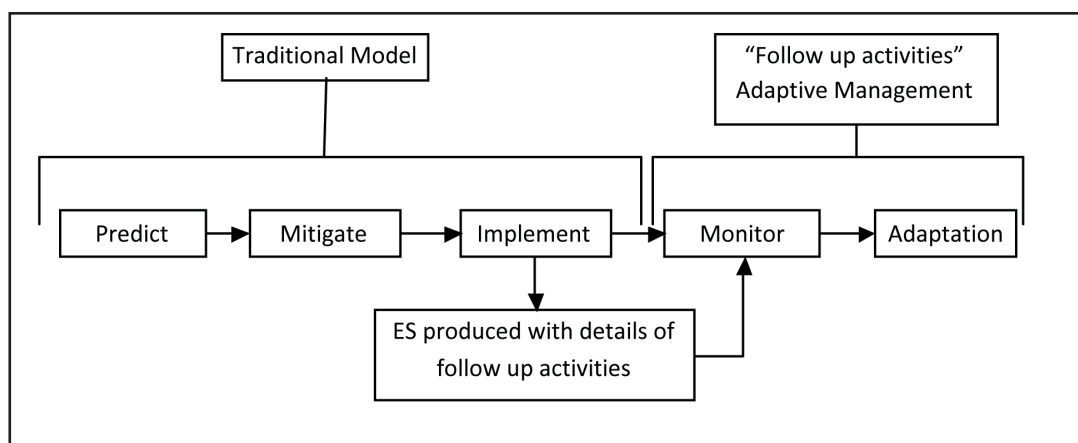
During IEMA's research workshops it became clear that practitioners feel there is a need to take greater account of the future delivery and success of mitigation and enhancement measures. Actions such as involving contractors and framing conditions appropriately (section 6.5.1) can enhance the chances that mitigation will be implemented successfully. Further to this, the funding of a medium term management plan (e.g. 5 years) by the developer is also seen as a success factor. However, after considering this initial period of management current EIA practice takes little account of the medium to long-term viability of actions to mitigate operational impacts. Further to this, practice has limited experience of designing operational mitigation measures that are designed to live with future environmental changes, such as the impacts of climate change.

One approach that has developed in the United States, Canada and Australia is the use of adaptive management processes within EIA. Adaptive management is:

A systematic process which monitors the on-going effectiveness of mitigatory and compensatory measures to determine if they are achieving their desired objectives and where they are not either modifies the action or identifies additional actions to be taken.⁴⁶

Figure 6.5.E sets out how the adaptive management process can be seen to extend the process of environmental management and protection, started by the EIA process, into the post-adoption, construction and implementation phases of a development.

Box 6.5.E: Model of how adaptive management fits into the EIA process



In the UK adaptive management can be seen to closely resemble development and implementation of an environmental management plan (section 7.4) and activity related to environmental monitoring (section 7.5). The emphasis of the adaptive management approach is on planning the follow-up activities during the EIA process. The approach has many of the same benefits associated with environmental management plans, such as enhanced stakeholder engagement and explicitly acknowledging and handling uncertainty in relation to the EIA's predicted environmental outcomes. However, it should be noted that adaptive management approaches are perhaps more generally associated with the more significant negative environmental effects where there is either uncertainty related to the long-term success of mitigation measures or where their failure would lead to unacceptable environmental harm.

46. Developed from: <http://www.eiacampus.com/course/category.php?id=15>

6.6 THE ROLE OF THE EIA CO-ORDINATOR

An EIA co-ordinator is the individual assigned responsibility for ensuring the assessment is undertaken effectively and efficiently; their role is much broader than project management and delivery. The co-ordinator must gain a true overview of the development as a whole, including engineering design, cost and programme, in order to input effectively, offering a unique perspective. The environmental information generated by the EIA is managed by the EIA co-ordinator who acts as a nexus to ensure the right information is available for project decisions at the right time. The co-ordinator's knowledge of the project sensitivities coupled with their communication skills makes them ideally positioned for community engagement activities.

The influence of an effective EIA co-ordinator involves:

- Increasing the overall quality of the EIA and design processes;
- Identifying opportunities for environmental enhancements and mitigation;
- Managing down risks to delivery; and
- Identifying and implement efficiencies and costs savings.

The consequences of the above activities act in-combination to get the best possible environmental outcome within the constraints of the proposed development.

IEMA's research has identified that getting the right EIA co-ordinator is one of the most important drivers in ensuring an effective and integrated design process. An indication of the value effective EIA co-ordination brings to different activities in the process is set out in Box 6.6.A. It is clear that many co-ordinators do not recognise the extent of the added value they bring to the process themselves, recognising instead the whole team of environmental professionals involved.

Greater recognition is needed that this is a specialist role in itself rather than a role anyone with minimal project management experience can deliver. The EIA co-ordinator role needs specific knowledge, attributes and experience. IEMA's research indicates that a developer is unlikely to get an effective EIA that achieves potential efficiencies and adds value to the design without ensuring that a knowledgeable, experienced and well-trained EIA co-ordinator is managing delivery. As such, the research has begun to identify the attributes and capabilities that effective EIA co-ordinators regularly exhibit in delivering this role.

An EIA co-ordinator needs to have wide-ranging environmental knowledge as this allows them to have a broad understanding of the environmental specialisms that contribute to the assessment. Whether this knowledge is gained through an education on cross-cutting environmental themes, built from a particular topic specialism, or developed in a wider profession as a result of working alongside environmental professionals is not necessarily important. However, the ability to effectively communicate across these environmental disciplines as well as with professionals in the wider design team and different stakeholder groups, from consenting authorities to local communities, is another key requirement. Communication skills need to be effective in many areas; for example, managing the exchange of information; providing input at meetings; writing effective reports; and talking to communities in a non-technical way. Another core set of attributes that assist the role are those related with effective project management; it is clear that the ability to manage the timely delivery of inputs and their costs is essential to delivering the EIA on time and to budget.

Beyond these core attributes the co-ordinator role needs more advanced skills, such as negotiation and persuasion not only to ensure that environmental and community issues are taken seriously in design, but also to make sure the assessment is focussed and avoids unnecessary or duplicated effort. The case studies presented during IEMA's research highlighted the valuable problem-solving skills EIA co-ordinators bring to a project, often offering a unique perspective on design problems and thus adding value to the design team. Finally, effective EIA co-ordinators need to be assertive to ensure that the key information that has been gathered through the assessment is effectively used in project design. A number of co-ordinators described this as a willingness to constructively challenge the design process and developer to enable environmentally sound development that is more likely to gain consent without delays.

Box 6.6.B provides an example of what can be achieved through effective EIA co-ordination, setting out the Environment Agency's approach to co-ordination that has helped generate over £15million of savings to flood risk management projects in England & Wales over the past 6 years. However, despite such examples, IEMA's research has found that the essential role played by the EIA co-ordinator is not recognised as often as it should be and in numerous cases EIAs are managed by general project managers who have little to no experience of EIA before taking up the role.

Whilst a compliant and robust ES can be produced through this approach, the added value that is generated by an experienced EIA co-ordinator is highly unlikely to be achieved. In order to improve UK EIA practice in both the short- and long-term there is a need for developers across all sectors to recognise the benefits of effective EIA co-ordination and demand such individuals are at the helm of every assessment they commission.

Box 6.6.A: The value added to a project by an effective EIA Co-ordinator

EIA Activity	Added value of effective EIA Co-ordination
Scoping	An overview of both the development and its environmental sensitivities provide the ability to negotiate an appropriate scope that delivers a focussed assessment saving time, costs and resources.
Iterative Design	The nexus between environmental and design professionals bringing them together to manage programme delivery and risks to this by generating pragmatic solutions that work for the development, environment and the community.
Engagement	Knowledge of the environmental issues related to the proposal, its design and an understanding of issues of concern to local communities, combined with effective communication skills, provides an effective leader for community and stakeholder engagement.
Baseline	The co-ordination role provides unique opportunities to ensure that the environmental specialists do not duplicate effort and that any information gaps are quickly and efficiently filled, whilst ensuring that design decisions are communicated to these specialists and their advice is returned in a timely manner.
Significance	The ability to ensure that effects are identified efficiently and that the processes used to evaluate their significance provide consistent results that make the EIA's findings combine to provide effective information for both the consenting authority and stakeholders alike.
Cumulative Effects	The ability to see across the proposal's environmental issues and the wider environmental trends in the surrounding area to create appropriate linkages between issues that can be fed back to help develop a more coherent design solution.
Mitigation and Enhancement	The knowledge and experience to efficiently avoid and manage anticipated environmental effects combined with an innovative knack for innovation that allows the delivery of pragmatic and cost effective solutions to complex inter-related issues.
The Environmental Statement	The document's director and editor in chief setting its tone and managing the various inputs. The deliverer of a consistent whole providing proportionate levels of environmental information based on an issue's significance to the proposal set out in the application for consent.
Summary	An EIA co-ordinator contributes to the effective delivery of the development by managing and reducing environmental and community risk in the programme, increasing quality of the proposal and managing down the costs of EIA for all parties.

Box 6.6.B: Example of the savings that can be generated by effective EIA Co-ordination

The National Environmental Assessment Service (NEAS) is a department within the Environment Agency that manages the environmental assessments (SEA and EIA) of the Agency's internal plans and projects. They are trained environmental assessment practitioners, also qualified in project management and public engagement, who work to maximise the environmental benefits of the Agency's projects, not just to minimise negative impacts.

As a public body, it is important that the Service is financially accountable and demonstrates its value. Two tools used to do this are the Environmental Value Register (EVR) and the savings register. The EVR records the environmental outcomes that are delivered by a project. It is completed at three stages: appraisal (what is identified as feasible), detailed design (what is included in the submission) and post-construction (what is actually implemented). In this way, the EVR measures which environmental outcomes are actually delivered in practice and the reasons for non-delivery. The information is also used to inform mitigation and future environmental design activities.

The savings register measures two types of financial savings. Costs avoided are those which result from a changed course of action that prevents money from being spent, for example finding a better way of tackling a problem that costs less but delivers more. Undertaking archaeological screening alongside ground investigations, for example, provides an early insight which can help avoid extensive and costly archaeological trial pits and watching briefs. Cash released includes savings achieved against budgets already in place using value management techniques, for example reusing waste on site, resulting in less being spent on disposal costs where these were originally planned for. The data from this spreadsheet is used to report back to Defra on how the Environment Agency (and NEAS) contributes to cutting costs and working more effectively.

NEAS EIA Coordinators must be skilled communicators, extracting key information from one specialist and translating this into an understandable language for another, at the right time in the process. They are, in summary, critical risk managers, anticipating and reducing risks to time, cost, quality and programme to deliver integrated processes and sustainable schemes.

Financial Savings:

Year	Annual financial savings
2005/06	£2,015,000
2006/07	£1,907,000
2007/08	£1,774,500
2008/09	£2,644,500
2009/10	£3,441,000
2010/11	£4,185,000

Total savings generated for the Environment Agency through the effective co-ordination of environmental assessment by NEAS between April 2005 and March 2010 amount to £15,967,000. (Jo Murphy, National Environmental Assessment Service (NEAS-Environment Agency))

Note: A presentation about this case study was presented at IEMA's EIA workshop (leads July 2010) and can be accessed via the reports online appendices.

6.7 CHAPTER CONCLUSIONS

- **Baseline:** Effective communications between an EIA co-ordinator and the environmental topic specialists are essential if baseline data is to be proportionate to the assessment. Increasingly practitioners must determine whether previously collected data is still useable or future scenarios of the baseline is appropriate, in such circumstances decisions must be project specific and should involve pragmatic discussions with both the consenting body and relevant stakeholders.
- **Alternatives & iterative design:** It is clear that EIA is having a strong and increasing influence on project design helping to avoid negative environmental impacts and build mitigation measures directly into the development proposal. However, current approaches to reporting this information in the ES do not appear to be effective. Where EIA has positively influenced a proposed development's design the ES should reflect this in a clear and transparent manner to allow stakeholders to understand how the concerns they raised during pre-application consultation have been addressed.
- **Significance:** Effective EIA practice ensures that the methods used to evaluate significance can be readily understood by those reading the ES. An over-arching approach to the discussion of significance across all the topic specific assessments can be a useful tool to achieve this; however, the key is to ensure that where different methodologies are used they are clearly justified and explained in a simple manner. EIA practice must avoid confusing those reading the EIA's findings and as such phrases like 'significant in EIA terms' should be avoided.
- **Cumulative effects:** EIA includes the requirement to identify not only the project's direct effects, but also a range of secondary effects including cumulative, synergistic and inter-relationship effects. Practitioners must ensure they consider both intra-project and inter-project cumulative effects. The use of new techniques, such as ecosystem goods and services, may provide enhanced methods to consider such effects, but it is clear that work is needed to improve practitioner knowledge of these techniques. To this end IEMA will produce a briefing note on Ecosystem Services & EIA.
- **Mitigation:** The use of a mitigation hierarchy by practitioners with the aim of avoiding negative impacts in the first instance, followed by the need to reduce or even compensate for such impacts is now fully embedded in EIA practice. However, issues now arise as to what constitutes mitigation, as a result of EIA's increasing influence in the iterative design process of developments. Three categories of mitigation are identified:
 1. Actions undertaken by the EIA that influence the design stage;
 2. Standard construction practices for avoiding and minimising environmental effects; and
 3. Specified follow-up action to be implemented post-consent.

In the case of the latter it is advisable to involve site contractors in their development to ensure the actions are understood and implemented by those responsible for their delivery.

- **Enhancement:** The research has identified that the inclusion of environmental enhancements to increase a development's positive impacts are still much less common than actions to mitigate predicted negative effects. However, with the increasing emphasis on local community involvement in the UK's development consent regimes future EIA practice will need to give greater consideration of opportunities to provide environmental and community enhancements. Developers are increasingly recognising the clear reputational benefits that can be gained from identifying and delivering positive environmental impacts through their developments and the potential influence this can have in generating support for their proposals.
- **The EIA co-ordinator:** An EIA co-ordinator is the individual responsible for delivering an effective, efficient and proportionate assessment of the proposed development. Therefore getting a high quality EIA co-ordinator is one of the most important decisions in commissioning an EIA. Effective EIA co-ordination delivers:
 - Increasing quality of the EIA and overall design processes;
 - Opportunities for environmental enhancements and mitigation; and
 - Efficiencies, costs savings and reduced risks to delivery.

There is a need for greater recognition, amongst developers who commission EIAs, that the EIA co-ordinator's role is a specialist activity and that contracting a suitable co-ordinator is not only a justifiable project expense, but also likely to pay dividends through the added value it brings to both the EIA and project design processes.

7. EIA OUTPUTS AND OUTCOMES

Chapters 5 and 6 have shown how EIA practice adds substantial value to the pre-application process through enhanced consideration of the environment in design and by allowing stakeholder concerns to be recognised and acted upon. This process must be effectively reported if the environmental information generated by the EIA is to influence decision-making process through the output of the assessment - the Environmental Statement. A greater challenge in terms of determining EIA effectiveness is whether the environmental outcomes resulting from a development, that gains consent, are found to be acceptable. The way the EIA process prepares environmental information so that it can be used effectively throughout all stages (consenting, post-consent, construction and operation) is as important to delivering an environmentally-sound development as each of the activities set out in the previous chapters of this Report.

This Chapter considers the current state of practice in relation to the production of an effective Environmental Statement and how this output has the ability to take a broader role in delivering efficiencies in the application process. The Chapter concludes by discussing how practice ensures that post-consent environmental mitigation, enhancement and monitoring activities, identified during the assessment, is delivered post-consent.

7.1 PRODUCING AN EFFECTIVE ENVIRONMENTAL STATEMENT

Effectiveness can be defined in many ways. Two key elements are the appropriateness of content and the length of the report, as this significantly affects the environmental information's usefulness, readability and potential to influence. IEMA has undertaken an analysis of 100 UK ESs completed during 2010 and found that on average they include more than nine topic specific assessment chapters. The most common of which - ecology, noise, landscape, transport and water (including flood risk) - were found to occur in over 85% of the documents reviewed, see Table 5.2.

Section 5.2 discussed how ineffective scoping can impact on the EIA co-ordinator's ability to effectively manage the length of the ES. However, identifying the appropriate scope of an EIA is not the only way to produce an effective ES. The breadth of topics covered will clearly have a bearing on document length, but other decisions also have a significant influence on the length of the document produced.

IEMA's research has found that the main text of many ESs is over 350 pages long, with those being submitted to the Infrastructure Planning Commission in relation to nationally significant infrastructure projects (NSIPs) often being nearer to double that figure. Alongside assessment chapters, there are generally a minimum of four initial chapters that introduce the report; describe the development; describe the proposed site; and set out the EIA's methodology, scope and any alternatives considered. In addition to the main text, many ESs include a separate volume for Figures and another containing its Appendices. Finally the majority of EIAs now comply with good practice and produce a separate Non-Technical Summary of the EIA's findings, discussed further in section 7.3.

A question that was often raised during IEMA's research was whether such long ESs add value to the consenting process or whether their length has begun to reduce their influence on the decision-making process. The 2008 Killian Pretty Review suggested that ESs might be limited to no more than 100 pages, although it went on to simply conclude that *"a far more proportionate approach to information requirements is needed"*.

As such, there is a need to understand what an effective ES might look like and how this compares to the content of a typical UK document. Clearly an effective ES will need to meet certain regulatory requirements, set out in Schedule 4 of the EIA Regulations. However, these requirements do not prescribe how they must be achieved nor are the requirements so complex so as to dictate the need for an onerous response. Beyond this, an effective ES should set out the context of the assessment and its influence on the design process and provide a concise explanation of each topic's assessment, covering: baseline, assessment findings, significant effects and mitigation. Current practice regularly expands the content of the ES to satisfy the expectations of the many audiences the document must cater for, rather than to meet regulatory requirements.

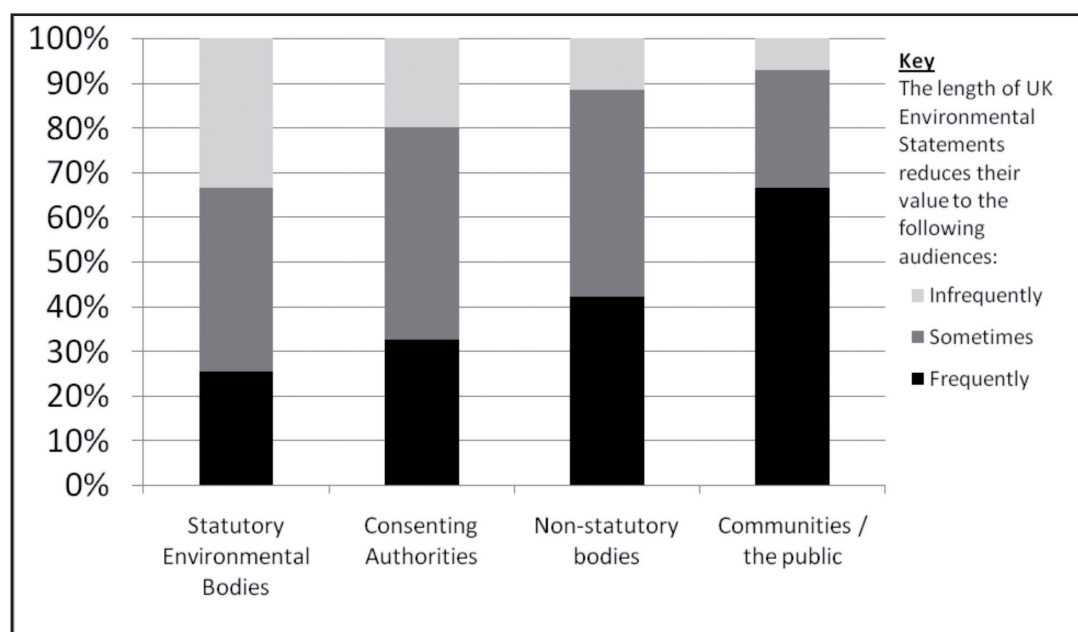
Environmental Statements have multiple audiences (see Box 7.1.A) who regularly request that additional content be included in the document to satisfy their expectations. The cumulative effect of over 20 years of such requests has resulted in a presumption in favour of automatically including this additional content, irrespective of the scoping activity. Alongside this the increasingly risk averse approach taken by many of the parties involved in EIA has generated a 'just in case' culture to assessment, section 5.2. As a result the 'core' of the ES has become substantially extended.

Box 7.1.A: The different audiences that an Environmental Statement must satisfy

Audience	Needs
Consenting authority	Environmental information that is relevant, necessary and material to the decision.
Statutory environmental bodies	Clarity that the consultee's environmental responsibilities (often linked to wider statutory or policy requirements) have been adequately considered in the assessment. Potentially also looking to achieve their wider objectives through development.
Non-statutory bodies	Clarity that the environmental issues they are interested in, often of a more localised or specialist nature, have been effectively addressed.
Communities / the public	A clear understanding of the implications of development on the environment and community. Potential resolution of existing local issues that may not be of direct relevance to the proposed development.
Developer	A robust document that will enhance the chance of gaining development consent and avoid delays in the decision-making process.
Legal advisers	A document that will provide comprehensive and robust evidence should the development end up at public inquiry.

IEMA's research has found that many practitioners are frustrated with the length of ES and have concerns about the value these documents give to consenting authorities, let alone wider groups such as the public. IEMA's online survey set out a series of questions on whether the current length of ESs reduces their value to their four main audiences, see Box 7.1.B. The findings indicate that over 90% of respondents consider that the current length of ESs reduces the value of the assessment's findings to communities groups and the public. Respondents indicate that this situation is somewhat better in relation to more technical audiences; however, 80% recognise that the length of ESs sometimes reduces the value of the environmental information they contain to consenting authorities, with just over a third indicating this is a frequent occurrence.

Box 7.1.B: Practitioner views on how the length of Environmental Statements reduce the value of the information they contain to different target audiences



A typical ES may therefore be failing to meet the needs of its main audiences and instead more closely resemble a robust submission of evidence document for a potential public inquiry. It is possible that, as a result of failing to effectively and efficiently convey the findings of the EIA, the development may be considered to have more significant environmental effects than is actually the case, increasing the chance of the consent being decided at inquiry.

It is clear that practitioners often feel they do not have sufficient time to write a concise ES. A number of practitioners indicated that they only view the Non-Technical Summary (section 7.3) as being aimed at a public audience, rather than the ES itself. Whilst the number of practitioners who hold this view appears to be limited, it is a worrying sign given that under the majority of the UK's EIA regulations, consultation on the application and its ES is the only formal opportunity for the public to express their views on the proposed development. As such, the accessibility and readability of the ES to readers who are not experienced environmental professionals should clearly be considered when writing the document. In current EIA practice it would appear that thoughts behind the Blaise Pascal quote - *"I have made this one longer only because I have not had the leisure of making it shorter"* - are equally relevant to the writing of current ESs.

7.2 DELIVERING MORE COHERENT APPLICATIONS THROUGH EIA

There have been numerous calls from stakeholders involved in consenting development for approaches that help streamline the application process. One idea that has been raised is to develop a single 'integrated assessment' that would enable developers to present the findings of the assessment of all issues relevant to a proposal in a single document. Such an approach would considerably reduce the large number of separate documents that often accompany applications. This approach would also align with Government expectations for an efficient consent process that both facilitates development (within environmental limits) and enables community involvement in decision-making.

EIA has a "wide scope and broad purpose"⁴⁷ and has through nearly 25 years of practice in the UK proved that it is capable of assessing beyond core environmental issues to include the social and economic effects of development. It is therefore surprising that there has not been greater recognition that where EIA is required for development, the assessment is more than capable of taking on the role of an integrated assessment that houses the many other assessments either required by specific regulations or expected to ensure compliance with central and local Government policies.

In many of the UK's current development consent regimes there is considerable duplication of information between the ES and other documents submitted alongside the application. A good example of this inefficiency can be seen in one of the UK's newest consent regime, which was specifically designed to operate in a streamlined manner: applications for Nationally Significant Infrastructure Projects via the Infrastructure Planning Commission. A number of the first few applications accepted by the Commission included an ES. However, these submissions also included several additional stand-alone reports, addressing the predicted effects of the development on: flood risk, sustainability, health, transport, carbon emissions, historic environment, landscape, waste and natural features. All of these issues had already been addressed through their inclusion within the ES and are often addressed in EIA practice, see Table 5.2.

IEMA recognises the need for other specific assessments to be undertaken to meet legislative, regulatory or policy requirements, for example a Habitats Regulation or Water Framework Directive assessments. However, identifying assessment needs is an activity that is undertaken at the early stages of the consent process, when the EIA process is being scoped. By incorporating such wider assessment requirements or expectations into the EIA at this early stage, the ES can be effectively designed to legally provide the specific information required to meet the information needs of both decision-makers and stakeholders under a single cover.

However, the trend in practice appears to be moving in the opposite direction to this with numerous topic specific assessments, some of which have no statutory basis, removing crucial information from the ES to present it in a separate topic specific report. IEMA has recently seen cases where the assessment of landscape, waste and consideration of alternatives have all failed to appear in the ES, but have instead been presented in separate documents. These wider documents include Design and Access Statements, landscape strategies or sustainability statements. This approach raises considerable concern not only because it can undermine the purpose and effectiveness of EIA, but also because it carries significant risks for the developer.

The most significant risk is that the development consent may be put at risk by a failure to comply with the EIA Regulations. A court case in 2000 (*Berkeley v SSETR*⁴⁸) found that the ES must be presented as a coherent document to avoid the process of identifying the environmental information required by the Regulations becoming a 'paperchase'. In the case in question the development consent was quashed due to the inadequacy of the ES. Further to this, there are clear risks of delays and increased costs. IEMA has seen a number of examples where consenting authorities have used their further information request powers to ensure that environmental topics set out in their scoping opinion are present in the ES, rather than be presented as a separate report. There can also be risks to the quality of the assessment's findings if they are not managed through the EIA process and presented in a comparable manner. Finally, by splitting up the assessment of topics and presenting them outside the ES, cumulative effects can be missed and the added value generated through effective EIA co-ordination can be lost.

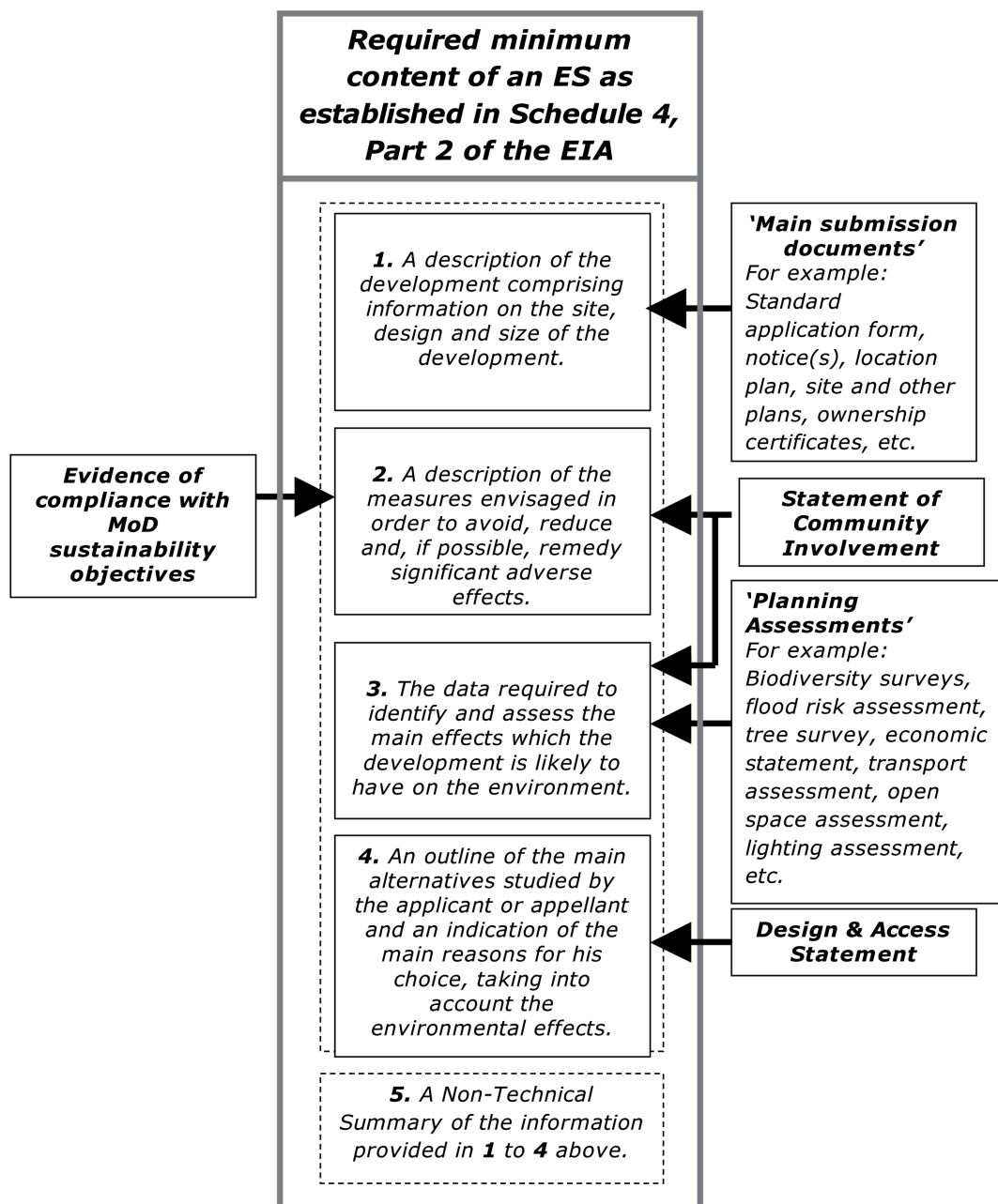
47. Case C-72/95 *Kraaijeveld* (ECJ, 1996) – see Box 3.2.A

48. Lord Hoffman said, "the point about the environmental statement contemplated by the Directive is that it constitutes a single and accessible compilation, produced by the applicant at the very start of the application process, of the relevant environmental information and the summary in non-technical language."

As such, the risk associated with splitting up an EIA's findings, combined with the aim for efficient documentation which adds value to both the design and decision-making processes, provides a compelling case for the ES to be the home for information relevant to the application.

The Environmental Planning Team in Defence Infrastructure Organisation, part of the Ministry of Defence, are already considering a holistic approach to their ESs to meet both the raft of information required in relation to a planning application and the information needed to demonstrate compliance with the MOD sustainability objectives. Their diagram shown in Appendix X is a work in process and provides a generic list of planning validation documents which can then be adapted to meet individual planning authority's requirements for specific projects. The diagram is intended for use by project managers, planning authorities, statutory and other consultees to help understanding of the interrelationships between the different information required, to ensure consistency and to reduce duplication. The Defence Infrastructure Organisation's Environmental Planning Team considers that the Planning Statement itself should not form part of the ES. Their approach recognises that whilst there will be some duplication between its content and the policy context discussed in the ES, there is a need for a single ` policy document in the same way the ES provides a single focussed assessment document. Figure 7.2 provides a simplified flow diagram showing how each piece of information needed to meet these wider requirements could fit within the ES.

Figure 7.2: An approach to integrating the majority of documents associated with a planning application within the Environmental Statement ⁴⁹



49. Adapted from an original MoD flow diagram – original diagram available as Appendix 3 of this report, via: www.iema.net/eiareport

7.3 THE NON-TECHNICAL SUMMARY

A requirement of the EIA Regulations is that the ES contains a Non-Technical Summary (NTS). This document must contain a summary of the information in the ES that makes up its statutory content (see items 1 to 4 in Box 7.2). The document is designed to provide anyone with an interest in the proposed development with an accessible, concise and transparent version of the assessment's findings, in language that people not regularly involved in the process can understand.

IEMA's research has found that it is now common practice to provide the NTS under a separate cover, as part of the ES documentation. The development of this approach, combined with the move to make application documents available online, has significantly increased public access to EIA findings. Beyond this, discussion at IEMA's workshops indicated that it is considered good practice to provide a clear link in the document to where the reader can access the full ES. Such information should include information about where and when hardcopies of the ESs are available and a web-address, if available, where the public can access the ES free of charge.

Whilst accessibility has improved, IEMA's research has found that NTSs are rarely concise documents when compared to other documents the public and local communities would usually access. IEMA's experience of reviewing EIA documentation indicates that the length of such summary documents appears to have increased in recent years. It is now common to see NTSs that are over 20 pages in length and there are examples from 2010 that run to more than 60 pages. This trend undoubtedly mirrors the increase in the length of ESs (see above). However, discussions with practitioners indicate that the growth in the length of ESs need not extend the length of a NTS, which should present the assessment's key findings and ensure it provides concise coverage of the statutory requirements.

Some practitioners have indicated that a small proportion of developers view the NTS as an opportunity to undertake a form of PR about the proposed development with the local community. In such circumstances the NTS can be written by people who have not been involved in the EIA process and have limited environmental knowledge. Where collaborative work is undertaken between the EIA co-ordinator and communications specialists to ensure the NTS sets out the EIA's findings in language that is accessible to a wide audience then the results are often of high quality. However, where there is limited, or no, contact with the EIA co-ordinator there are risks that the NTS could fail to accurately portray the EIA's findings. During the workshops practitioners gave examples of cases where the wording in the NTS appeared to airbrush the significance of negative effects and focus on, or even, over emphasise anticipated positive environmental outcomes. From IEMA's experience of reviewing ESs the reader's trust of the whole document can be put at risk through a lack of objectivity in the language and emphasis set out in its NTS.

Based on the workshops, practitioners believe that the best way to improve NTSs in the future is to explore more effective methods for presenting the EIA's findings in a concise manner. IEMA has gathered a number of examples from practice that show how the effective use of diagrams and annotated maps or photographs can effectively convey information in a non-technical manner. Such approaches present an opportunity to reduce the length of documents, whilst at the same time increasing their readability and interest to a public audience.

The role that NTSs can play as a tool to attract local communities and wider members of the public to engage in the decision-making process is an area that needs to be explored further. This will become increasingly important given the role communities are expected to play in future decision-making. As such, there is a need to make these documents more accessible to the public, who often have limited time available to engage in consultation processes and consenting regimes. As a result of this research and a clear desire from UK EIA practitioners to increase the number of people reading the findings of an EIA, IEMA plans to develop and launch a short document setting out principles for developing an effective EIA NTS by the middle of 2011. Further to this IEMA's new EIA Quality Mark has allowed the Institute to make a growing library of over 350 NTS available to members online via www.iema.net/qmark/nts.

7.4 ENVIRONMENTAL MANAGEMENT PLANS

An Environmental Management Plan (EMP) is a document that sets out the actions that are needed to manage environmental and community effects associated with the construction and operation of a development. Such documents clearly set out the action needed, when it should occur and who is responsible for its delivery. Whilst not required by the EIA Regulations, an EMP has proved itself to be the most effective way of carrying the management of environmental impacts from the pre-application process into the implementation phase of a development. In late 2008, IEMA produced guidance on how to develop and implement an effective EMP⁵⁰.

This guidance document has been taken up in UK EIA practice and increasingly draft EMPs are being included in ESs; summarising the mitigation, compensation, monitoring and enhancement measures required to effectively manage the predicted environmental effects of the development if it gains development consent. Box 7.4.C sets out how the EMP forms a bridge between the EIA process prior to consent being awarded and Environmental Management Systems either operated by construction contractors or that will be implemented once the development is operational.

The building blocks for developing a successful EMP and the key benefits are set out in Boxes 7.4.A and 7.4.B respectively. However, IEMA's research workshops highlighted that engaging the principal contractor during the EIA process and drafting of the EMP is the most crucial action that needs to be undertaken if an EMP is to be successful. Such plans are therefore most often effective when the delivery of the actions is built into contractual agreements and where there is a clear indication of who has overall responsibility for the EMP onsite. Furthermore, practitioners have indicated the need for an effective change management process that allows actions set out in the plan to be modified in order to remain relevant to changes that occur post-consent. This flexibility in the management of environmental actions post-consent is a key component of the adaptive management approach to mitigation and enhancement, as discussed in section 6.5. IEMA's EIA survey found that 77.9% of respondents agreed that a draft EMP should be required within the ES, with only 7.4% disagreeing with this concept. Whilst it is currently unclear whether the revised EIA Directive, section 8.1, will take a more proactive approach to enshrining adaptive management concepts such as EMPs in the European EIA regime, it would appear likely that their use in UK practice will become increasingly common in the future.

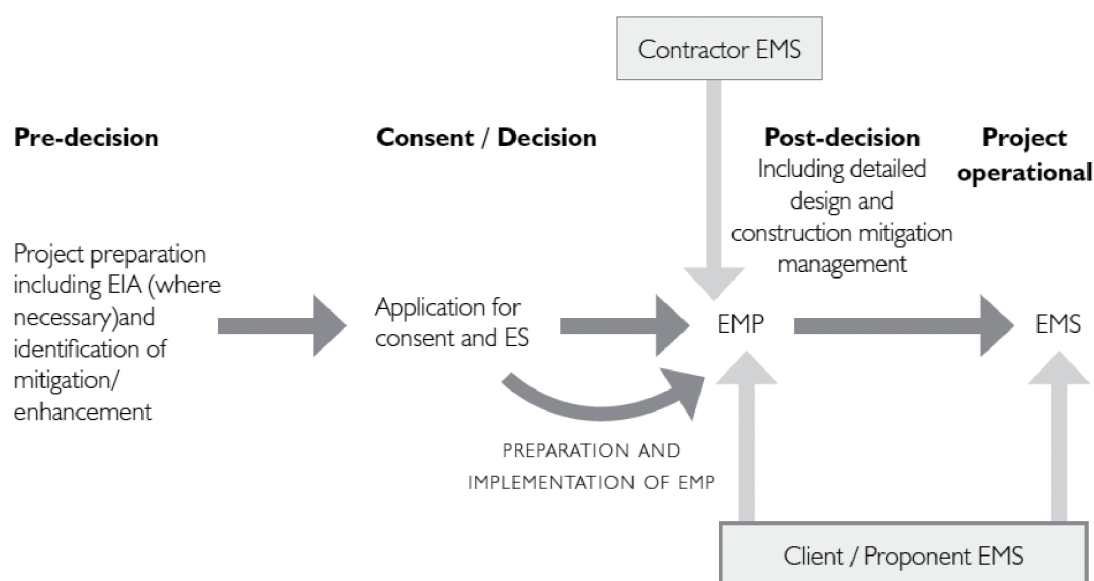
Box 7.4.A: The building blocks for developing a successful EMP

1. Involvement of the proponent, construction teams and contractors during the formulation of mitigation when planning the development to ensure:
 - The mitigation is deliverable;
 - Costs of mitigation actions are factored into the detailed design stage, whilst the construction budget is still being developed; and
 - There is buy-in and commitment when developing mitigation at the EIA stage, to increase likelihood of effective implementation.
2. Involvement of competent environmental professionals in the design and specification of mitigation actions to ensure
 - That the requirements are very clear; and
 - To improve the chances of successful delivery.
3. Ensuring mitigation measures identified whilst planning the development have been formulated with the involvement of relevant stakeholders, or a clear timetable and process for further consultation post-consent is set out (where mitigation requires more detailed design post-consent);
4. Clearly identified and sufficiently detailed mitigation measures in the pre-consent phase (a framework or draft EMP prepared alongside an ES is helpful as it can set out additional detail in preparation for a full EMP);
5. Ensuring mitigation proposals are identifiable in documents accompanying the application for development consent;
6. Ensuring mitigation measures are presented as elements that the proponent would be willing to have included in the final consenting documentation.

50. Environmental Management Plans – Practitioner Best Practice Series: Volume 12 (IEMA, 2008)

Box 7.4.B: Five benefits of preparing an Environmental Management Plan ⁵¹

1. Creates a framework for ensuring and demonstrating conformance with legislative requirements, conditions and mitigation set out in ESs.
2. Provide a continuous link or 'bridge' between the design phase of a project and the construction, and possibly operational, phase.
3. Ensures an effective communication or feedback system is in place between the operators onsite, the contractor, the environmental manager (or consultant) and ultimately the regulator;
4. Preparing a draft EMP at an early stage demonstrates commitment to mitigation and can help reduce delays post-consent by showing how consultees and consenting authority concerns will be addressed; and
5. Drives cost savings through improved environmental risk management.

Box 7.4.C: The link between EIA, Environmental Management Plans (EMP) and Environmental Management Systems (EMS)⁵²

51. Adapted from: Environmental Management Plans – Practitioner Best Practice Series: Volume 12 (IEMA, 2008)

52. Adapted from Marshall et al (2003) – as presented in Environmental Management Plans – Practitioner Best Practice Series: Volume 12 (IEMA, 2008)

7.5 MONITORING ENVIRONMENTAL EFFECTS

The EIA Regulations do not provide any clear requirements in relation to monitoring either the assessments predicted effects or the implementation of mitigation and enhancement measures. However, it is widely recognised that an effective EIA system must involve some form of monitoring both on an individual project basis, to assess the actual environmental outcomes that result from a development, and on a wider basis to provide a check on the quality of the predictions made within such assessments.

However, in addition to a lack of regulatory requirements, there are several challenges associated with the practicality, responsibility and potentially high costs of implementing an on-going environmental monitoring programme. There are some forms of development, such as energy from waste plants, which are required to monitor emissions to air and water during their operational phase; however, these activities are linked to requirements under environmental permitting regimes. As such the regular application of bespoke monitoring programmes undertaken directly as a result of the EIA process is not a common feature of EIA practice in the UK.

Environmental monitoring was not a regular topic of discussion during IEMA's research workshops and where it was discussed practitioners recognised that practice was unlikely to develop further in the area without some form of regulatory requirement. IEMA's online survey showed that 82% of respondents would like to see regulatory monitoring requirements strengthened as part of the European Commission's on-going review of the EIA Directive. The aim of such monitoring would not only help prove the effectiveness of the EIA's findings, but also allow additional action to be taken if negative effects were found to be greater than predicted, or if mitigatory or compensatory measure were either found to be ineffective or simply not implemented.

It appears that currently EIA practice has accepted that post-consent environmental monitoring is likely to remain limited in the short-term and, as such, practitioners focus on developing mitigation measures that are likely to be conditioned, implemented and effective, rather than monitorable. EMPs may provide some opportunity to check on the proportion of mitigation and enhancement measures identified by the EIA process that are actually delivered during the construction and operation of the project. Further to this, many businesses are now aiming to highlight that they act in an environmentally responsible manner and, as such, monitoring and reporting on the implementation and actions within EMPs may be set to increase. Such action could act as an effective means of showing how a business delivers environmentally sound development.

Another development that is providing the opportunity for enhanced environmental monitoring activity is the application of EIA to multi-staged consents. In such circumstances the EIA process may be initiated at the outline planning application stage, but need to be revisited again when consent for reserved matters is sought. In such circumstances there are clear efficiencies to be gained from the developer undertaking environmental monitoring after outline consent has been gained in order to supply effective baseline data to inform the assessment of the reserved matters' environmental effects.

Finally, practitioners highlighted a number of examples where they are commissioned to undertake the delivery of environmental compensation and its on-going management for a period of 5 or even 10 years after the development has gained consent. In such circumstances there is an opportunity to increase understanding of the success of environmental actions. Practitioners have already identified that by continuing to engage a management panel, made up of different stakeholder groups, including local authorities and non-governmental organisations, the on-going delivery of such environmental management actions is improved. Such panels can help identify how actions can be maintained after the initial funding provided by the developer runs out. It is clear that there is a need to share further examples of effective environmental monitoring practices to enable this area of practice to continue to develop, despite the lack of strong regulatory drivers.

7.6 CHAPTER CONCLUSIONS

- Effective Environmental Statements:** An effective Environmental Statement (ES) is one whose content is appropriate to the proposed development and whose length is no longer than that needed to provide the decision-maker and stakeholders with the EIA's findings. ES have many audiences and satisfying their competing demands can prove difficult; however, IEMA's research has found that EIA practitioners recognise the fact that generally the length of a typical UK ES acts to reduce the value of the EIA's findings it contains to the majority of audiences. It is clear that action is needed by EIA practitioners and all those involved in practice to begin to produce more proportionate ES that provide clear and focussed information.
- Delivering coherent applications:** Applying for a development has become increasingly complex over the past 25 years with the need to complete numerous assessments either as a result of regulatory requirements, national / local policy indications or expectations set out in guidance. As a result there are increasingly calls for a tool that can be used to provide an effective single 'integrated assessment'. However, EIA already provides this opportunity as the scope of issues that can be considered in an assessment is not limited by the Directive or UK Regulations; as such community issues and even socio-economic effects can, and regularly are, included in ES. Developers and consenting authorities alike must recognise the potential the ES offers to provide a single and proportionate integrated document setting out all the significant positive and negative impacts related to a development proposal.
- Non-Technical Summary (NTS):** Providing a NTS under a separate cover from the main ES has now become standard practice in the UK, allowing wider access to the EIA's findings. However, whilst accessibility has improved other issues have appeared including: documents becoming overly long - regularly exceeding 20 pages in length; and the use of the NTS as a form of public relations for the proposed development rather than accurately presenting the EIA's findings. For NTS to remain effective and credible communication tools EIA co-ordinators must be directly involved in the writing process and more widely practitioners must continue to explore developing effective methods of presenting the assessment findings to engage communities.
- Environmental Management Plans (EMP):** An EMP is a document that sets out the mitigation, compensation and enhancements actions identified by the EIA in a manner that allows them to be readily implemented during the construction and operation of a development. The research has found that engaging a site contractor to help develop such actions that make up the content of the EMP is a key factor in the successful implementation of an EMP in practice. The inclusion of a draft EMP within ES is becoming increasingly common and IEMA's study has found that nearly 80% of UK EIA practitioners would support making this a mandatory requirement within the revised EIA Directive.
- Monitoring:** IEMA's research has identified that EIA practitioners would like to see the EIA Directive strengthened to include more emphasis on monitoring the actual environmental effects that result from a development that underwent EIA. However, there are other mechanisms that are beginning to deliver more effective monitoring in practice, although these are yet to become standard practice. They include: recognition amongst developers that the environmental effects of their developments increasingly influence their corporate reputation; and the commissioning of environmental professionals to monitor and manage the implementation and maintenance of environmental compensation and enhancement measures for a number of years after a new development is constructed.

8. THE BASIS OF FUTURE EIA

This Chapter looks at future developments in the EIA process in relation to changes to the EIA Directive, the UK Regulations and in terms of potential areas of future legal challenge. All such developments will clearly have an influence on how UK EIA practice develops in the future. However, practitioners and others involved in the process should recognise that such developments are only part of the story and that by focussing on how EIA practice develops they can have considerably more influence on the value it adds to decision-making in the UK. IEMA's vision of how practitioners can take the lead in developing EIA practice is set out in Chapter 9.

8.1 THE EIA DIRECTIVE

In 2011, the Commission launched the process with a view to consolidating the original EIA Directive (85/337/EEC) and its three amendments into a single new EIA Directive. This process, known as codification, will result into a 'new EIA Directive' and is expected to be concluded in autumn 2011. However, this will simply be a procedural change designed to simplify implementation and interpretation of the four texts that set out the Directive's requirements (e.g. the process involves the verification of the different linguistic versions of the EIA Directive). In terms of UK EIA practice the only likely impact will be the need to alter the way the EIA Directive is referenced in guidance and Environmental Statements, from the existing references to either 85/337/EEC, or 97/11/EC to the new Directive reference number 2011/??/EC (the number will be known later this year).

The European Commission's real work in reviewing the EIA Directive will take longer to be realised, with their current activity focussed on undertaking an Impact Assessment that will explore the potential costs and benefits of different approaches to amendment or replacement. This work follows on from the Commission's official review of the EIA Directive's performance (COM (2009)378)⁵³ and views on this report from the Committee of the Regions⁵⁴. The Commission provided opportunities for Member States and their citizens, through public consultation, to help shape the options that will be considered in their impact assessment work. The consultation involved running an online survey during summer 2010, meetings with Government officials from Member States, and was brought to a close with a 2 day conference on the EIA Directive in Belgium on 18th & 19th November 2010.

At this conference the Commission provided early insight into their initial thinking on the future direction the EIA Directive may take. European Commissioner for the Environment, Janez Potočnik, identifying three principles that will guide any changes to the EIA Directive:

1. The current level of environmental protection provided by the EIA Directive must not be weakened.
2. The main weakness of the Directive is that it is too procedural and must begin to include greater focus on quality.
3. There is a need to look for opportunities for streamlining both between EIA and other required assessments and within the EIA Directive, in particular there must be a focus on developing more coherent approaches to screening between Member States.

However, beyond these broad principles it is understood that the Commission does not, as yet, have any particular favoured approach to the EIA Directive's future direction. As such, there is a need to continue to monitor the Commission's activity and any proposals that arise to ensure the views of UK EIA practitioners are well represented. IEMA will continue to do this through its contacts with: DCLG, who lead the UK Government's input into the process; the devolved administrations, which provide their own input; and directly with its EIA contacts in the European Commission.

53. See: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0378:FIN:EN:PDF>

54. Opinion of the Committee of the Regions on Improving the EIA and SEA Directives - <http://ec.europa.eu/environment/eia/pdf/cdr38-2010%20fin%20c.pdf>

IEMA has already undertaken a number of actions to ensure the views of UK EIA practitioners have been considered by the Commission in the initial stages of the Impact Assessment process. To this end a number of IEMA members were actively involved in discussions at the Commission's November 2010 EIA Conference in Belgium, including presenting a paper on non-regulatory approaches to improving quality in EIA practice. Further, the findings of IEMA's own online EIA survey, undertaken in developing this Report, have already been fed into the Commission's thinking⁵⁵. The 1,815 responses IEMA received to its own EIA survey are being used, alongside the 1,365 responses to the Commission's official public consultation, to help shape the initial step in the EIA Directive's review. The complete findings of IEMA's EIA survey are available as an online appendix to this Report; however, Box 8.1 sets out a summary of some of the key amendments UK EIA practitioners would like to see included in any future EIA Directive.

The European Commission's proposals for an improved EIA Directive will not be seen until at least 2012 with a new EIA Directive not expected to be agreed until 2014 at the earliest. Subsequently, Member States will be given a period, generally 2 years, to amend their own EIA regulations. As a result enhancement included in the future EIA Directive designed to improve the EIA process are unlikely to influence UK practice until 2017.

The European Commission's report on the application and effectiveness of the EIA Directive⁵⁶ identified that both climate change and biodiversity could be given greater consideration in the Directive's text and in its application via practice. As a result of this the Commission is both producing new guidance to enhance the consideration of these environmental issues and considering the wording of the Directive, as part of its wider review.

The guidance will be entitled: Practical guidance and recommendations for integrating climate change and biodiversity into EIA procedures, and is expected to be launched in October 2011. The guide will be accompanied by a sister document providing direction on the consideration of climate change and biodiversity in Strategic Environmental Assessment (SEA).⁵⁷

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

56. Section 3.5 of the report - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0378:FIN:EN:PDF>

57. Directive 2001/42/EC - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>

Box 8.1: Modifying the EIA Directive – IEMA's Perspective

IEMA's survey asked a number of questions regarding the changes that practitioners would like to see made to the EIA Directive. The results of the survey reveal that 93.8% of those offering a view would support measures being taken to improve the EIA process under the Directive. There is, however, a range of views held on exactly what should be done. 61% agree that the Directive should set common minimum thresholds for Annex 2 projects and 55% want to see the screening criteria in Annex 3 replaced with a more detailed checklist. Further to these modifications of the current directive, 82.3% of respondents wanted to see the introduction of a mechanism to ensure the quality of the environmental information supplied. There was also support for a broader reform to the way EIA interacts with other EU Directives and policies with 76.1% supporting further improvements in existing synergies.

The table below shows the results when respondents were asked which single option for modification of the Directive they supported, excluding those who offered no view. Three of the options represent modification measures to the Directive which as a generic option would form the most chosen option with 54.3% in favour. Clearly there are differences of opinion on the extent to which this modification should be with the most chosen option, both in terms of modification measures and overall, being for a more extensive modification of the Directive including changes to annexes and existing provisions as well as the introduction of further provisions on coordinating other environmental assessments

Percent	Supported Option	
3.5%	No change	
17.1%	The Annexes of the Directive should be updated and clarified	Modification Measures: 54.3%
10.7%	Both the annexes and the provisions of the Directives should be amended	
26.5%	Both the annexes and the provisions of the Directives should be amended along with the introduction of further provisions for the coordination of other environmental assessments required under other EC law	
7.8%	Replace Directive with Regulation	
22.2%	Repeal Directive and replace with a single Environmental Assessment Directive or Regulation covering all existing assessments under the EIA other Directives	
10.4%	Merge the EIA and SEA Directives	
1.8%	None of the above	

8.2 NEW EIA REGULATIONS FOR PLANNING APPLICATIONS

On 23rd February 2011 the Scottish Government laid new Town and Country Planning EIA Regulations before the Scottish Parliament. These regulations came into force on 1st June 2011 and, in relation to Scottish planning permission replacing the relevant parts of the 1999 EIA regulations, as amended. A similar process of update and consolidation is currently underway for the EIA regulations that relate to assessment in the English planning system. In this case Regulations, replacing SI 293/1999 and its subsequent amendments, are expected to be laid before Parliament in July 2011, coming into force shortly afterwards.

These two sets of regulations have provided the context for over 70% of the total number of EIA undertaken in the UK between 1999 and 2008; as such the amendments will need to be understood by the majority of people involved in UK EIA practice. However, the main changes contained in the new regulations focus on the implications of court rulings discussed in Section 4.6 of this Report. As such, whilst the new regulations will need to be widely disseminated and understood, they will have little substantive effect on the assessment process or EIA's outputs and outcomes, described in Chapters 6 and 7.

In respect of Wales and Northern Ireland there is a current need to update the regulations that control the application of EIA in the planning system, to ensure that they both incorporate the requirements of Directive 2009/35/EC and are in alignment with recent EIA court rulings. IEMA understands that the Welsh Assembly Government plans to consult on amendments to the EIA regulations over the summer, with an aim to adopt new regulations in the autumn. The timescales for amending the Northern Ireland's EIA regulations are less clear, but are anticipated to begin in Autumn 2011. Further, it is not known whether either the Welsh Assembly Government or the Northern Ireland Assembly will take a similar approach to England and Scotland and use this opportunity to replace previous regulations and amendments with a newly consolidated set of EIA Regulations.

Looking beyond the new planning EIA Regulations that will come into effect in 2011 there will clearly need to be future amendments as a result of new case law (e.g. Box 4.3). However, IEMA understands that there is little appetite within either DCLG or the Scottish Government to take a pro-active approach to further development of the EIA Regulations until the new EIA Directive, Section 8.1, is in place. As such any profound changes to the UK's EIA Regulations are unlikely to come into force before 2017.

8.3 FUTURE CASE LAW

It is not possible to predict the outcomes of on-going legal challenges related to EIA, nor is it appropriate to comment on the specifics of such cases in such a report. However, case law will undoubtedly continue to play an important role in shaping the way EIA is practiced in the future. To this end IEMA approached Stephen Tromans QC, a leading Environmental Lawyer and EIA expert, to provide his views on how developments in the field of environmental law and the outcome of recent EIA case law might well influence EIA practice in the years ahead. Box 8.3 sets out these potential areas of future challenge and acts to underline IEMA's view point that it is better to undertake a high quality EIA, in the first instance, rather than attempt to cut corners and run an increased risk of having the development consent challenged through the courts.

- The development of principles of access to the courts in order to challenge allegedly defective or deficient EIA procedures – particularly in the areas of standing to bring challenges, time limits for challenge, and costs⁵⁸.
- Also the important question of interim relief to prevent projects proceeding pending full hearing by the courts.
- Fulfilling the UK's obligations to secure full public participation in the EIA process, including the important obligation to ensure that the public are fully aware of their rights under the process.
- Continued development of the principles of how EIA applies to multi-staged consent processes under Wells, and the application of EIA to non-standard planning and other decision-making processes, such as phased development.
- Ensuring adequate breadth of environmental statements to comply fully with the requirements to assess indirect and cumulative effects of development, in particular, but not limited to, the areas of climate change and greenhouse gas emissions control and the disposal and management of other waste streams from projects.
- Making EIA work effectively and proportionately in the context of the new processes of localism in planning.
- Applying EIA to the area of marine planning and marine environmental protection.

Stephen Tromans QC, 39 Essex Street

58. On 6th April 2011 the European Commission indicated it was beginning proceedings to take the UK to the European Court of Justice over concerns related to the high costs of access to environmental justice, including EIA

8.4 THE EIA QUALITY MARK

In April 2011 IEMA launched the EIA Quality Mark (see Figure 8.4), establishing a new standard for organisations that co-ordinate EIA in the UK. The scheme allows consultancies and developers that regularly lead UK EIA to make a voluntary commitment to undertaking quality practice and producing effective Environmental Statements. IEMA is responsible for the operation of the scheme and monitoring each registrant's on-going compliance to its commitments (see Box 8.4).

IEMA has operated a corporate EIA register since its inception; however, the new EIA Quality Mark has reinvented the approach creating a scheme that places an emphasis on sharing, learning and improving EIA practice. The EIA Quality Mark looks at quality across an organisation's EIA activities including its management processes and approaches to the development of staff competence. The scheme is therefore designed to provide a regular and rigorous analysis of compliance reviewing both Environmental Statements and conducting staff interviews on an annual basis.

Figure 8.4: The EIA Quality Mark logo



The EIA Quality Mark scheme offers a real opportunity to enhance UK EIA by creating a strong community of practitioners who are working to maintain and improve standards as well as sharing examples and working together to enhance knowledge and produce innovative solutions in practice. The scheme will provide numerous benefits that will drive UK EIA practice forward both now and in the future. These benefits will be felt by consenting authorities, communities, wider stakeholders as well as developers and EIA practitioners.

The benefits offered by an organisation operating under the EIA Quality Mark include:

- **Increased Confidence** that the organisation undertaking the assessment will deliver an efficient and effective service rooted in their commitment to quality EIA.
- **Cost effectiveness** scheme registrants have access to resources including a library of hundreds of existing ES allowing them to keep up-to-date with the latest developments in EIA.
- **Credibility** in the eyes of consenting authorities, stakeholders and local communities as the assessment is led by an organisation that has volunteered to have its EIA activities regularly reviewed by IEMA.

Beyond this the EIA Quality Mark has been specifically designed to ensure it generates benefits for all those interested in improving UK EIA practice. This will include an increasing number of EIA related articles available to planners, consultants and communities; regular EIA events and webinars allowing practitioners to keep u-to-date with developments in practice. Further, the scheme means that IEMA will house a library of well over 700 ES available for loan to EIA Quality Mark registrants. The library will continue to grow with the most recent examples of UK ES as registrants submit their latest assessments.

This large ES library will allow IEMA, on its own or through partnerships with the UK's leading universities in the EIA field, to undertake research into current trends and developments in practice, which will feedback to registrants allowing practice to rapidly respond to issues that arise and to trail innovative solutions. A number of the benefits of the EIA Quality Mark will also be available to all IEMA's members, including:

- EIA briefings and guidance notes developed under the scheme – with a briefing on Ecosystem services & EIA and Principles on writing effective Non-Technical Summaries (NTS) expected to be launched in Autumn 2011; and
- An online library of NTS⁵⁹ created from the ES submitted by EIA Quality Mark registrants, which contains approximately a third of all ES submitted across the UK in 2010.

The EIA Quality Mark will be a key driver of improvements in UK EIA practice and will play an important role in delivering IEMA's vision for EIA practice, see Chapter 9.

59. www.iema.net/qmark/nts

Box 8.4: EIA Quality Mark Commitments

1. **EIA Management** – We commit to using effective project control and management processes to deliver quality in the EIA we co-ordinate and the Environmental Statements we produce.
2. **EIA Team Capabilities** – We commit to ensuring that all our EIA staff have the opportunity to undertake regular and relevant continuing professional development.
3. **EIA Regulatory Compliance** – We commit to delivering Environmental Statements that meet the requirements established within the appropriate UK EIA Regulations.
4. **EIA Context & Influence** – We commit to ensuring that all EIAs we co-ordinate are effectively scoped and that we will transparently indicate how the EIA process, and any consultation undertaken, influenced the development proposed and any alternatives considered.
5. **EIA Content** – We commit to undertaking assessments that include: a robust analysis of the relevant baseline; assessment and transparent evaluation of impact significance; and an effective description of measures designed to monitor and manage significant effects.
6. **EIA Presentation** – We commit to deliver Environmental Statements that set out environmental information in a transparent and understandable manner.
7. **Improving EIA practice** – We commit to enhance the profile of good quality EIA by working with IEMA to deliver a mutually agreed set of activities, on an annual basis, and by making appropriate examples of our work available to the wider EIA community.

9. A VISION FOR EIA PRACTICE

Part 2 of the report (Chapters 4 to 7) presents the outcomes of the most comprehensive review of UK EIA practice undertaken in recent years. However, to provide a positive, visible and meaningful contribution to the greening the economy the EIA profession must take steps to continue to improve practice. These steps must ensure that each EIA is focussed and accurate, be mindful of the resources required to deliver the process, and recognise that a development's environmental consequences do not end with the submission of an environmental statement. In essence:

EIA practice will influence development proposals to ensure that they work for the developer, community and environment, in order to meet the objective of sustainable development. It must recognise that getting this right is essential to delivering proportionate assessments that generate improved environmental outcomes.

HEMA has identified six key actions for practitioners to take to improve practice at both a project and collective level, to deliver this vision:

1. Communicating added value generated by EIA
2. Realising the efficiencies of effective EIA co-ordination
3. Developing new partnerships to enhance EIA activity
4. Listening, communicating and engaging effectively with communities
5. Exchanging knowledge and experience to tackle the difficult issues
6. Delivering environmental outcomes that work now and in the future

9.1 COMMUNICATING ADDED VALUE GENERATED BY EIA

The workshops presented many case studies where the EIA had significantly improved the overall project process and its outcomes. There is a need for EIA practitioners to communicate the added value that effective EIA can bring to the development consent process, including:

- providing a constructive problem solving tool enabling effective decision-making;
- generating improvements in design, often saving resources;
- facilitating community involvement and harnessing the benefits this can bring;
- effectively managing risk, budgets, programme and quality; and
- delivering net environmental gain.

It is important that all parties involved in EIA practice, from practitioners, through clients, to decision-makers recognise that effective EIA can deliver added value in many areas. Through this EIA can make a broader contribution to the delivery of proportionate applications that enable effective decision-maker leading to developments that are sustainable.

9.2 REALISING THE EFFICIENCIES OF EFFECTIVE EIA CO-ORDINATION

A well trained and experienced EIA co-ordinator is a valid project expense. Effective EIA co-ordination leads to multiple benefits through engaging local communities, generating environmental gain and improving the design of proposed development. These tangible benefits are brought about in several ways. A key role of the EIA co-ordinator is to enhance knowledge and understanding of EIA amongst environmental topic specialists, the design team, consenting authorities, wider stakeholders and local communities. By planning an efficient assessment and effectively managing inputs and expectations across these parties, the EIA co-ordinator can also ensure that the environmental statement is both appropriate and proportionate. Their editorial and technical writing abilities should also facilitate wider readership of the final environmental statement. Additionally, the EIA Co-ordinator contributes to the effective management of risk, budgets and programmes and often provides both strategic thinking and a unique perspective to challenging problems.

In order to maximise the value delivered by the assessments they lead, EIA co-ordinators must therefore continually develop their knowledge, capabilities and experience. Clients must recognise that the co-ordinator's central position in the overall project management team is crucial if the added value EIA can deliver for both the development and the environment (discussed in 9.1 above) is to be realised.

9.3 DEVELOPING NEW PARTNERSHIPS TO ENHANCE EIA ACTIVITY

There are many groups involved in the EIA process and effective interaction between these groups is a key driver of quality practice. Planners, legal advisers, engineering design teams and construction contractors all influence the success of an EIA. For example, unless environmental mitigation and enhancement activities - identified through EIA - are clearly understood by construction contractors, they are unlikely to be implemented effectively, reducing an EIA's positive environmental outcome. In particular, at a project level, greater consideration needs to be given to identifying parties responsible for the longer-term success of environmental mitigation, compensation and enhancement measures included in Environmental Statements. Developers may fund the implementation and short-term management of such measures, but after this initial period of success the on-going environmental benefit or protection can be lost. EIA practice should therefore begin to explore opportunities for partnerships between local groups and communities to deliver this on-going environmental management to ensure the outcomes predicted in the assessment are achieved in reality.

There is a need to enhance the working relationships between EIA practitioners and these wider groups in order to deliver IEMA's vision for the future of EIA.

9.4 LISTENING, COMMUNICATING AND ENGAGING EFFECTIVELY WITH COMMUNITIES

The EIA Directive includes an expectation that practice should build support for the decisions taken by consenting authorities. The EIA co-ordinator has a central role in community engagement during the development consent process.

By listening to community concerns at an early stage the EIA can feed information about local environmental and social concerns into the application and design process. This approach also allows any misconceptions amongst the local community about the proposed development or its EIA process to be rectified.

There is a need for EIA practitioners to develop efficient approaches to maintaining communication with communities to allow concerns to come forward, and EIA information to be shared. Where this is achieved community trust in both the proposed development and the findings of its EIA are enhanced.

Given the increasing focus on enhanced pre-application consultation and engagement across the UK and the coalition's Localism agenda, EIA and the skills of its practitioners in this area will become of greater importance in the future.

9.5 EXCHANGING KNOWLEDGE AND EXPERIENCE TO TACKLE THE DIFFICULT ISSUES

If UK EIA practice is to become more effective then it must instil a desire amongst practitioners to actively work together to generate pragmatic solutions to difficult issues. These include: assessing and addressing cumulative environmental effects; valuing the environment in decision-making; and sharing environmental information between different types of assessments, such as EIA and SEA. EIA practice must also become a more effective early adopter of new approaches, such as ecosystem services assessment. By developing a collective culture amongst practitioners that focuses on advancing practice, the UK can ensure that it continues to be seen as a global thought-leader on EIA. By working together to trial novel solutions to the difficult issues facing EIA practice the reputation of the UK's environmental consultancy sector can be further enhanced, helping to drive future economic growth.

9.6 DELIVERING ENVIRONMENTAL OUTCOMES THAT WORK NOW AND IN THE FUTURE

For EIA practice to be truly effective then the environmental outcomes that result from development should be equal to, or better than, those predicted. To measure this requires post-consent environmental monitoring; however, there are currently no plans to enhance the EIA regulations in this area and little appetite amongst developers to voluntarily undertake potentially expensive environmental monitoring programmes. Given this, environmental mitigation and enhancement measures should be designed in such a way that maximises the chance of the measures being implemented effectively. As such EIA practice must place greater emphasis on developing measures that planners are able to condition and contractors are able to understand and implement within the development's construction programme.

There is questionable value in EIA practitioners identifying, and developers paying for, the implementation of environmental measures that are unlikely to deliver their anticipated environmental benefit or protection. Future practice should therefore also include greater consideration of the EIA's confidence that enhancement and mitigation measures requiring on-going management will continue to operate effectively in the long-term. Further to this, greater care is needed to try to ensure a development's predicted environmental outcomes align with the needs of the wider environment and society as a whole, an issue that will become increasingly important as the effects of a changing climate begin to have a greater influence across the UK.

IEMA

The Institute of Environmental Management & Assessment (IEMA) is the UK's leading environmental professional association. IEMA is dedicated to creating a sustainable future through environmental skills, knowledge and thought leadership.

For more information, visit www.iema.net

£50

© IEMA 2011



Printed on 250gsm and 100gsm revive 50:50 white offset.
Printed by Ruddocks an ISO14001 and ISO9001 registered company.
Paper supplied by an ISO14001 registered mill.