

UK IA Update: Climate Change, Proportionate EIA & Competence

IAIA Washington BC Branch

Welcome!



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Outline

Welcome

Climate Change in EIA – The UK Approach

- IEMA's CC Guidance
- CC in Flood & Coastal Risk Management IA
- Q&A

Proportionate EIA & Competence – Perspectives

- Addressing disproportionate EIA
- EIA Competent Experts
- Q&A

Climate Change in UK EIA Practice



Outline

Climate Change in EIA – The UK Approach

- Context & IEMA's CC Guidance
- CC in Flood & Coastal Risk Management EIA
- Q&A

Climate Change & the Revised EIA Directive



Climate Change in UK EIA Regulations 2017

Regulation 4

Covers: land, soil, water, air and climate

Schedule 3

(screening) – Risk of affect of accident/disaster (incl Climate)

Schedule 4

Reference to GHG, Adaptation and Vulnerability for inclusion in the EIA

Climate Change in IEMA



Transforming the world to sustainability

EIA Guidance

IEMA Principles Series:

Climate Change Mitigation & EIA

Reducing greenhouse gas (GHG) emissions is and will continue to be one of the main policy drivers in the coming decades. Action to manage GHG emissions from existing activities in all sectors of the economy is essential, but action is also needed related when planning future actions. The EIA Directive 1 requires the consideration of the effects of projects on climate (Article 3) and climatic factors (Annex IV).

In a 2009 IEMA survey of EIA practitioners, 88% felt that where relevant, carbon emissions should be considered in the assessment and reported in the Environemntal Statement (ES). The supplement to PPSI (CLG 2007 and forthcoming 2010) indicates Government support in this area, stating:

"Local planning authorities should not require specific and standalone assessments [of climate change] where the requisite information can be provided through...environmental impact assessment."

Whilst Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA) can present a broader opportunity to manage GHG emissions this, does not absolve EIA from consideration of climate change mitigation. The principles below focus on climate change mitigation, but EIA practitioners must also consider adaptation, which will be covered in a forthcoming set of IEMA principles to be consulted upon during summer 2010.

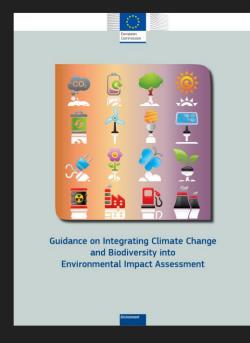
Over-arching Principles:

- . The GHG emissions from all projects will contribute to climate change; the largest interrelated cumulative environmental effect.
- . The consequences of a changing climate have the potential to lead to significant environmental effects on all topics in the EIA Directive - e.g. Population, Fauna, Soil, etc.
- The UK has legally binding GHG reduction targets EIA must therefore give due consideration to how a project will contribute to the achievement of these targets
- . GHG emissions have a combined environmental effect that is approaching a scientifically defined environmental limit, as such any GHG emissions or reductions from a project might be considered to be significant.
- . The EIA process should, at an early stage, influence the location and design of projects to optimise GHG performance and limit likely contribution to GHG emissions.

¹85/337/EEC as amended by 97/11/EC, 03/35 /EC, and 09/31/EC





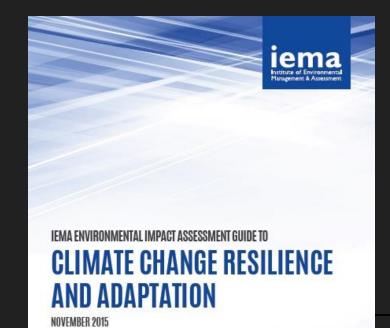




Assessing Greenhouse Gas Emissions and Evaluating their Significance



2010 2010 2017



The guide provides a framework for the effective consideration of climate resilience and adaptation in the EIA process

Resourcing the EIA

Identifying Future Climate

Building Climate Resilience

Integrating into the ES

Developing mitigation and adaptation management

On-going Challenges for CCR&A in UK EIA

- Uptake of CCR&A in practice
- Case study examples

Proportionality	Communication	Integration	Monitoring
Scoping, Scoping, Scoping!	Complex, risk based issues	EIA not done by the designer	How do you monitor adaptive management?
Have we taken it too far?	Little prospect of a yes/no answer	How does it relate to other design uncertainties	
How much of this is inherent in existing assessment methods	Usefulness of outputs to designers	(demand, resource prices, other uncertainty)	
memous		Is SEA a better place?	

GHG in UK EIA - The Drivers

The new Environmental Impact Assessment (EIA) Directive (2014/52/EU)

Legally binding UK target of 80% emissions reduction from 1990 levels by 2050

Interim target - 34% UK emissions reduction from 1990 levels by 2020

The Paris Agreement



GHG in UK EIA

IEMA Principles Series:

Climate Change Mitigation & EIA

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ARUP

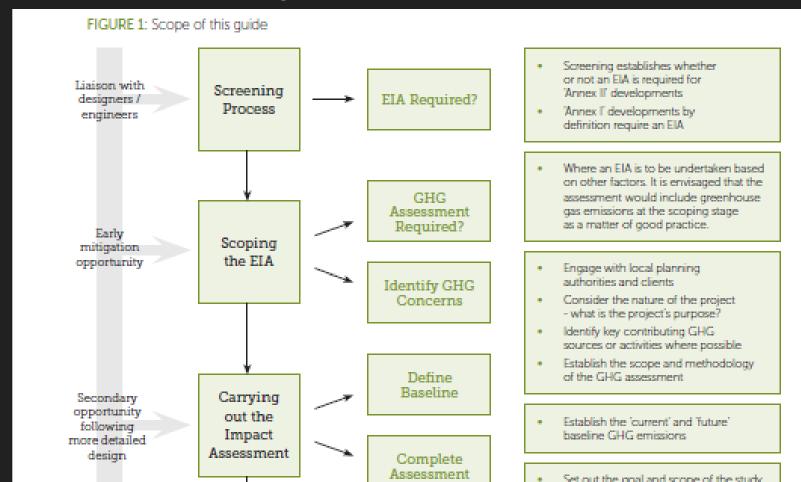
Environmental Impact Assessment Guide to:

Assessing Greenhouse Gas Emissions and Evaluating their Significance



2010 2017

The scope of the guide



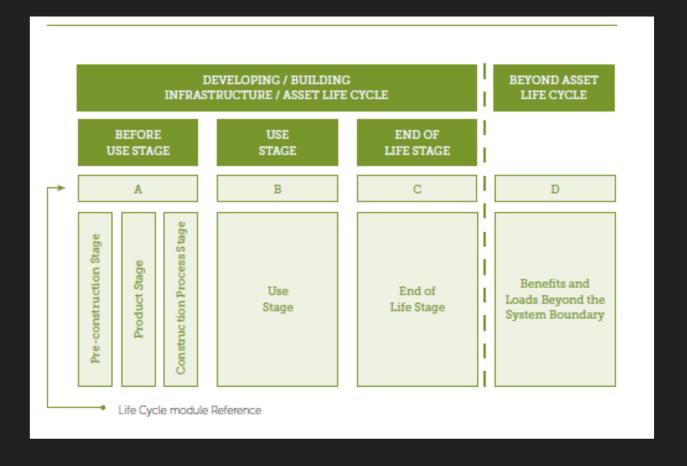
Assessing GHG emissions



- Defining study goal and scope
- Study boundaries
- Study period
- Inclusions and cut off rules

- Quantification methodology
- Uncertainty
- Using tools

Adopting a life cycle approach

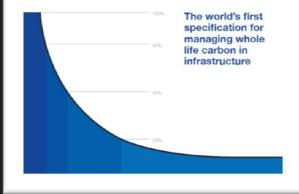


PAS 2080

PAS 2080: 2016 Carbon management in infrastructure

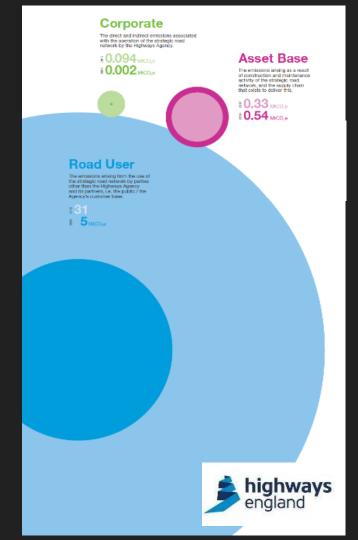
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Guidance Document for PAS 2080

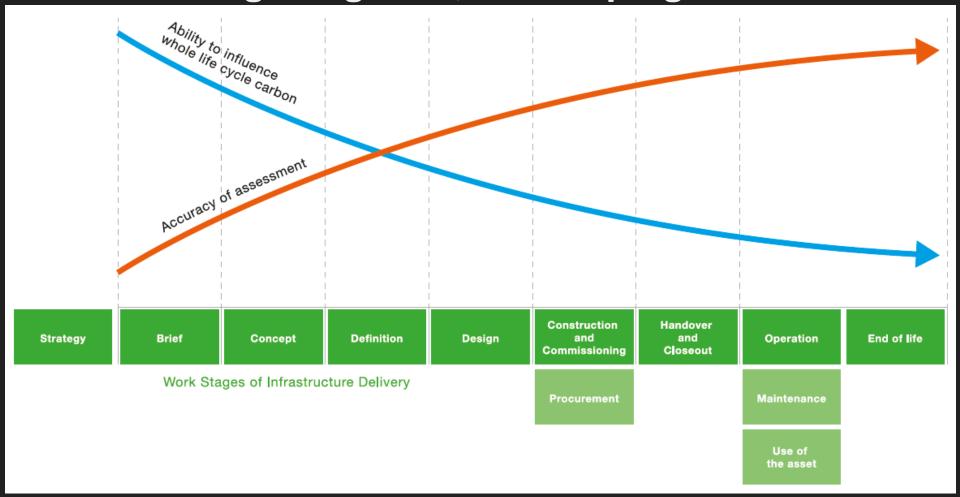


Significance

- Any GHG emissions / reductions from a project might be considered significant
- Framework approach:
 - No preferred method for significance
 - No defined GHG trigger threshold.
- Contextualising GHG emissions against any national, sectoral or local budgets encouraged
- Appendix C: Examples from around the world



Front-loading mitigation, but keeping it flexible





Climate Change in the EIA of Flood & Coastal Risk Management EIA Jo Murphy IAIA Washington DC

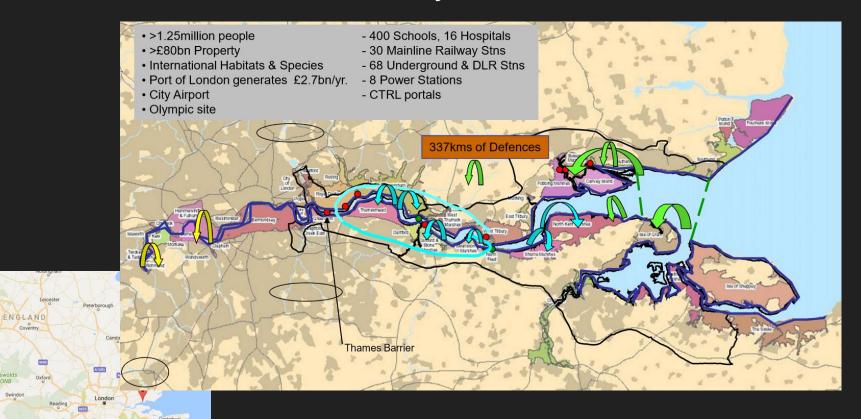
23 August 2017

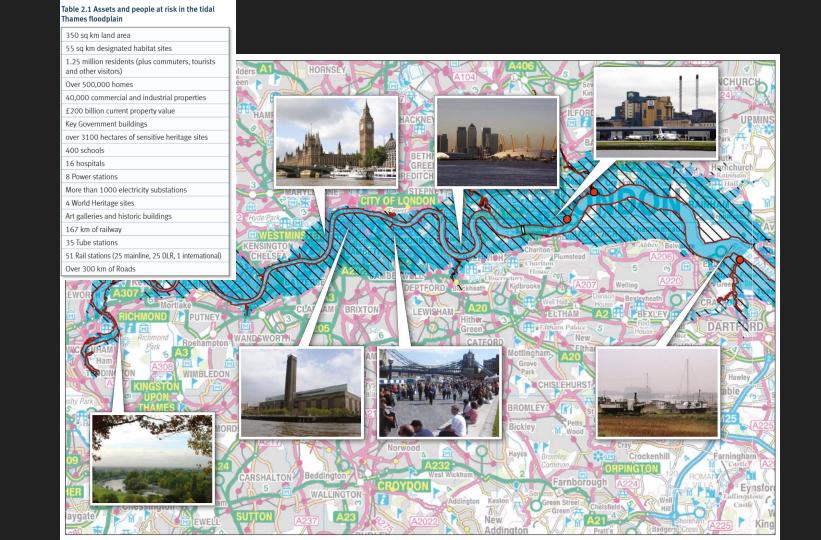




Flood and coastal erosion Environment risk management in England Investment programme 2015 to 2021 £2.5 billion of Defra £22.3 billion capital grant invested 444444444 in the 6 years £1.5 billion 4444444 from 300,000 of £29.4 billion £5.0 billion Investing in built schemes damages avoided and improving critical services - flood warnings, forecasting, mapping and telemetry ----300,000 households 42% spent on with reduced risk of flooding 58% on inland Attracting over £345 million £600 million in additional funding through partnership contributions Visit gov.uk/government/publications/programme-of-flood-and-coastal-erosion-risk-management-schemes

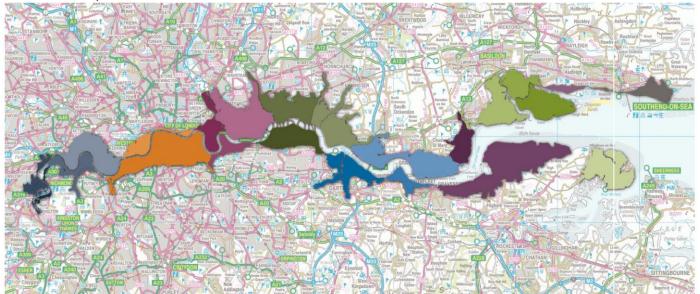
The Thames Estuary, UK







Thames Estuary 2100 Plan area



The TE2100 action plan sets out our recommendations estuary-wide and in each of the TE2100 policy units. There are 23 policy units in the Plan area - to avoid repetition those with similar characteristics and requiring a similar type and range of actions have been grouped together into action zones.

In the Plan, there is a description explaining the features of each policy unit and our action plan for each zone which shows:

- · what actions are required;
- who will undertake these actions;
- · how this will be done.

There are eight of these local action zones and an estuary-wide zone:

Action zone 0 – estuary-wide

Action zone 1 - west London

Action zone 2 - central London

Action zone 3 - east London

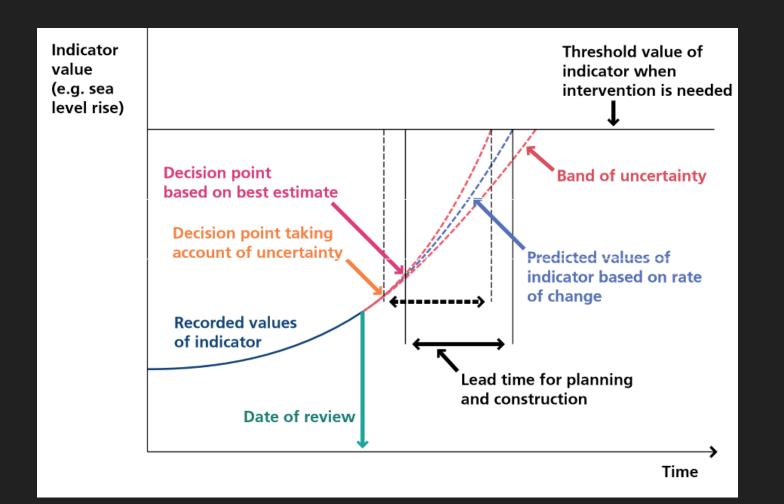
Action zone 4 - east London downstream of Thames Barrier

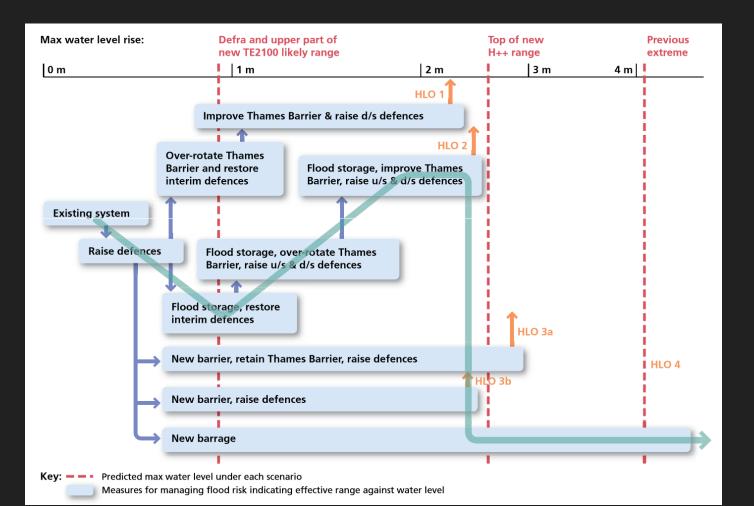
Action zone 5 - middle Estuary

Action zone 6 - lower Estuary Marshes

Action zone 7 - lower Estuary, urban/industrial and marshland

Action zone 8 – Seaside/fishermen's frontage





Three time horizons - three themes for flood risk management



The first 25 years

"Maintaining confidence and planning together"

- Continuing maintenance, operation and essential improvements.
- Creating new habitats, safeguarding the spaces for future flood management and working in partnership with others to reduce flood risk.
- TE2100 will have a real influence in the preparation of, and updating of local strategic and spatial plans.



The middle 15 years

"Renewal and reshaping the riverside"

- Many of the existing walls, embankments and smaller barriers will need raising and major refurbishment or replacement in this period.
- These major projects provide an opportunity to reshape our riverside environment through working with spatial planners, designers, environmental groups and those who live and work in the Estuary area.



To the end of the century

"Preparing for, and moving into the 22nd century"

- From 2070 (based on government's current climate change guidance) a major change will be needed.
- The decision on the "end of the century" option to be adopted must be made at the start of this period followed by planning and preparation for implementation
- By 2070, flood risk management arrangements must be in place to take us to the end of the century – and beyond.

The supporting evidence

We have built up a comprehensive evidence base of data and results with over 300 studies and investigations. This evidence provides a firm foundation to our TE2100 Plan. It is also a valuable resource for us to share with implementation partners.



To find out more see chapter 10.

Deciding on the Plan

In order to decide on our Plan, we have had to understand the impacts of all combinations of our estuary-wide options. We have used two key methods – economic appraisal and strategic environmental assessment, to undertake this work which is described in chapter 7 "Deciding on the Plan".



For more information on appraisal and assessment, see chapter 7.

Planning the implementation

Three phases have emerged for implementation of our TE2100 Plan, each having a different objective and theme representing the developing needs of flood risk management in the Thames estuary over the life of the TE2100 Plan:

- "Maintaining confidence and planning together" (2010 to 2034);
- "Renewal and reshaping the riverside" (2035 to 2049);
- "Preparing for, and moving into the 22nd Century" (from 2050).

Review – updated conclusions

The Plan recognises that there are several factors that determine tidal flood risk in the Estuary, in addition Monitoring changes in the Thames estuary to sea level rise, and that these factors will change over time. The TE2100 Plan therefore identified 10 indicators of change to be monitored as part of the plan. These indicators help us assess whether we need to make the actions identified in the Plan at an earlier or later date, and whether these actions and interventions are adequately managing flood risk on the Estuary.

The Plan requires a review of the indicators of change to be undertaken after 5 years, ahead of a full review of the Plan itself in 2020. The first 5 year review of the 10 indicators of change was published in October 2016. Results from the 5 year review shows that changes in the Estuary are generally taking place in line with the Plan's predictions and we have concluded that the timings of the actions identified in the Plan remain appropriate. However, we need to continue monitoring any changes in the estuary and have identified a number of improvements that should be considered in time for the 10 year review in 2020.

Adaptability & impact assessment

Chapter 7: Deciding on the Plan

SEA and HRA: Conclusions

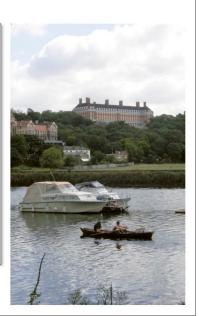
The conclusion of the SEA and HRA (Appropriate Assessment) is that the environmentally-preferred option is to upgrade and maintain the existing system of defences (Option 1.4). New barrier options are likely to infringe environmental legislation.

Bringing the economic appraisal and SEA together

In summary, the economic appraisal has identified Improving the existing defences (Option 1.4) and a New barrier at Long Reach (Option 3.2) as "front runners" for the period beyond 2070, with Improving the existing system (Option 1.4) being recommended until that time.

The SEA/HRA process has concluded that Improving the existing system — optimising repair and replacement (Option 1.4) is the environmentally preferred option both pre- and post-2070.

This suggests that the overall preference would be for Improving the existing system (Option 1.4). Current information suggests that a new Barrier at Long Reach (Option 3.2) might be the better economic option by a small margin post-2070. But uncertainty in the assessment post-2070 and the absence of an immediate need for a decision on the "end of the century" option, mean that this will be deferred until a future review of the TE2100 Plan in 2050.



"The Flood"



London overwhelmed by a huge tidal surge in The Flood



KEEP CALM AND HAVE A TEA BREAK



Perspectives

Proportionate EIA

- The problem of disproportionate EIA
- UK Proportionate EIA Strategy
- Q&A

Competency requirements in:

- UK EIA
- ESIA
- Q&A

Delivering Proportionate EIA

23 August 2017

A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice

Context



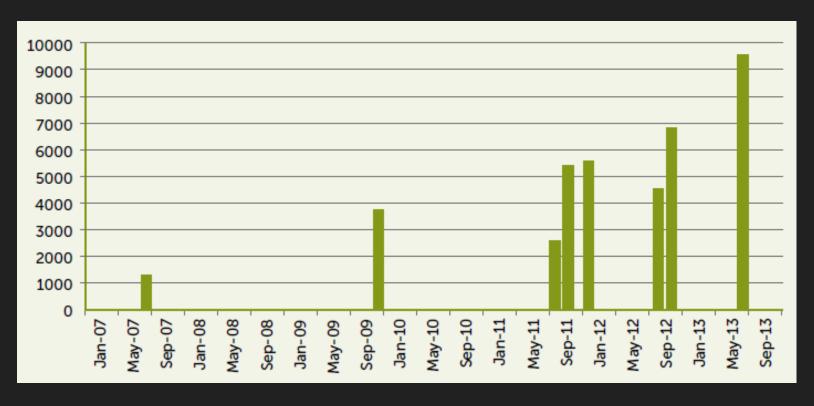


Justice Sullivan - 2004

'It would be no advantage to anyone concerned... applicants, objectors or local authorities - if ES were drafted on a purely "defensive basis" mentioning every possible scrap of information ... Such documents would be a hindrance not an aid to sound decision-making by the local planning authority, since they would obscure the principles issues with a welter of detail'.

Derbyshire Waste Ltd vs Blewett and SoS for Environment [2004] EWCA Civ 1508 at para 42

Growth in UK Offshore EIS Length 2007-2013



EIA Risks Failing to...

- Be a key voice for the environment in decision-making
- Add value to development design
- Engage the public in effective consultation
- Help manage risks to consenting
- Be more than an expensive exercise

EIA is still valued by Professionals, Govt, and wider stakeholders, but pressure is mounting and potential for significant change is real post-Brexit...

IAIA Conference Findings 14June'17



Implications of BREXIT for EIA...

Majority think UK will maintain EIA

Split on whether EIA will be more or less important

Majority think significant potential it will limit progress in future EIA practice



Developing the Strategy



Rochelle, Illinois

Systemic Collaborative Action

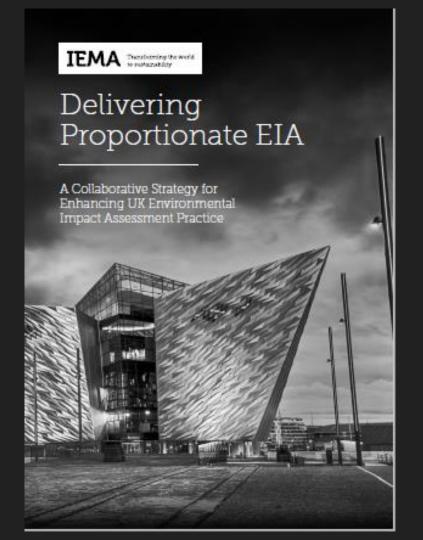
Responsive Action (2009-2015)

Treating the symptoms of disproportionate EIA



Proportionate EIA

Proactive Action (2016 onwards) Addressing the causes of disproportionate EIA



Four Strategic Themes for Action

Enhancing People

So that those involved in EIA have the skills, knowledge and confidence to avoid an overly precautionary approach.

Improving Scoping

To generate a more consistently focussed approach to this critical activity throughout the EIA process.

Sharing Responsibility

Recognising that disproportionate EIA is driven by many factors and that enabling proportionate assessment will require collaborative actions that work towards a shared goal.

Embracing Innovation & Digital

Modernising EIA to deliver effective and efficient assessment and reporting that adds value to projects and their interaction with the environment.

A Holistic Approach

A Specific Approach

National Grid Seeks to Incentivise Proportionate Practice

Richard Gwilliam & Timothy fluit (National Grid)

Promoting major influstructure projects is an expensive business and the cost of EIA is not an imagnificant contribution to the first bill. But when faced with the challenge of writing an extra report for an errest to an ES or repeating a survey just in case, caution often wine the day. After all, the risk of feture to get consent for a project all too often outweighs the cost of that additional report or survey, even when the need for it is likely to be marginal.

Repetilent, National Grid remains a firm advocate of promoting proportionate practice in EIA and actively encourages its supply chain to adopt and promote proportionate principles in their assessments. As well as providing high level advice to its supply chain on proportionals EIA. the business is now trailing allernative contracting strategies to incardivise proportionals behaviour

Over recent years some encouraging practice has emerged suppliers are beginning to proactively challenge acciping opinions from statutory bodies and are actively promoting the consideration of proportionality in their assessments. National Grid has also begun to work collaboratively with suppliers to look at how ESs can be restructured to make them more accessible and better use digital information including the use of nevigable GIS systems to support applications

Despite some good practice however, ESs still routinely go beyond the core purpose of reporting the likely significant effects of development. To more effectively embed this on vogue approach to EIA, broad industry consumus as to what conditutes proportionate EIA is: needed so that project promotion and practitioners can uphold more proportionals practice with confidence.

for development consent.

Landscape Institute Push for Proportionate Visualisations

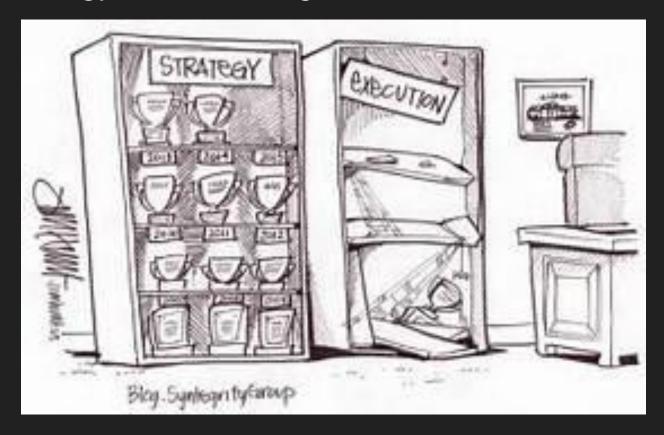
A personal perspective on proportionals assument by Mary Fisher (LDA Design)

As a former process improvement consultant, I have always had an interest in efficiency and have been working to reduce our DVA chapter lengths and number of drawings, so I was pleased to be invited to join the team to develop the Landscape Institute Technical Note 02/17 which provides guidence on the proportional use:

This is not an easy task as there are a wide range of techniques and technologies and there is not a one-size-fits-all answer. The guidance had to strike a belance between providing sufficient direction and being too restrictive, between the desire of decisionmakers and the public to be adequately and accurately informed, and the aim of developers and professionals to provide cost-effective assessment.

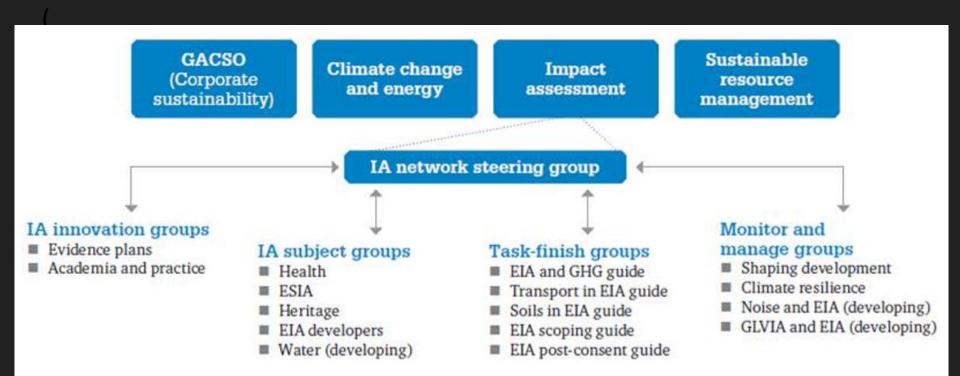
Proportionals EIA reads chapter authors, consulters and decision-makers to all play their part with confidence to agree what makes an adequate execution! for a given project and I believe that this guidence is an important contribution to that goal.

A Strategy is Not Enough









Call to Action

- Promote the vision for the UK's proportionate EIA future
- Engage key stakeholders and representative bodies in implementing the strategy
- Catalyse actions and initiatives around the four key themes of people, scoping, collaboration and innovation & digital
- Develop a proportionate EIA Charter, creating a positive and visible campaign around which a coalition of the willing can rally.
- Develop an *EIA Digital Strategy* that looks across UK practice to identify the opportunities to deploy advances in technology.

A&P





Current Competency Expectations in IA Systems



Europe – 2014/52/EU

Competent expert [Art 5(3)(a)]

• EU developers must ensure EIS IS prepared by competent experts.

Sufficient Expertise [Art5(3)(b)]

 Consenting authority must have access to sufficient expertise to examine the EIS for completeness and quality.

All 28 EU Member States had to comply by 16 May 2017, but Directive provides no definition / guidance...

World Bank: Environment & Social Framework

(August 2016)

ESS1:

- ESA 'prepared by qualified and experienced persons'
- Use of Borrower frameworks, if id gaps = measures & actions to address capacity development in Borrower, national, subnational, sectoral implementing institutes

ESS4,5,6: Competent professionals, 'qualified experts', etc

ESS9: FI's ESMS include 'organisational capacity & competency'

Competency expectations included in some national, sub-national and financial institutions IA systems.

But...

Coverage is incomplete, requirements are nonspecific & terminology varies

Common understanding of quality / consistency is lacking in ES capacity development & training activities

UK EIA Practice Competent Experts & Sufficient Expertise

Transforming the world to sustainability

UK EIA Co-ordinator Competent Expert...

<u>Standard Practice</u>: Individual that can demonstrate <u>all</u> of following:

- 1. Full membership relevant prof. body / Registered EIA Practitioner status;
- 2. Experience of leading substantive components of EIA process;
- 3. Evidence of on-going CPD relevant to coverage of Schedule 4 (Annex IV)

<u>Good Practice</u>: Standard + in EIA Quality Mark registrant



<u>Best Practice</u>: Good + individual has *Principal EIA Practitioner* status

ES Competency A growing trend in the transition to Borrower Safeguards?



Towards a Global Environmental & Social Competency Framework for Large Infrastructure Projects

14 April 2016

European Bank for Reconstruction and Development

IAIA16- Nagoya (12 May 2016)

The Principles of Collaboration for Country Safeguard Systems

Signed by ADB, World Bank, Japan International Cooperation Agency (JICA), and fellow members of the <u>Development Partners Safeguard Coordination Committee</u>.

Understanding **current** Competency Expectations



IAIA Innovation Grant 2017

Exploring IA Competency Requirements

Establishing a Global Baseline





Josh Fothergill
& Dr Ross Marshall
Fothergill Training & Consulting Ltd

Whether common criteria exist between such systems?How such systems are developing?

IAIA Member Value:

lack a shared understanding of...

1st edition compendium of current national / other IA competency systems (November '17)

Effective IA requires competent professionals, but we

- What competency requirements exist around the world?

E: Josh@fothergilltc.com

Do we need to consider exploring a framework standard for global ES competency?



IFST101

Thank You!



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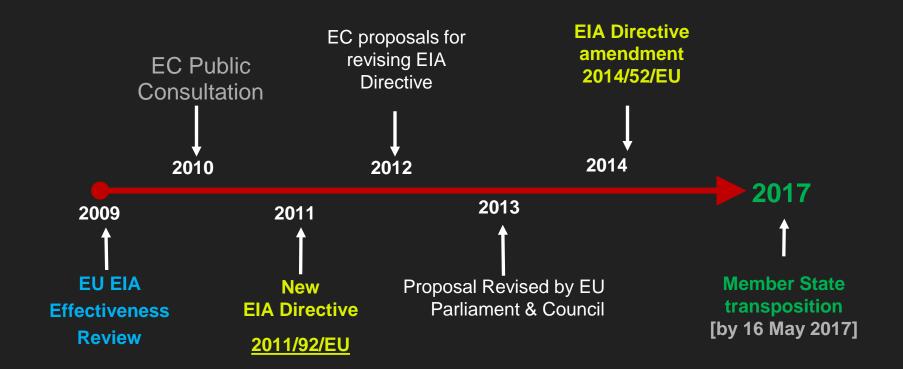
Chief Executive - Fothergill Training & Consulting Ltd

E: Jo@fothergilltc.com





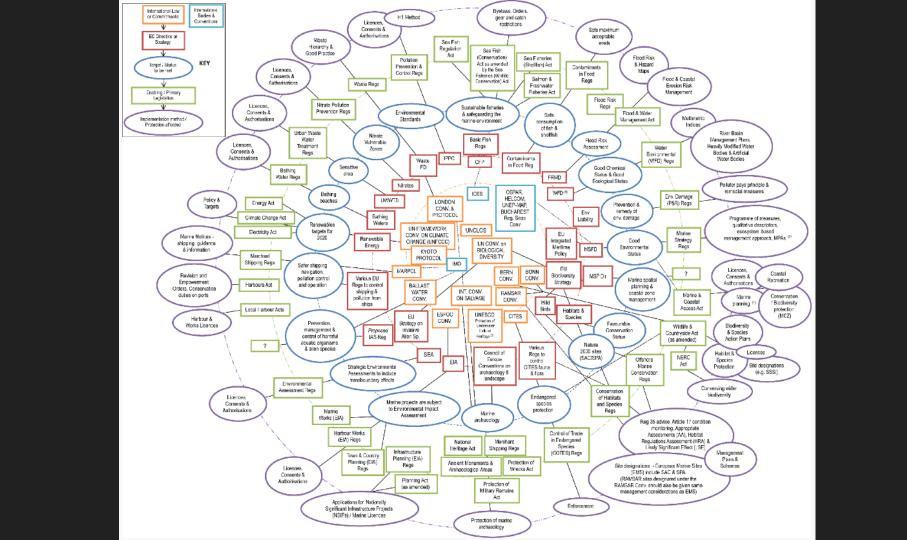
Overview: Revising the EIA Directive



Main Changes via 2014/52/EU

- A definition of EIA
- EIA Report
- Joint / Co-ordinated HD
- Time limits
- Screening Revisions
- New / revised topics
- Scoping Revisions
- Competent Experts

- ES Content
- Examination of ES and sufficient expertise in CA
- Decision Notice
- Monitoring
- Penalties & Conflict Interest
- Transitional arrangements



Ice Breaker



National Geographic