

## IAIA10 Training Course #10

### **Best practice strategic environmental assessment – the alternatives and impact prediction stages**

Level: Advanced

Prerequisite: Full understanding of the SEA process, preferably practical experience in carrying out or reviewing one or more SEAs

Language: English

Duration: One day, pref. 7 April 2010

Trainer: Riki Therivel  
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#### **Course description**

Purpose: To promote the application and development of best practice SEA techniques - focusing on alternatives and impact prediction/mitigation - by presenting and discussing examples and ideas from good SEA practice worldwide

Audience and learning outcomes: The course is oriented towards experienced SEA practitioners, reviewers and academics. By the end of the course, participants should have improved understanding of current SEA good practice techniques worldwide, and hopefully ideas for how to improve their own SEA practice or research.

Content: SEA practice has evolved very quickly over the last few years, including in the US as part of the development of policies on economic restructuring, China in response to the 2003 EIA Law and more recent draft SEA legislation, many developing countries as a result of World Bank and other initiatives, and Europe in response to the SEA Directive. The course will present information about current good practice SEA worldwide collected in summer/autumn 2009 as part of the preparation of the second edition of my book 'Strategic Environmental Assessment in Practice'. It will present good practice examples/ideas of SEA alternatives development and assessment, and impact prediction/evaluation/mitigation.

## Detailed description of the course structure and content

### Welcome (15 minutes)

- Introduction to the course and trainer
- Introduction to the participants: previous experience, expectations from course

### Recent SEA developments worldwide (15 minutes Powerpoint presentation)

- Brief summary of SEA developments worldwide over the last 4-5 years
- Strengths and weaknesses of various SEA systems

### What is SEA 'best practice'? (45 minutes presentation + discussion)

- Effective SEA: concepts of direct and indirect benefits of SEA, single-loop and double-loop SEA learning, research on what contributes to SEA effectiveness
- Discussion: constraints to SEA effectiveness from participants' experience (institutional, procedural, technical etc.)
- Discussion: So then what is 'best practice' SEA?

Coffee/tea break

### Alternatives development and assessment (90 minutes Powerpoint, discussion and mostly use of workbook of examples)

- Theory and guidance on alternatives development: 'reasonable' and 'feasible' alternatives, alternatives hierarchy, tiering of alternatives, etc. (Powerpoint presentation)
- The 'do nothing' or 'do minimum' alternative: links to future baseline without the strategic action
- Examples of best practice alternatives development
- Examples of best practice alternatives assessment and comparison
- Discussion: alternatives best practice

Lunch

### Impact prediction, evaluation and mitigation (75 minutes, same techniques as for alternatives above)

- Theory and guidance on impact prediction and evaluation: objectives-led v. baseline-led assessment; topic-based v. task-based report structure
- Examples of best practice impact prediction and evaluation techniques: expert judgement, modelling, GIS-based techniques etc.
- Assumptions in impact prediction and evaluation:
- Environmental limits in SEA: can they be determined? What might they look like? What are implications for impact mitigation?
- Discussion: implications of using environmental limits in SEA

Tea/coffee break

Impact prediction, evaluation and mitigation cont. (45 minutes, same techniques as for alternatives above)

- Cumulative impact assessment: what are cumulative impacts? What other strategic actions and projects should be considered in cumulative impact assessment?
- Examples of best practice cumulative impact assessment
- Public participation in impact prediction, evaluation and mitigation
- Discussion: impact prediction, evaluation and mitigation best practice

Workshop/surgery: How do I apply best practice to my own SEA practice? (45 – 60 minutes)

Participants bring examples of SEA issues that they are facing, or SEA situations for in which they would like to apply best practice techniques. Either as a whole group or in small groups (depending on the size of the entire group), we would brainstorm best practice ideas that these participants may want to try out post IAIA'10.

Includes discussion of institutional constraints to SEA best practice

Conclusion (10 minutes)

Materials that participants will receive during the course

- Workbook with copies of all Powerpoint presentations, and extracts from SEA reports showing good practice techniques and approaches
- CD with copies of good practice SEA guidance and SEA reports

### **Qualifications of the trainer**

#### **PROFESSOR RIKI THERIVEL**

##### **Education**

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| 1977-1982 | BSc Mathematics and Computer Science, BA German, BA English; State University of New York at Binghamton, USA   |
| 1984-1986 | MSc level studies in environmental engineering; Cornell University, USA  |
| 1986-1988 | Postgraduate level studies in environmental engineering, specialising in environmental impact assessment, funded by the Japanese Ministry of Education; Kyoto University, Japan. |
| 1997-1998 | PhD in strategic environmental assessment, by published work, Oxford Brookes University, Oxford (completed Jan. 1999)  |

##### **Experience**

2001-ongoing ***Partner, Levett-Therivel sustainability consultants***

Levett-Therivel is an ethical sustainability consultancy that develops policy and management tools that improve the environment and peoples' quality of life. We specialise in sustainability policy/management, strategic environmental assessment and sustainability appraisal, land use planning policy, and transport and energy policy. We mostly work for government, public bodies and NGOs. Since I co-founded Levett-Therivel in August 2001, I have led, or had a leading role, in:

- Preparation of guidance on SEA for England, Scotland, Ireland
- Carrying out, strategic environmental assessment/sustainability appraisals (SEA/SA) including for several high profile UK strategic actions: national policy statements on energy, flood risk management strategy for the River Thames, several regional spatial strategies
- Supporting the carrying out of SEA/SA (capacity building, audit/review of SEA/SA reports, preparing SEA templates), e.g. review of about 12 SEA reports per year for the Irish Environmental Protection Agency, support to (currently) about a dozen UK local authorities
- Training courses on SEA and SA in e.g. Ghana, Iran, Switzerland, UK

1997-ongoing **Visiting professor, School of Planning, Oxford Brookes University** (1-2 days/week)

I teach on the MSc course in Environmental Assessment and Management, and supervise MSc and PhD students.

### **Selected publications**

2004 (second edition due 2010) *Strategic Environmental Assessment in Action*, Earthscan, London

1996 (with M Rosario Partidario, eds.) *The Practice of Strategic Environmental Assessment*, Earthscan, London.

2009 (with P Morris, eds.) *Methods of Environmental Impact Assessment*, UCL Press, 3<sup>rd</sup> edition, London.

2005 (with J Glasson and A Chadwick) *Introduction to Environmental Impact Assessment*, 3<sup>rd</sup> edition, UCL Press, London.

1992 (with E Wilson, S Thompson, D Heaney and D Pritchard) *Strategic Environmental Assessment*, Earthscan, London.

**Comparable previous course:** I have run multiple rounds of a similar course in the UK, at Oxford Brookes University, 1-2 times per year, focusing on UK practice and examples. Typically I run a two-day training event, with the first day being 'Intro to SEA' and the second day 'Advanced SEA.' Typical attendance is 20-30, typically planners charged with carrying out (or supervising consultants who are carrying out) SEAs. I also run the 'Intro to SEA' twice a year for the Royal Town Planning Institute. The IAIA'10 course is internationally-oriented: it would not presuppose a particular legal system, and would use examples from all around the world (including quite a lot from developing countries).

I have run a previous course on SEA at an IAIA conference with Maria Partidario, which was well attended.

I have also supervised many MSc dissertations on SEA best practice, which involve roughly the same kinds of discussions as I envisage occurring during the course.