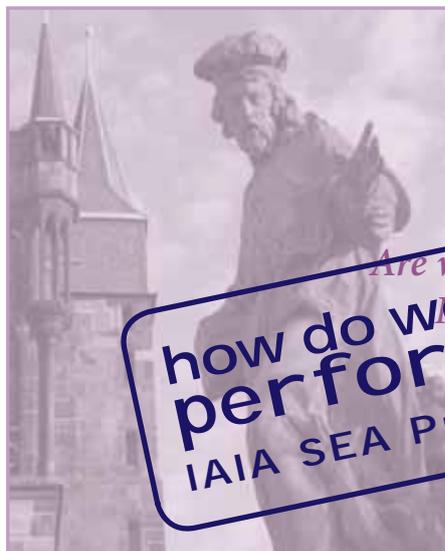


SEA Implementation and Practice: Making an Impact?

21-23 September 2011
Prague, Czech Republic

Final Program

Special Conference on Strategic Environmental Assessment
IAIA SEA Prague II 2011



Organized by

International Association for Impact Assessment *in cooperation with the*
European Commission – DG Environment *and the* United Nations Economic Commission for Europe

Co-hosted by

Integra Consulting *and*
Czech University of Life Sciences

Venue

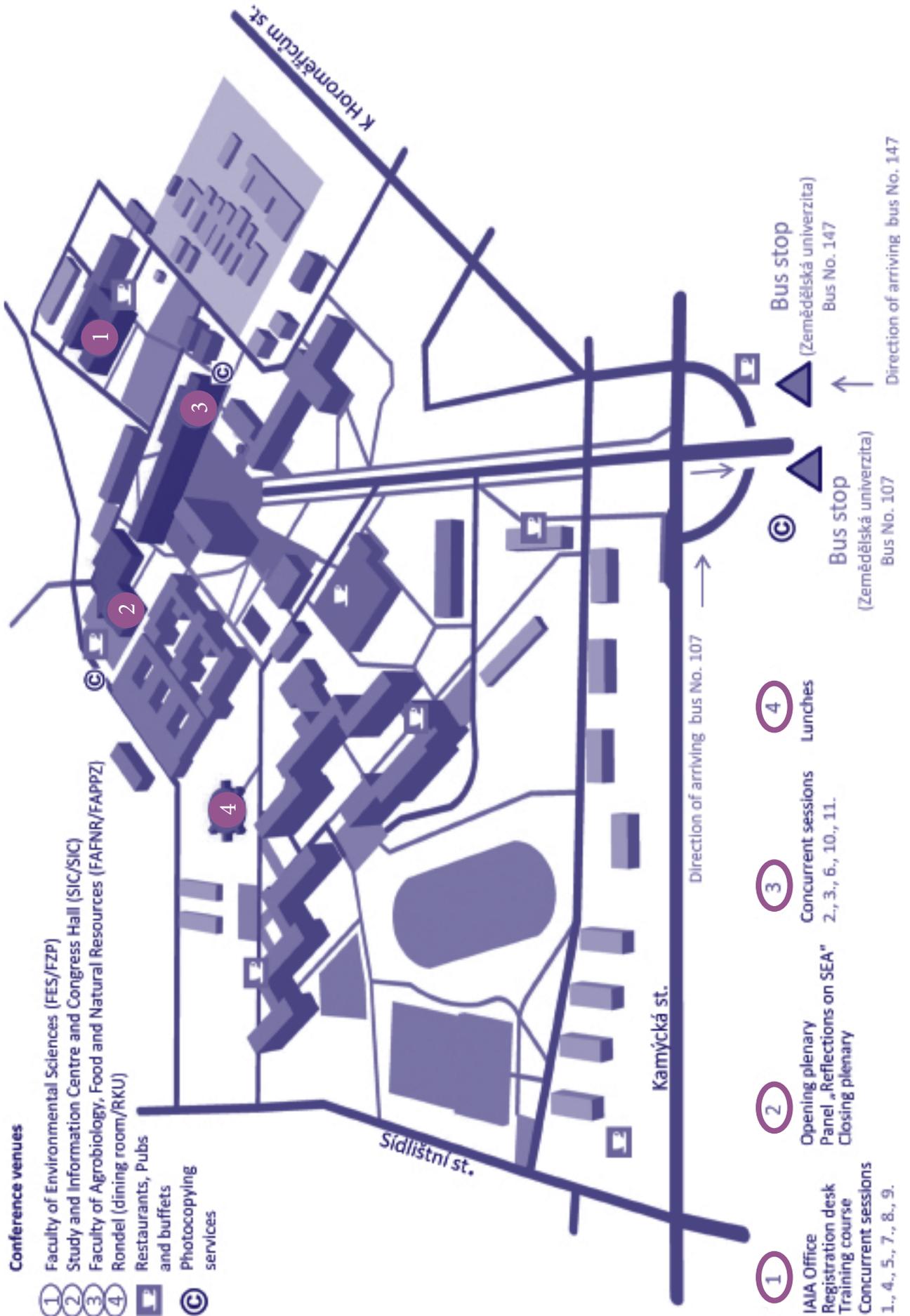
Faculty of Environmental Sciences
Czech University of Life Sciences
Kamycka 1176
Prague, Czech Republic



Celebrating the 10th Anniversary
of the
SEA Directive



Conference Venue (Campus)



Conference Committees

Key Contacts

Jiri Dusik (Co-chair of the Programme Committee), jiri.dusik@integranet.cz
Barry Sadler (Co-chair of the Programme Committee), bsadler01@aol.com
Vladislav Zdrzil (Co-chair of the Organizing Committee), zdrzil@knc.czu.cz
Zdenek Keken (Co-chair of the Organizing Committee) keken@knc.czu.cz
Ivana Vasickova (Conference secretariat), ivana.vasickova@integranet.cz
Loreley Fortuny (IAIA Headquarters), impact@iaia.org

Programme Committee

Jiri Dusik (Co-chair), Integra Consulting, Czech Republic
Barry Sadler (Co-chair) in personal capacity, Canada
David Annandale, Integra Consulting, Canada
Ralf Aschemann, University of Graz, Austria
Tea Aulavuo, United Nations Economic Commission for Europe
Matthew Cashmore, Danish Centre for Environmental Assessment
Peter Croal, OECD/DAC Task Team on SEA and Canadian International Development Agency
Thomas Fischer, University of Liverpool, United Kingdom
Marie Hanusch, Bosch & Partner, Germany
Monica Fundingsland Tetlow, Rogaland fylkeskommune, Norway
Elsa João, University of Strathclyde, United Kingdom
Lone Kørnøv, Danish Centre for Environmental Assessment
Fernando Loayza, World Bank
Ross Marshall, Environment Agency, United Kingdom
Maria Partidário, Technical University of Lisbon, Portugal
Ursula Platzer, Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria
Urszula Rzesot, in private capacity, Poland
Bobbi Schijf, Netherlands Commission for Environmental Assessment
Martin Smutny, Integra Consulting, Czech Republic
Riki Therivel, Oxford Brookes University, United Kingdom
Rob Verheem, Netherlands Commission for Environmental Assessments

Organizing Committee

Vladislav Zdrzil (Co-chair), Czech University of Life Sciences
Zdenek Keken (Co-chair), Czech University of Life Sciences
Simona Kosikova, in personal capacity, Czech Republic
Michal Musil, Integra Consulting, Czech Republic
Ivana Vasickova, Integra Consulting, Czech Republic

International Advisory Committee

Miroslav Martis (Chair), Czech University of Life Sciences
Nicholas Bonvoisin, United Nations Economic Commission for Europe
Jan Dusik, UNEP Regional Office for Europe
Lars Emmelin, Blekinge Institute of Technology, Sweden
Josh Fothergill, Institute of Environmental Management & Assessment, United Kingdom
Mojca Hrabar, Oikos, Slovenia
Ausra Jurkeviciute, in personal capacity, Lithuania
Georges Kremlis, European Commission, DG Environment
Stephen Lintner, IAIA President
Henrieta Martonakova, UNDP Bratislava Regional Center
Nenad Mikulic, Ministry of Environment and Physical Planning, Croatia
Matthias Sauer, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany
Dusan Sevic, Regional Environmental Center, Hungary
Daniel Slunge, University of Gothenburg, Sweden
Elizabeth Smith, European Bank for Reconstruction and Development
Roger Smithson, in personal capacity, United Kingdom

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Welcome

Dear Participants:

We have the great pleasure to welcome you to Prague, the city of a hundred spires, many bridges and uncountable scenic views.

For the second time in a decade, we are honoured to host on behalf of IAIA hundreds of the world's foremost specialists in strategic environmental assessment. As a country which has used this tool for some fifteen years, we appreciate the opportunity to offer a campus of the Czech University of Life Sciences in Prague for this meeting and the chance to share experience with colleagues from different countries in Europe and around the globe.

We hope that the conference will meet your expectations and that you will gain new ideas, make new friends, and also have time to become enchanted by our city, Prague.

Within our power and on behalf of our colleagues from the Faculty of Environmental Sciences and the Czech University of Life Sciences in Prague, we promise to do our best to assure the success of this conference.

Petr Sklenicka

Dean, Faculty of Environmental Sciences, Czech University of Life Sciences

Vladimir Zdrzil

Secretary, Faculty of Environmental Sciences, Czech University of Life Sciences

Welcome

Dear Colleagues:

On behalf of the programme committee, we are delighted to welcome you to the IAIA special meeting on SEA. This is a follow up to our successful meeting of six years ago.

In the interim, much has happened in this fast-moving field, more than enough to make it worthwhile to revisit the state of SEA practice internationally and in the European Union in particular. Looking ahead, in June 2012, world leaders will be convening as part of the Rio+20 process to review progress toward sustainable development. SEA systems, currently in place in some 60 countries, offers an important tool for this purpose that governments have yet to fully exploit.

Yet we are also living in a time of economic restraint and financial turmoil and some of you may wonder whether attending an international meeting on SEA is a worthwhile investment in such circumstances. We asked the same question during our initial discussions about organizing a follow-up to the IAIA SEA 05 Prague. Our conclusion was that time is right precisely because the current economic crisis presents an opportunity for SEA practitioners to reflect on whether we are doing things well, making a difference to decision-making and enhancing sustainability of proposed development plans, programmes or policies. Current demands for increased efficiency and accountability in governance systems give us an opportunity to discuss what improvements are needed in SEA procedures and practices and how best to give them effect at the time of budgetary cutbacks.

The 10th anniversary of the adoption of the SEA Directive in the European Union and the entry into force of the SEA Protocol to the Espoo Convention offers a major impetus for reflection on the overall performance of SEA systems and the latest innovations in our profession. We see the conference both as a stock-taking and agenda-setting event that can point to new directions for future practice. Core questions of interest include the following:

- What needs to be done to accelerate environmental integration into strategic level decision making through the application of SEA? How can we take advantage and promote existing SEA good practice worldwide and influence the identification and choice of sustainable development alternatives and options?
- Does SEA address the tougher issues and threats of cumulative and large scale environmental effects such as the loss of biodiversity and ecosystem services, resource depletion and climate change? Does SEA facilitate a transition to a green economy and effectively addresses impacts on human wellbeing? How can SEA better address these concerns?
- Does SEA facilitate constructive public participation and stakeholder dialogue? How can the SEA process be made more interactive? What value is added, *e.g.*, by mediated discussion among key stakeholders and the search for development options that are in their mutual interest?

There are many other questions that will be asked and addressed in the course of the eleven thematic streams into which the conference is organized. These themes have been developed by a committee comprised of distinguished colleagues with extensive theoretical background or practical experience in SEA application who will also chair the thematic streams and lead the reporting of results. With their assistance and that of other members of the organizing committee and the international advisory committee, the conference features 56 sessions with over 140 presentations on different aspects of SEA and over 200 delegates are registered to attend at the time of this writing. This has exceeded our initial expectations.

We look forward to seeing you in Prague to celebrate past achievements, examine current trends and issues and consider the future direction of SEA. All delegates are invited to add their voice to what promises to be a timely and relevant debate on whether SEA is making a difference in Europe and internationally.

Jiří Dušík and Barry Sadler

Co-chairs of the Programme Committee, IAIA SEA 11 Prague

IAIA SEA 2011 Prague: Agenda Outline

Wednesday, 21 September 2011

0800 – 0900	Registration
0900-1100	Opening plenary and reflections on the SEA Directive <i>Chair: Thomas Fischer</i> Aim: to provide opinions on the key achievements and weaknesses of the first 10 years of the implementation of the SEA Directive.
0900	Welcome <i>Petr Sklenicka, Dean of the Faculty of Environmental Sciences</i>
0910	Opening remarks on conference aims and approach <i>Jiri Dusik, Co-chair of the Programme Committee</i>
0930	Keynote address “Main achievements and challenges in the implementation of the SEA Directive” <i>Georges Kremlis, European Commission, DG Environment, Head of Unit ENV.A.3, Cohesion Policy and Environmental Impact Assessments</i>
0950	Panel “Reflections on experience with the implementation of SEA Directive” <ul style="list-style-type: none">• <i>Riki Therivel, Oxford Brookes University, United Kingdom</i>• <i>Peter Hjerp, Institute for the European Environmental Policy</i>• <i>Maria Partidário, Technical University of Lisbon</i>• <i>Lars Emmelin, The Swedish School of Planning, Blekinge Institute of Technology</i>
1030 - 1100	Open Discussion
1100-1130	Coffee break
1130-1300	Plenary Trends in SEA: European and International experience <i>Chair: Barry Sadler</i> Aim: to outline main broad trends in the development of SEA and present the contemporary issues to stimulate the thinking on where we are and where we are going.
1130	Opening remarks “Reflections on SEA development and directions for the future” <i>Barry Sadler</i>
1145	“A hitchhiker’s guide to SEA: Are we on the same planet?” <i>Rob Verheem, Netherlands Commission for Environmental Assessment & Jiri Dusik, Integra Consulting</i>
1200	“SEA in Europe, the Caucasus and Central-Asia: Implementation of the SEA Protocol to the Convention on EIA in a Transboundary Context” <i>Tea Aulavuo, UN Economic Commission for Europe</i>
1215	“Lessons from applying SEA in low income and transitional countries” <i>Fernando Loayza, World Bank</i>
1230 - 1300	Open discussion on where we are and where we should be going
1300-1430	Lunch
1430-1600	Concurrent sessions (see details on page 7)
1600-1630	Coffee break

1630-1800 **Concurrent sessions** (see details on page 7)

Thursday, 22 September 2011

0900-1030	Concurrent sessions (see details on page 7)
1030-1100	Coffee break
1100-1230	Concurrent sessions (see details on page 7)
1230-1330	Lunch
1330-1430	Poster session
1430-1600	Concurrent sessions (see details on page 7)
1600-1630	Coffee break
1630-1800	Concurrent sessions (see details on page 7)

Friday, 23 September 2011

0900-1030	Concurrent sessions (see details on page 7)
1030-1100	Coffee break
1100-1230	Concurrent sessions (see details on page 7)
1230-1400	Lunch
1400-1600	Final Plenary: Conference Highlights <i>Co-chairs: Jiri Dusik & Barry Sadler</i> Aims: to take stock of the main findings of the conference and look forward
1400	Snapshot reports from theme sessions Theme 1: Ross Marshall & Ursula Platzer Theme 2: Marie Hanusch & Monica Fundingsland Tetlow Theme 3: Ralf Aschemann Theme 4: Riki Therivel Theme 5: Lone Kørnøv Theme 6: Elsa João & David Annandale Theme 7: Thomas Fischer Theme 8: Maria Partidário & Matthew Cashmore Theme 9: Martin Smutny & Urszula Rzeszot Theme 10: Rob Verheem & Bobbi Shijf Theme 11: Fernando Loayza & Tea Aulavuo
1500	Open discussion: What does this tells us about where we are and where we are going in SEA: Toward an emerging agenda?
1600	Conference close

Overview of Concurrent Sessions

	Time	Rooms								
		Z1	Z2	Z030	Z239	Z342	A I	A II	A III	A IV
21 September	1430-1600		9.1 Key issues related to SEA for EU Cohesion Policy – panel discussion	4.1 Dealing with weaknesses in current SEA practice	7.1 Integration of multiple strategic assessments				10.1 Introduction SEA in developing countries' variations on a theme or different themes?	11.1 How can SEA contribute to greening the economy?
	1630-1800	1.1 Status Updates from the European Community (1)	9.2 SEA approaches and methods for EU Cohesion Policy		7.2 Integration of multiple strategic assessments (continued)	8.1 Current Challenges			10.2 SEA for development cooperation	11.2 Lessons from SEA and integrated impact assessment of policies in Europe
22 September	0900-1030	1.2 Status Updates from the European Community (2)	9.3 National experience in SEA of EU Cohesion Policy	4.2 Dealing with difficult SEA clients		8.2 Where are we with SEA? Different perspectives on new dilemmas	6.1 The Importance of context when applying SEA methods	2.2 Transposition and implementation issues for spatial planning	10.3 SEA for development cooperation (continued)	11.3 How can policy SEA contribute to greening governance?
	1030-1230	1.3 Status Updates from an International perspective	9.4 SEA in EU Cohesion Policy: What to improve for the period 2014+?		7.3 SEA and appropriate assessment – panel discussion		6.2 Specific methodologies for SEA	2.3 Strategic energy planning and SEA	10.4 SEA for development cooperation: Conclusions and panel discussion	11.4 Challenges of applying policy SEA in Europe
	1430-1600	1.4 Delivering value in SEA in Scotland: The Scottish SEA Review	5.1 Climate mapping, adaptation and water resources	4.3 From SEA to sustainability appraisal	7.4 SEA type assessments: Case studies	2.1 SEA application in major sectors: Lessons learned and future visions	6.3 Methodologies for Policy and National-level SEA	2.4 Energy infrastructure and SEA: A network of challenges	10.5 "Getting our act together": Donor co-ordination in SEA support	11.5 Lessons from non-European countries on policy level SEA
	1630-1800	1.5 So are national systems making a difference? Final papers and discussion	5.2. Presentation of the draft EC guidance on consideration of climate change and biodiversity in SEA		7.5 Addressing specific issues in and through SEA	8.3 What do we want from SEA research?	6.4 Elements for Guidance on SEA: World Bank Experience in Africa	2.5 SEA application in "non-traditional" settings	3.1 Case studies on stakeholder engagement in SEA related to certain plans and programmes	11.6 Key factors of policy SEA: Accountability, equity and modeling
23 September	0900-1030		5.3 Institutional barriers and possibilities for climate change integration	4.4 Resilience assessment	7.6 Linking SEA with other assessment and planning tools – a panel discussion	8.4 Where are we with Capacity Development in SEA?	6.5 SEA and biodiversity: Is it making a difference?	2.6 SEA application using non-traditional" methods	3.2 Case studies on stakeholder engagement in SEA related to certain countries	
	1100-1230	6.6 Wiki Web GIS Applications for Strategic Environmental Assessment		4.5 Concluding session	5.4 Climate game	8.5 How to bridge the gap: Concluding debate	6.7 Cumulative effects, mitigation and enhancement	2.7 SEA application in key sectors: Ways forward	3.3 How to increase the effectiveness of stakeholder engagement in SEA	

Conference Profile at a Glance

The conference is organized into 11 thematic streams:

1. **Effectiveness of national SEA systems: How are they making a difference?** This theme will discuss whether and to what extent current SEA systems effectively integrate environmental considerations into decision making, and what legal, institutional or procedural changes could improve quality of practice.
2. **Sector-specific SEAs: Are we getting it right?** This theme will explore the strengths, weaknesses, opportunities and threats in current practice of SEA in key sectors, consider whether and how SEA influences sector planning and decision-making, and identify future directions and ways forward.
3. **Stakeholder engagement in SEA.** This theme will discuss whether it is time to move toward more interactive approaches, such as multi-stakeholder policy dialogues and dispute resolution, to broaden the terms of stakeholder engagement or to seek new innovative approaches in this area.
4. **Beyond current SEA practice.** This theme explores several dimensions related to next-step SEA: improving those aspects of SEA that are currently not carried out well, broadening SEA to act as an integrative sustainability tool, and linking SEA and resilience thinking.
5. **Addressing climate change in SEA.** This theme will address, among other issues, the use of holistic approaches to assessing, mitigating and adapting to the environmental and social effects of climate change and tackling uncertainties of future change
6. **SEA procedure and methods: Tackling the tougher issues?** This theme will take a critical look at procedures and methods that are applied in SEA, identifying strengths and weaknesses of analytical tools, what is missing and what we need to do better or differently.
7. **Linking SEA with other assessment and planning tools.** This theme will examine key linkages between SEAs and other tools, for example when different assessment instruments are applied to the same policy, plan or programme more or less at the same time; tiering between, *e.g.*, policies, plans and programmes, administrative tiering between, *e.g.*, national, regional and local levels; as well as linkages across administrative, sectoral and other boundaries.
8. **Research and Capacity Development agenda.** This theme will take stock of progress in recent years and stimulate critical debate on where are stand with respect to SEA research, how capacity development incorporates evolving SEA knowledge, what are the emerging priorities for the evolution of SEA and future research on the field?
9. **SEA and EU Cohesion Policy: Coming together or still far apart?** Programmes within the EU Cohesion Policy have many consequences for environment and sustainability. This theme will discuss how to best use the SEA for influencing future development directions and priorities of these programmes in the EU Member States.
10. **Toward Good Practice in SEA for Development Cooperation.** The theme will discuss whether the European and international donors promote suitable forms of SEA that are fully adapted for decision-making cultures in the respective recipient countries. It will end with the session discussing possible arrangements for donor coordination in SEA.
11. **SEA for policy-making: Lessons from Europe and internationally.** This theme seeks to promote reflection on the results of applying SEA in policy-making in Europe and globally, adapting this process to political economy, institutional and cultural constraints that are critical in policy formulation and implementation, and the best use of the Article 13 of the SEA Protocol for promoting consideration and integration of environmental concerns into the preparation of policies and legislation.

This theme will focus on two fundamental questions:

- Are the current national SEA systems effectively integrating environmental considerations into decision making, and achieving positive outcomes?
- What legal, institutional or procedural changes could improve SEA application and quality of practice?

Session 1.1: Status Updates from the European Community (1)

Session 1.2: Status Updates from the European Community (2)

Session 1.3: Status Updates from an International perspective

Session 1.4: Delivering Value in SEA in Scotland – The Scottish SEA Review

Session 1.5: So are National Systems making a Difference? Final papers and discussion

Session 1.1: Status Updates from the European Community (1)

Aim: Reports and assessment of the current status of 2 national systems established under the EU SEA Directive and their respective strengths, weaknesses, opportunities and threats as perceived by established practitioners. In addition, an overview of the effectiveness of the SEA Directive is given by the European Commission and opportunities for improvement will be discussed.

Working method: Papers and open discussion.

Practitioner Views of SEA Effectiveness in the UK

Josh Fothergill - j.fothergill@iema.net, James Thorne, Claire Kirk

18 months after a report into the effectiveness of SEA in the UK and the government's response to its recommendations, IEMA has gathered new evidence to assess developments in UK SEA practice. The paper will consider whether the research had the desired influence and what issues remain for UK SEA.

Appropriate SEA Application in Germany? Views from Practice, Administration and Academia

Marie Hanusch - m.hanusch@boschpartner.de, Stefan Balla, Thomas Fischer

The paper explores (in)appropriate approaches to SEA applications in Germany based on selected SEA case studies combined with the experience to prepare SEA guidance, and some reflections from research on SEA effectiveness.

Modernizing Dutch SEA: The NCEA Chips In

Rob Verheem - rverheem@eia.nl, Bobbi Schijf

The Netherlands Commission for Environmental Assessment (NCEA) has been part of SEA development in The Netherlands from its inception in the mid '80s. Currently it is engaged in the discussion on modernization of the Dutch SEA system. The presentation will discuss NCEA's views on current ideas for SEA improvement.

Reflections

George Kremlis, European Commission, DG Environment

Open discussion

Session 1.2: Status Updates from the European Community and Others (2)

Aim: Reports and assessment of the current status of 4 newer national systems that have incorporated the EU SEA Directive for SEA into their national systems on EU entry and a non-EU country. Their respective strengths, weaknesses, opportunities and threats as perceived by established practitioners are examined.

Working method: Papers.

SEA Effectiveness in Czech Republic

Michal Musil - michal.musil@integranet.cz, Martin Smutny, Jiri Dusik

The paper compares results from a survey on SEA practice conducted among public authorities in the Czech Republic with a similar study from the UK. The survey findings supports criticisms of the Czech SEA system that is characterized by over-extensive application of SEA without any robust quality assurance and follow-up provisions.

SEA Implementation in Romania: Tool or Burden

Marius Nistorescu - marius.nistorescu@epcmediu.ro, Alexandra Doba

After five years of effective implementation in Romania, SEA is still perceived as the step brother of EIA. Conducted mainly in the later stages of plans development, usually with no alternatives, with little or no public participation and with little consideration on the outcomes, SEA fails to be an iterative process and remains mainly a bureaucratic burden rather than a planning tool for managing the natural resources. The lack of reliable data on the state of environment combined with the lack of specific requirements on methodological approaches, lack of GIS use in assessment, an opaque process of public information and a low capacity for reviewing the environmental reports are unfortunately the weak pillars on which the SEA foundation is built. The paper summarizes the results of a critical analysis performed very recently under a national project aiming to expand Romania's capacity to generate global environmental benefits through mainstreaming the Rio Conventions into national, regional and local decision-making. In order to assess the efficiency of SEA in reshaping the plans and programs, the analysis focused on the quality of the environmental reports, the assessment methodologies used by SEA experts, public information and participation and the efficiency of monitoring programs. Measures to address all the identified gaps and shortcomings are also included in the paper.

The Use and Effectiveness of SEA in Slovenia

*Ales Mlakar - ales.mlakar@siol.com, Brane Kontic, Martin Zerdin, Alenka Cof, Lea Trnovsek, Nika Cigoj
Marius Nistorescu, Alexandra Doba*

Report of a project into an estimation of Slovenia progress in implementing SEA, how the process has contributed environmental protection goals, its efficiency, the problems that still remain and future steps to improve SEA.

SEA in Macedonia: Challenges and Opportunities

Jadranka Ivanova - jadrankaivanova@yahoo.com, Dragana Cerepnalkovsk

The presentation gives an overview of the process of establishing an SEA procedure and practice in the Republic of Macedonia, a candidate country for EU membership. It will cover the current status of SEA implementation and discuss challenges

Session 1.3: Status Updates from an International Perspective

Aim: Expanding the perspective on SEA outside the EU region, this session provides a series of short reports and updates on other national SEA systems in development or newly introduced within primarily non-European countries. Their perceived cultural models, respective strengths, weaknesses, opportunities and threats as perceived by established practitioners and academics are examined.

Working method: Papers.

Basic Features of the SEA System in Chile

Rodrigo Jiliberto - rjiliberto@taugroup.com, Juan José Troncoso Tirapegui

Review of the basic components of the recently introduced Chilean SEA system.

Challenges to Institutionalizing SEA in Vietnam

Tran Thi Huyen Trang - trang2k@yahoo.com, Daniel Slunge

The paper analyzes key challenges involved when moving from introducing to institutionalizing SEA in Vietnam. Building on interviews with Vietnamese and international stakeholders and an extensive literature review, we identify important institutional constraints at the micro, organizational and macro level which severely undermine SEA effectiveness in Vietnam.

Application and Challenges of SEA in the Middle East & North Africa (MENA) Region

Mutasem El-Fadel - mfadel@aub.edu.lb

This paper examines the application and challenges of SEA in the Middle East and North Africa (MENA) region, exploring the existing legal and organizational frameworks for implementing SEAs with a SWOT analysis about the implementation processes addressing the challenges and opportunities ahead.

SEA in Former Soviet Union Countries

Martin Smutny - martin.smutny@integranet.cz, Henrieta Martonakova

This paper provides a summary of current status of SEA in former Soviet Union countries. It addresses legal and institutional frameworks as well as general efficiency of SEAs and compares SEA practice in these countries with main general features of SEA systems in the EU.

SEA in the Planning Processes and Practices of Pakistan

Nazia Zakir - nazia.zakir@niap.pk, Raja Aurangzeb Khan

Pakistan is in the process of evaluating prospects of SEA in planning processes and practices. This paper provides the evaluation of existing planning process and need for SEA incorporation.

Session 1.4: Delivering Value in SEA in Scotland – The Scottish SEA Review

The Scottish SEA Review was published on 21 July 2011. It is the first full review of Scottish SEA practice since transposition of Directive EC/42/2001 and the subsequent enactment of legislation that applies SEA considerably more widely than elsewhere in the UK. The review has two key objectives: (a) Environmental Protection and Improvement - to identify if SEA was integrating environmental considerations into plans effectively and (b) Better Regulation - to identify ways to improve the efficiency and proportionality with which SEA is applied. This theme, and the papers within it, explores how the review was conducted and explains its key findings and recommendations. It is supported by two further papers that reflect on the findings within the context of theoretical and practical perspectives on the role and delivery of SEA.

Introduction to Theme - Scottish Government

Amanda Chisholm

A Summary of the Scottish SEA Review: Context and Method

Scottish Environment Protection Agency

The Scottish SEA Review will be published in July 2011. This is the first comprehensive evaluation of SEA effectiveness and efficiency in Scotland and considers all aspects of SEA practice in Scotland in some detail. A variety of new methods was developed to secure data from the wide range of Scottish SEA practitioners and participants. This data then formed the basis upon which findings about the efficiency and effectiveness of Scottish practice could be made. This paper will introduce the methods used to conduct the Scottish SEA Review, focusing on the participatory workshops, the targeted and comprehensive on-line surveys and the comprehensive analysis of 32 SEA cases.

A Summary of the Scottish SEA Review: Key Findings and Recommendations

Scottish Environment Protection Agency/Scottish Natural Heritage

The Scottish SEA Review will be published in July 2011. This is the first comprehensive evaluation of SEA effectiveness and efficiency in Scotland and considers all aspects of SEA practice in Scotland in some detail. Overall, the review has found that SEA as practiced in Scotland is making a difference to the way plans are prepared and to their content. There are, however, many elements of the process that could be improved to enhance its effectiveness as an environmental protection and decision making tool. This paper will provide an overview of the high level findings of the review and how they were translated into practical recommendations for SEA practice.

There is considerable experience with sector specific SEA across many of the EU member states and other countries worldwide. Not surprisingly, the biggest sector of application is spatial planning due to (a) the existence of a large number of spatial plans at different scales of planning and (b) the general SEA duty of spatial plans under the EU Directive. However, other emerging sectors are becoming more relevant - currently the strongest seems to be the energy sector, and an increasing number of voluntary SEA applications are to be found. Moreover, the scale of SEA application appears to be becoming more and more strategic. This dynamic within SEA applications in key sectors also opens the floor both to new “non-traditional” settings for SEA application and to innovative “non-traditional” approaches to SEA.

Session 1 explores lessons learned and future visions from SEA application in key sectors, including transport, water, waste, energy and land use planning. Examples are provided from the United Kingdom, Poland, Portugal and The Netherlands.

Some of the current challenges and issues associated with the transposition and implementation of SEA requirements for spatial plans in Iceland, Italy and Slovenia are presented in Session 2.

One of the emerging sectors of SEA, namely strategic energy planning, is examined in Session 3. Presentations cover the status quo and lessons learned from Denmark’s energy sector, using SEA to incorporate environmental and sustainability questions in the Portuguese oil industry regulation policy, and a case study from Slovenia.

This is followed by a World Café discussion on the challenges of SEA for energy infrastructure plans (Session 4). This session asks how we can deal with conflicts with other plans and programmes, alternatives and transboundary impacts of linear energy infrastructure, social and health issues versus nature conservation, and SEA as a mitigation tool between space-based development and energy infrastructure for its energy demand.

Session 5 is a presentation of SEA application in “non-traditional” settings. Examples include using SEA to assess: tourism development in the Indian Sundarbans, environmental and social impacts of REDD+ initiatives in Kenya, and regional air quality impacts of industrial complex planning in the Republic of Korea.

Session 6 focuses on methods for SEA of spatial plans, and explores some emerging “non-traditional” methods. Presentations include: A methodological roadmap for land use master plans in Norway, using the impact assessment process to capture the complexity of partnerships (between government, companies, communities) and provide guidance for how to create good partnerships, and finally a case study on the influence of street level bureaucracy in SEA implementation for the Copenhagen spatial plan in Denmark.

Session 7 summarises the current state of the art and explores the main challenges and ways forward identified during the previous sessions. What is the verdict on sector specific SEA? What are we getting right, what could we do better? Which lessons can be drawn from current SEA practice and how can these be utilised?

Questions that this theme will explore include:

- What is the status quo of sector specific SEA application?
- What are the main strengths, weaknesses, opportunities and threats in current practice of SEA in key sectors?
- Is sector specific SEA influencing decision-making, and why/why not?
- What needs to be in place to improve current practice?
- How can we best make use of lessons learned?
- What are the future visions and ways forward?

Session 2.1: SEA application in major sectors: Lessons learned and future visions

Session 2.2: Transposition and implementation issues for spatial planning

Session 2.3: Strategic energy planning and SEA

Session 2.4: Energy infrastructure and SEA: A network of challenges

Session 2.5: SEA application in “non-traditional” settings

Session 2.6: SEA application using “non-traditional” methods

Session 2.7: SEA application in key sectors: Ways forward

Session 2.1: SEA Application in Major Sectors: Lessons Learned and Future Visions

Aim: To explore practical examples and lessons learned from SEA application in key sectors, and to discuss current challenges and opportunities.

Co-chairs: Marie Hanusch, Monica Fundingsland Tetlow

Working method: Paper presentations.

Main conclusions from presentations and discussions will be considered in the last session and incorporated into the conclusions from the theme.

SEA Application in UK, Poland and Portugal

Cristina West - cristina.west@atkinsglobal.com, Joanna Borzuchowska, Ana Ferreira

The requirements of the SEA Directive have been transposed into law in all EU countries. However, national guidance on how to undertake SEA is not completely identical, reflecting different approaches to decision-making across European countries. This paper will provide a comparative analysis of how SEAs are influencing decision making at different planning levels in the United Kingdom, Poland and Portugal in various sectors, including transport, water, waste and land use planning. It will also examine the extent to which SEA guidance and best practice are contributing to better decision-making and will set out the key success and constraints factors.

Eye on the Ball! SEA in Dutch Spatial Planning

Bobbi Schijf - bschijf@eia.nl, Marja Van Eck

The Netherlands Commission for Environmental Assessment now has 25 years of experience with environmental assessment. From the time that it was introduced, this tool was applied not exclusively to projects, but also to specific plans, programmes and strategies. Approximately 330 Strategic Environmental Assessments have been undertaken in the Netherlands so far. This presentation will focus on experience with SEA application in spatial planning. In The Netherlands SEA is mandatory for so-called “spatial visions.” These are long term spatial planning strategies prepared at central, regional or local level. A spatial vision outlines the desired spatial developments of the area that it covers, and explains which authorities and instruments will be engaged to achieve these developments. An analysis of the succession of SEAs produced for spatial visions teaches three important lessons: (1) There is no one-size-fits-all: great diversity in the types of spatial areas and planning questions in the structure visions requires a flexibility in SEA focus. (2) Keep your eye on the ball: the implementation of spatial visions is complex. It encompasses many projects and is undertaken in a timeframe of 20-40 years. To offer a durable framework for plan implementation, SEA should concentrate on the overarching spatial choices driving the structure vision, rather than on detailed location choices. (3) Make the SEA sustainable: a sustainability focus within SEA works well for spatial visions. SEA is effective in showing to which extent spatial solutions under consideration can achieve the goals for sustainable development that decision-makers have set for themselves. And generate better options if necessary. In this paper the lessons learned from SEA application to spatial visions in the Netherlands are drawn out, and will be illustrated with some examples.

Radioactive Waste Disposal: An SEA Case Study

Mark Gough - mark.gough@nda.gov.uk

UK Government policy for the long term management of higher activity radioactive wastes is geological disposal. This involves isolating the wastes deep inside a suitable rock formation to ensure no harmful quantities of radioactivity ever reach the surface. Finding a suitable location for disposal involves communities volunteering to take part in a site selection process and then working in partnership with Government to identify and assess potential sites. The UK's Nuclear Decommissioning Authority (NDA) will be undertaking an SEA of the implementation plan for geological disposal. The SEA will be used to support on-going development of the implementation plan and to support and inform the site selection process. This case study will outline preparatory work for the SEA and key challenges and opportunities likely to be faced. The long timescale over which a disposal facility would operate (well into the next century) poses an interesting problem in terms of defining a baseline against which effects can be judged, with climate change a particular issue. The principle of voluntarism in the site selection process also raises questions about “reasonable alternatives” and the detailed level of assessment required to effectively support the site selection process may push the SEA to the boundaries of EIA. It is hoped the conference will provide a forum for discussion and feedback on these issues and the NDA's proposed approach to, and scope of the SEA.

Session 2.2: Transposition and Implementation Issues for Spatial Planning

Aim: To explore some of the challenges and current issues associated with the transposition and implementation of SEA requirements for spatial plans in EU member states.

Co-chairs: *Davide Geneletti, Adam Barker*

Working method: Paper presentations.

Main conclusions from presentations and discussions will be considered in the last session and incorporated into the conclusions from the theme.

Adapting SEA Effectively to National Planning

Asdis Hlokk Theodorsdottir - hlokk@ru.is

A national spatial planning instrument has recently been introduced for the first time in a new Planning Act in Iceland. The provisions for this national spatial planning strategy in the new Planning Act are a result of a debate that has gone on, with intervals, for over two decades. With only a general framework for this new planning instrument having been established in the new Planning Act, the task ahead is to develop this new planning instrument more or less from scratch, including how SEA shall be incorporated into and contribute to the planning process and the planning documentation. Here lies an opportunity and a challenge to effectively integrate SEA into a new and evolving planning context. The paper presents an analysis of how SEA can most effectively be incorporated into the process and documentation of this new planning instrument, both with regard to the “hard infrastructure” of rules and regulations and the “soft infrastructure” of practice and processes. This builds on a thorough analysis of the planning culture and planning traditions in Iceland and the discourse that has developed around the introduction of a national planning instrument over decades. It also draws on new evidence on SEA implementation to municipal and sectoral planning in Iceland. Lessons from this case can have direct relevance to regional and national plan-making environments in other national contexts, especially those that, like Iceland, are subject to EU SEA requirements.

Regional SEA Systems of Italian Spatial Planning

Carlo Rega - carlo.rega@polito.it, Marco Pompilio, Chiara Bragagnolo, Davide Geneletti, Alessandro

The Italian local spatial planning is regulated by regions. Consequently, regional planning acts and SEA legislations are particularly differentiated within the country. In fact, the lack of a national guidance contributed to a heterogeneous interpretation of the subsidiarity principle, leading to different planning acts and SEA systems. Furthermore, the transposition of the EU Directive at national level occurred only in 2006, but SEA practice anticipated it, prompted by both the regulations on plans and programs adopted with the EC funding schemes and the regional spatial planning acts. In particular, the implementation of regional SEA systems differs with respect to a number of key issues, including the authority in charge of evaluating the SEA process and documents, the relationship between SEA and decision-making procedures, and the interpretation of the subsidiarity principle. This paper aims to provide an overview of the Italian SEA system with focus on spatial planning, by illustrating differences and analogies among the regional systems, and discussing the main areas of concerns. Among others, these are the need to find the right balance between integration and independence of SEA, the appropriate scale to address environmental problems, the effectiveness of planning and SEA tiering, and the opportunity of SEA to improve the inter-institutional governance in a context characterized by fragmentation of competences and decisional powers. These issues are presented and discussed in relation to the broader EU context.

The Case of SEA Process in Ljubljana Spatial Plans

Vesna Kolar Planinsic - vesna.kolar-planinsic@gov.si, Matjaz Harmel, Mojca Lenardic, Miran Gajsek, Tomaz Souvan

Slovenia transposed the SEA directive in 2004. Since then, the new Spatial Planning Law has been accepted to improve the spatial planning and the municipalities have had to prepare the new spatial plans. The paper shows the legal transposition of SEA directive in the Environmental Law and Spatial Planning law for town and country plans. From more than 200 municipality plans in preparation, one of the first cases was SEA case of municipality Ljubljana, the capital of Slovenija. Ljubljana has implemented SEA on the Strategic plan up to 2027 and land use plan. The Ministry of Environment and Spatial Planning is controlling the few steps in the administrative procedure: screening, scoping, quality of environmental report and final decision. The paper presents main methods in different steps of SEA process as screening, scoping, and preparation of environmental report and integration of the environmental aims into the plan. The methods of consultation with ministries and organization responsible for the environment, including health are presented. The process of integration and effectiveness of SEA application in relation to the accepted plan is presented. Alternatives developed at the beginning and during the SEA process are shown as well as public consultation. The case is evaluated according to theoretical framework. Some obstacles are also presented and on its base some recommendations for SEA for local community plans described.

Aim: To explore challenges and effective approaches of different applications in the emerging SEA sector of strategic energy planning.

Co-chairs: *Mojca Hrabar, Amanda Chisholm*

Working method: Paper presentations.

Main conclusions from presentations and discussions will be considered in the last session and incorporated into the conclusions from the theme.

Dilemmas in SEA Application: The DK Energy Sector

Ivar Lyhne - lyhne@plan.aau.dk

Based on three years of collaborative research, this paper outlines dilemmas in the application of SEA in the strategic development of the Danish energy sector. The dilemmas are based on concrete examples from practice in the implementation of SEA in the sector, and they concern, *e.g.*, strategic choices in transmission network development and ministerial choices on location of energy production units. The paper outlines the roots of the dilemmas as well as their implications for timing and content of SEA. The verdict is that we (in the Danish energy sector) are starting to get it right. Lessons for SEA implementation in similar contexts are proposed.

The Case of the Slovenian National Energy Plan

Vesna Kolar Planinsic - vesna.kolar-planinsic@gov.si, Barbara Breztnik, Jure Likar

The paper presents transposition and implementation of SEA directive 42/2001 in Slovenia in the period 2004-2010. The experiences of all phases of SEA are described as transposed in the Environmental Act and decree on Environmental Report as well as in other relevant environmental legislation. The overall administrative measures are presented and implementation activities as differ from the plans and programmes context: main screening decisions, the main plans and programmes themes. The reasons for further SEA process are described and analyzed as seen from the screening decision. The links between appropriate assessment according to habitat directive are presented. There are two practical cases of SEA on programme level presented: National Energy Plan and the Operational Programme for Urban Waste Management. The analyses of all phases: screening, scoping, quality of environmental report, consultation with ministries and organisation and public, are described and the integration of environmental issues into the plan are presented. The links and interrelation with other plans, programmes and spatial planning acts are also described. The transboundary impact assessment procedures according to directive and Protocol on Strategic Environment Assessment to the Convention of transboundary impact assessment for both programmes are also presented.

SEA Contributes to Oil Industry Regulation Policy

Orlanda Domingos - om.domingos@gmail.com, Manuel Marques

The upstream segment of the oil industry is taking its first steps in Portugal. Oil operations are inherently associated with environmental impacts, facing new challenges in environment and sustainability. The scope of strategic instruments is a powerful tool in building a structured policy framework and promoting support for economic and development interests. In this context, the conceptual and methodological framework of the Strategic Environmental Assessment (SEA) is revealed as a major contribution to the integration of environmental dimension and sustainability to sector policy regulation. Through development of a strategic-based model, strategic options are evaluated, opportunities and risks are identified, establishing a benchmark of alternative strategic options, on the thematic, institutional and governance level, supporting decision-making in a dynamic context and stressed by external pressures. This study demonstrates the relevance of the application of SEA, as well as the applicability of the strategic based methodology, at regulation level of business sectors, facilitating quick and consistent decision-making in the future, leading to effective uncertainty reduction in decision-making process and to greater likelihood of achieving programmed objectives and goals, contributing to a sustainable and integrated planning. On the other hand, it reveals how to use the SEA at the highest level of policy-making decision in consonance with the SEA protocol.

Session 2.4: Energy Infrastructure and SEA: A Network of Challenges

Aim: To discuss the challenges of SEA for energy infrastructure plans.

Co-chairs: *Mojca Hrabar, Amanda Chisholm*

Working method: World Café.

Main conclusions from the discussions will be considered in the last session and incorporated into the conclusions from the theme.

Introduction

Mojca Hrabar - mojca.hrabar@oikos.si

Discussion on SEA on energy infrastructure will share experience in SEAs for energy infrastructure plans; these often show conflicts with other plans and programmes on various levels. Hear about practices in other countries, strategic planning on EU level and SEA objectives and criteria for energy infrastructure. EU has strategic plans and corridors, but on the regional level, SEA process often gets caught between strategic level and regional/local interests. Moreover, numerous larger infrastructure objects have serious transboundary effects, if not environmental at least social. Suggested topics: approaches to SEAs of spatial plans for large energy infrastructure (renewables, transmission lines, pipelines), assessing alternatives and transboundary impacts of linear energy infrastructure, social and health issues versus nature conservation in SEAs, SEA as mitigation tool between space-based development and energy infrastructure for its energy demand.

Session 2.5: SEA Application in “Non-Traditional” Settings

Aim: To explore SEA application in “non-traditional” settings and the potential for experience transfer to other sectors.

Co-chairs: *Ausra Jurkeviciute, Josh Fothergill*

Working method: Paper presentations.

Main conclusions from presentations and discussions will be considered in the last session and incorporated into the conclusions from the theme.

SEA for Tourism in the Indian Sundarbans

Ernesto Sanchez-Triana - esancheztriana@worldbank.org, Raghvendra Singh, Santiago Enriquez, Priti Kumar

The Sundarbans mangrove forest boasts one of the richest and most unique ecosystems in the world. It occupies 10,000 km² in the Ganges delta, and spans India and Bangladesh, with about 40% of the area within the Indian state of West Bengal and the remainder in Bangladesh. The Indian Sundarbans is home to a unique biodiversity, as well as to an estimated 4 million people, many of which live in poverty. Many challenges confront the Sundarbans, including sea level rise, geo-morphological changes, and unsustainable livelihoods that have little impact in reducing poverty while significantly eroding the region's natural capital. The Government of West Bengal conducted an SEA with the World Bank's support to assess opportunities to promote tourism development in the region to support local livelihoods, taking into account the fragility of the Sundarbans ecosystem. The SEA included a series of studies, as well as strong participatory mechanisms, which pointed at the need of shifting from the region's current focus on developing mass tourism to a new strategy of low impact eco-tourism catering to specific market niches. The SEA also helped identify the geographical areas where tourism infrastructure should be located, the zones for activities such as wildlife observation, and the skills and capacities that local communities would require to provide ecotourism services.

Can SEA of REDD+ Improve Forest Governance?

Daniel Slunge - daniel.slunge@economics.gu.se, Fernando Loayza, Anders Ekbohm, Paul Guthiga, Wilfred Nyangena

The Forest Carbon Partnership Facility has recently proposed the application of strategic environmental social assessment (SESA) for incorporating environmental and social considerations in the preparation of REDD+ initiatives. This paper discusses the potential contribution of SESA to REDD+ initiatives, drawing on experiences from earlier attempts to large scale forestry sector reforms and a recent World Bank pilot program on strategic environmental assessment. The paper suggests that SESA can be a useful approach for strengthening institutions and governance needed for managing diverse environmental and social impacts related to REDD+. More specifically, SESA can enhance policy making and governance through raising attention to environmental and social priorities, strengthening constituencies for policy change and

Session 2.6: SEA Application Using “Non-Traditional” Methods

Aim: To explore innovative methods and approaches to SEA in spatial planning.

Co-chairs: Charlotta Faith-Ell, Rob Gardner

Working method: Paper presentations.

Main conclusions from presentations and discussions will be considered in the last session and incorporated into the conclusions from the theme.

Making an Impact through Partnerships

Charlotta Faith-Ell - charlotta.faith-ell@wspgroup.se, Jos Arts

There is a need for impact assessment processes that capture the complexity of partnerships (between government, companies, communities), while providing relevant and practical guidance. One reason is that traditional IA focuses much on the consent decision and less on the complete supply-chain from the first strategic plan, to project development, realisation, up to operation and maintenance. However, in order to create true partnerships, a good start is crucial. Here SEA plays a vital role. At the same time, it is important to adopt a bottom-up perspective relating initiatives carefully to what is happening on the ground (monitoring and daily operations).

Street-Level Bureaucracy in SEA Implementation

Lone Kørnøv - lonek@plan.aau.dk, Jie Zhang

A successful implementation process can function as a linkage between Strategic Environmental Assessment (SEA) and planning, and increase effectiveness understood as influence on decision-making and planning practice. There is, though, a way from the announcement of the SEA report, including mitigation measures minimising negative impacts and enhancing positive, till it influences planning practice and decision-making. Based upon implementation theory, the research identifies 13 reasons why implementation of SEA is difficult, with an emphasis on the influence of street-level bureaucrats (SLBs). These reasons are tested in a study of the implementation process of Copenhagen's spatial plan from 2009-2011 through document analysis, focus group interview, combined with questionnaires, telephone and e-mail follow up. The analysis shows that the transmission of the SEA into planning practice is very complex, especially when confronted by the planners at the front line to implement measures suggested in the SEA report. These planners function as SLBs and are challenged by various barriers such as ambiguous and contradictory goals, never adequate resources, overload, uncertainty of contextual environment, etc. As a result, the planners use different coping strategies to develop some shortcuts or simplifications to manage the SEA implementation. Finally it is found that the planners are not only implementing and transferring the SEA into practice, but are also being innovative and trying to reshape the outcomes that go beyond the original SEA report. The article provides insight into possibilities and barriers for the implementation of SEA in a spatial planning context, and underlines the implementation process and the political, financial and human resource systems involved, and the high influence of front line planners who also function as “innovator” during the transmission from SEA proposal to planning practice.

SEA Guidance for Land Use Master Plans in Norway

Jørgen Brun - jb@md.dep.no

The presentation gives an overview of the legal context, objectives and main contents of the Norwegian SEA Guidance for landuse master plans to be published 1 October. The Guidance aims at giving municipalities and regional authorities a practical methodological roadmap for carrying out SEA as an integral part of the planning process. It further gives examples of assessments of plans for different themes such as landscape, biodiversity, cultural heritage and noise.

Session 2.7: EA Application in Key Sectors: Ways Forward

Aim: Wrap-up session to further discuss the key strengths, weaknesses, opportunities and threats which have been identified during the previous sessions, and to operationalize some of the ways forward.

Co-chairs: Moria Hanusch, Monica Fundingsland Tetlow

Working method: Group work and roundtable discussion.

The session will be introduced by a summary of the main points from the previous sessions. Selected issues will be discussed in small groups. Participants will be asked to prepare a short statement on behalf of each group on ways forward for that particular issue. Conclusions achieved by the group will provide the basis for a final roundtable discussion.

Stakeholder involvement is increasingly viewed as one of the crucial dimensions of strategic environmental assessment (SEA). Therefore, this stream will analyse and discuss the key question “Public and stakeholder consultation in SEA: too little or too much?” not only in terms of quantity, but in terms of quality as well.

Building upon a stock of ten years of experience with the EU SEA Directive, this stream intends to deliver a critical review of the experiences gathered related to stakeholder engagement. Therefore, presenters will give their views on (i) case studies on stakeholder engagement in SEA related to certain plans and programmes; (ii) on case studies on stakeholder engagement in SEA related to certain countries; and (iii) on selected measures and tools to increase the effectiveness of stakeholder engagement in SEA.

Public participation has to be integrated to any SEA procedures in order to include information that is relevant to the decision-making process, to increase the credibility of the plans, programmes or policies (PPPs) considered, and to support a democratic approach to the plan-making process. Stakeholder engagement comprises the involvement of various actors, such as the general public, the one of authorities and the engagement of other parties (such as NGOs, interest groups, etc.) into the SEA process.

Some of the questions to be discussed might be “How well is this process of public participation in SEA working in different countries and for different PPPs?” “What does it deliver to SEA and decision-making?” “Is it time to move toward more interactive approaches such as multi-stakeholder policy dialogues and dispute resolution or to broaden the terms of engagement?” “Are there any new innovative approaches regarding stakeholder engagement in SEA?” “How can non-European SEA contexts benefit from one decade of EU experiences in stakeholder engagement in SEA?”

Session 3.1: Case studies on stakeholder engagement in SEA related to certain plans and programmes

Session 3.2: Case studies on stakeholder engagement in SEA related to certain countries

Session 3.3: How to increase the effectiveness of stakeholder engagement in SEA

Session 3.1: Case Studies on Stakeholder Engagement in SEA Related to Certain Plans and Programmes

Aim: To present and discuss case studies on stakeholder engagement in SEA related to certain plans and programmes.

Working method: Presentation and discussion of papers.

Effective Engagement in Offshore Renewables SEA

Fiona Simpson - fiona.simpson@scotland.gsi.gov.uk

Early and effective public engagement in SEA can be particularly challenging in the context of high level plans and programmes. In Scotland, the recent SEA of the Plan for Offshore Wind Energy in Scottish Territorial Waters generated an unprecedented public response. This paper will present a case study of the consultation process. It will begin by examining the preconditions for ensuring that notionally compliant consultation in SEA goes further to become effective public engagement. It will go on to consider the key challenges encountered, which include striking the right balance between specificity and strategy, the methods of engagement, and managing and reconciling conflicting stakeholder perspectives. The case study emphasises the importance of undertaking SEA in a context where views on environmental effects can genuinely influence final outcomes.

SEA of Water Management Plans and the Role of the Public

Zdenek Keken - keken@knc.czu.cz, Vladimír Zdrzil, Miroslav Martis

The form and extent of public involvement in preparation of water management policies and its SEA significantly influences the final form of water policy on international, national and regional levels. The paper deals with early public involvement and its quality in the SEA process and its effect on the measure of acceptance for the final version of conception.

Session 3.2: Case Studies on Stakeholder Engagement in SEA Related to Certain Countries

Aim: To present and discuss case studies on stakeholder engagement in SEA related to countries.

Working method: Presentation and discussion of papers.

Public Participation in SEA in Kenya

Harry Spaling - harry.spaling@kingsu.ca

Meaningful public engagement is a challenging, if promising, feature of SEA for advancing sustainable resource-based policies, plans and programs in developing countries such as Kenya. This paper will report on early results of research underway into participation in Kenyan SEA based on a review of 11 SEA reports.

The type and extent of participation will be compared to standard SEA guidelines, including the “2011 National Guidelines for SEA in Kenya.” Questions such as who participates, how and at which stages of the SEA process and how participant input is used will be asked. Factors that promote and hinder participation will be identified, with special attention given to community factors such as information access, participant literacy and mobility, local knowledge and a “tyranny” of participation. Findings are expected to inform the next (case study) phase of the research focused on community-based approaches to SEA and if/how community approaches contribute to more meaningful participation and to learning outcomes that enhance sustainability.

SEA: Effective as Consensus-Building Tool

Kerstin Arbter - office@arbter.at

What makes participative SEAs work? From various cases in Austria, Luxembourg and Liechtenstein, I have learned that high quality participation, going considerably beyond the SEA Directive, can actually contribute to SEA effectiveness. Some key success factors of stakeholder participation:

(1) The continuous involvement of environmental NGOs, speaking independently on behalf of environmental interests, (2) stakeholder involvement throughout the entire planning and SEA process, so that they can influence the choice and assessment of alternatives and can reconcile interests in the course of the process and (3) enabling public authorities, NGOs and external experts cooperating at eye level and having an equal say in order to reach a consensus on the final plan. We could increase the effectiveness of SEAs, applying the SEA Round Table approach as well as the Austrian Standards of Public Participation.

Session 3.3: How to Increase the Effectiveness of Stakeholder Engagement in SEA?

Aim: To present and discuss how to increase the effectiveness of stakeholder engagement, focusing on tailored public participation processes and other issues.

Working method: Presentation and discussion of papers.

Upstreaming Public Participation in SEA

Jean-Philippe Waaub - waaub.jean-philippe@uqam.ca

From what we have learned from case studies at the international level, it is of the utmost importance to tailor public participation processes according to the national context but also to foresee evolving trends. We discuss three key issues and possible answers to define a public participation process to SEA.

Firstly, is the involved process about traditional SEA (dealing with environmental issues at strategic level) or about strategic assessment (or integrated assessment) including environmental issues among others, or even sustainability assessment at strategic level? The definition of the stakeholder system is a critical step. Is there any room for involving the general public? We propose to design flexible processes having in mind the possibility to work at two levels. The first one would involve societal representativeness for more efficient contributions and the second one, if possible, involving the general public for consolidation still open to unforeseen issues that could be raised, and validation.

Secondly, how much the planning process, the SEA process and the participatory process are tiered? We will discuss the opportunity of methodological approaches that are more suitable for better tiering and for upstreaming stakeholder's participation.

Thirdly, there is a need to face value issues, to take into account different knowledge basis (e.g., scientific, vernacular, aboriginal or traditional), and to deal with incomplete information, ambiguities, and uncertainties which are more or less inherent according to the strategic level. In conclusion, these three issues and the possible array of answers are potentially challenging the role of environmental assessment experts and the balance of power among the parties as defined by the Arnstein's ladder of citizen participation. We discuss some opportunities and threats of different organizational design.

Theme chairs:

Riki Therivel, *Levett-Therivel Sustainability Consultants and Oxford Brookes University*, riki@levett-therivel.co.uk
 Mike Jones, *Stockholm Resilience Centre*, mike.jones@stockholmresilience.su.se
 Steve Smith, *URS/Scott Wilson*, Steve.Smith@scottwilson.com

This theme explores several dimensions related to next-step SEA: improving those aspects of SEA that are currently not carried out well, broadening out SEA to act as an integrative sustainability tool, and links between SEA and resilience thinking.

The first two sessions consider ways of dealing with existing problems in carrying out SEA. A presentation-based Session 1 focuses on ways of improving weaknesses in current SEA practice: how soils can be better considered in SEA, how reasonable alternatives can be better identified, and how trend analysis can be used to improve our understanding of past and future trends. A discussion-based Session 2 then considers how to deal with problems of unwilling or downright negative SEA “clients” (planners): this session will be of particular interest to SEA consultants, and will specifically consider whether “SEA process certificates” are needed.

The second two sessions look forward to the future of SEA. Session 3 reviews three case studies of sustainability appraisal, and asks whether and how SEA should be broadened to also consider social and economic issues: would this water down the whole purpose of SEA? Would it simply present three “silos” of social, economic and environmental assessment, or are the opportunities for integration, win-win and making tough choices?

Session 4 considers whether and how resilience thinking can inform SEA. Resilience is the ability of a social or environmental system to absorb disturbance and return to its original state. Resilience thinking accepts that change will occur and aims to manage for change. So how is this different from sustainable development? And what can a resilience focus bring to SEA?

Session 5 is a workshop/discussion about the future of SEA: how can we build on current strengths and deal with current weaknesses? What are emerging opportunities and threats, and how can the SEA community respond to them?

Questions that this theme will explore:

- What are the weaknesses of current SEA practice – both technical and procedural - and how can these be overcome?
- How can a better context be set for EA practice?
- Can SEA be effectively broadened to act as an integrative sustainability tool?
- How can resilience thinking inform and support SEA?

Session 1: Dealing with weaknesses in current SEA practice

Session 2: Dealing with difficult SEA clients

Session 3: From SEA to sustainability appraisal

Session 4: Resilience assessment

Session 5: The future of SEA

Session 4.1: Dealing with Weaknesses in Current SEA Practice

Aim: To explore three aspects of current SEA practice that are not carried out effectively – analysis of impact on soils, development of reasonable alternatives, and trend analysis (prediction of the future baseline without the plan) – and how this could be improved.

Chair: Riki Therivel

Working method: Paper presentation.

SEA as a Tool for Preserving Land Consumption

Aldo Treville - aldo.treville@mail.polimi.it, Paolo Pileri

The value of “soil” is poorly taken into consideration in Italian SEA of urban and regional planning, reflecting the low awareness of the many functions and vital services to human activities and ecosystem survival, and the misconception of soil degradation impact on water, human health, climate change,

nature, biodiversity, protection, and food safety. Recently enhanced planning practices show soil protection objectives, but they are still not properly justified, assessed, and compared to different alternatives; and consequently not respected due to lack of adequate monitoring. The paper focuses on exploring the potential of SEA as an effective tool of improving urban and regional planning processes, in respect to land consumption, soil degradation and urban sprawl. Some SEA of Urban Plans in Northern Italy are discussed, underlying how they were able to stimulate better awareness of soil as a resource, and how this new awareness led to the integration of environmental considerations, usually neglected, into the planning process.

Improving the Consideration of Alternatives in SEA

Steven Smith - steve.smith@scottwilson.com, Alex White

The SEA Directive requires the consideration of “reasonable alternatives” and, as such, goes to the “heart of much public-sector decision-making” (DG Environment). Guidance from the European Commission emphasises that “the studying of alternatives is an important element of the assessment and the Directive calls for a more comprehensive assessment of them than does the EIA Directive.” The development of reasonable alternatives facilitates a robust assessment process which can focus on evaluating the environment and sustainability implications of different choices and so assist decision-makers in choosing a preferred option. This paper will focus on the consideration of alternatives in English spatial planning and will examine the challenges encountered in developing reasonable options as well as what these look like in reality, examples of emerging best practice and the implications of recent legal judgements for future planning and assessment practice.

Trend Analyses in SEA

Jiri Dusik - jiri.dusik@integrant.cz

Trend analyses are powerful tools that allow SEA practitioners to analyze and present evolution of key issues over time. Analyses of trends can use storylines, graphs, satellite imagery, spatial analyses or other information which is available in the study area. Moreover, trends analyses allow practitioners to determine endogenous drivers that can be influenced by the proposed PPP and exogenous drivers which are beyond the control of a particular PPP. Proper trend analysis has the capacity to facilitate analysis of the future baseline trends (trends without the proposed PPP) and strengthens the analysis of impacts simply because it allows assessment to consider not only direct impacts of the proposed PPP on the key issues but also its indirect effects on the key root causes that drive the trends in the priority issues.

Session 4.2: Dealing with Difficult SEA Clients

Aim: To consider, from the perspective of those undertaking SEAs, approaches for dealing with a constraining factor to some SEAs: planners/clients who are uninterested or downright hostile to SEA.

Chair: Riki Therivel

Working method: Very brief ground-setting remarks, followed by a discussion.

SEA is meant to be a rational, “neutral” process that informs decision-making, and SEA findings are expected to be effectively taken into account by plan-makers. But SEA adds time and expense to planning processes, it can shine a light on planning practices that are non-rational and possibly fraudulent, and it may open the way to public input that complicates planning and challenges planners’ views.

Understandably, planners do not always welcome SEA with open arms: many find it a waste of time, and some actively try to challenge it. They may cut corners (*e.g.*, not consider alternatives, or not carry out public consultation where they are legally obliged to) in the hope that they are not legally challenged. Where the SEA is carried out by consultants, clients may try to rewrite “inconvenient” parts of the consultants’ SEA reports, threaten to not pay consultants if they are unhappy with the findings of the SEA, or in extreme circumstances use bribery or blackmail.

This session will start with brief examples by consultants Jiri Dusik and Orlando Venn of “problem client” behavior, possible reasons for this behavior, and possible responses to it. The floor will then open to a wider discussion of this topic.

One way of dealing with this problem might be to have a certification of the SEA process: the SEA practitioner would sign a form (which would be included in the SEA report) stating that they have not been subject to any threats or inducements, that their SEA report documents all of the key issues raised by all parties during the SEA process, and that they are not aware of any fraudulent practices in the planning process which would constrain the consideration of SEA outcomes in decision-making. Josh Fothergill will kick off the second half of the discussion by discussing the certificate programme of the UK Institute of Environmental Management and Assessment, and how such a certificate could be applied to SEA processes. A wider discussion will then follow on whether and how certification of SEA processes could be implemented.

Aim: To analyse advantages and disadvantages of extending SEA practice to also cover social and economic considerations.

Chair: Mike Jones

Working method: Paper presentations.

Sustainability Appraisal of Water Strategies

Bryan Jenkins - bryan.jenkins@canterbury.ac.nz, Shona Russell, Martin Ward, Barry Sadler

Water management in the Canterbury region of New Zealand is reaching sustainability limits in terms of water availability and cumulative effects of its use. The Canterbury Water Management Strategy was developed as a collaborative governance approach to formulate a new way of managing water in the region. A key component of strategy development was the sustainability appraisal of strategic alternatives (the first such application in New Zealand). The paper describes the appraisal process set in a sustainability framework based on four well beings (economic, environmental, social and cultural) and New Zealand resource management legislation. A paradigm shift has been required to water management based on a strategic approach to the management of the resource (rather than effects-based management of projects), on collaborative governance approaches to decision-making with multi-stakeholder and community engagement (in contrast to the adversarial approach of applicant-driven development within environmental constraints), and on proactive achievement of sustainability outcomes (rather than reactive consideration of adverse effects).

SEA of the Railway Corridor Vienna - Bratislava

Felix Sternath - sternath@raumumwelt.at, Lukas Lang, Ernst Mattanovich

In 2010, the first-ever railway SEA in Austria was carried out on occasion of a number of network improvements planned by the Austrian Federal Railways. It covered several railway connections between Vienna and Bratislava. Also for the first time, the SEA did not focus merely on a single project and possible alternatives but on an entire transport corridor comparing different network conditions. The paper firstly intends to demonstrate how the large scale of the subject was successfully confronted in the environmental report. It secondly and mainly shows the deduction of a target system from numerous official documents from different levels (global to local) concerning amongst others spatial development, traffic planning and environmental protection. This target system was sub-classified in main goals with respective secondary goals as well as appropriate indicators. Each secondary goal was assigned to at least one pillar of sustainability. It clearly was shown that many secondary goals correspond to more than just the latter. The target system was then used as the basis to assess the sustainability of the alternatives. The paper thirdly advocates a preferred use of qualitative methods when it comes to assessing the impacts on a larger scale. The use of qualitative methods corresponds in a high degree to the strategic approach which is the main difference to EIA. Fourthly and finally, the paper describes the positive experiences with cross-border consultations by involvement of the Slovak Republic.

SEA for Sustainable Bioenergy Production

Rocio A Diaz-Chavez, r.diaz-chavez@imperial.ac.uk

Renewed interest in biofuels has been motivated by different concerns, such as high oil prices, energy security and the effects of climate change. Though the use of biomass is widely favoured, the negative social and environmental implications may outweigh the outcomes. Therefore, there is a need to demonstrate that bioenergy crops are sustainably produced and comply with either national regulations or international standards derived from the market requirements. There is no single best methodology for assessing the sustainability of biofuel crops. Rather, this requires the use of a wide range of analytical tools, such as those which derive from EIA and SEA. Other environmental management tools and methodologies are already in use, including Environmental and social impact assessment, Corporate Social Responsibility and stakeholders participation, GIS, LCA. Government enforcement can also contribute towards pointing the way forward to sustainable production.

Session 4.4: Resilience Assessment

Aim: This session will explore concepts of resilience and consider how resilience thinking can inform SEA.

Chair: *Steve Smith*

Working method: Paper presentations.

Introduction to Resilience Assessment

Mike Jones

A brief introduction to the main principles of resilience, to set a context for the subsequent presentations

Integrating a Resilience Approach into SEA

Ric Eales - r.eales@cep.co.uk, William Sheate, Jonathan Baker

Climate change and biodiversity loss are among the most important environmental challenges faced the EU today. Both are complex and cross-cutting issues, which impact upon nearly all human activity. Progress towards combating and adapting to climate change, and halting the loss of biodiversity and damage to ecosystems requires sound consideration of these issues within the development and implementation plans/programmes. To achieve this requires the improved integration of these complex issues into SEA and the recognition that SEAs, especially within the context of a changing climate, need to assess not just the effect of the plan/programme on the environment, but also the effects future changes in the climate and ecosystem services for example will have on the plan/programme, *i.e.*, its resilience to these changes. This paper considers the value added to SEA, and plan/programme proponents alike, by incorporating climate change and biodiversity in SEA as part of integrating a resilience approach. It seeks to demonstrate that the relationship between a plan/programme and climate change and biodiversity can be conceptualized as either a “virtuous” or “vicious” cycle depending on whether, and how effectively, resilience to future change is integrated. Illustrative examples are drawn on to demonstrate how SEA can be used to facilitate a virtuous cycle and therefore the development of more resilient plans/programmes.

Translating Theory to Practice: Sustainability Planning in Australia

Carolyn Cameron - Carolyn.Cameron@environment.gov.au, Bill Grace, Jenny Pope

Environmental planners have been confronted by piecemeal “siloes” approaches to governmental planning process, often resulting in conflicting objectives and a lack of coherence between planning activities at different scales. More recently there is an opportunity to identify and apply broader, integrated processes in developing regional planning options. This paper examines Bill Grace’s proposed framework approach and its applicability to real world planning scenarios in Melbourne and Karratha Australia. The framework facilitates a single broad approach to sustainability planning, assessment and management that can be consistently applied at any scale, from regions to cities to local settlements. The framework is grounded in resilience theory and considers human activities as influences on complex, dynamic socio-ecological systems (SESs). Application of the framework commences with the development of a shared understanding of the SES defined at any relevant scale) and the current “health” and resilience of its various sub-systems. Clearly articulated goals for each of the sub-systems enable concurrent assessments of alternative scenarios and provide the basis for ongoing adaptive management through robust monitoring and evaluation. A key consideration is innovative and cross sectoral governance structures that facilitate ongoing adaptive management of the socio-ecological systems.

Session 4.5: The Future of SEA

Aim: This session will consider likely future directions of SEA theory and practice.

Chair: *Riki Therivel*

Working method: Workshop and discussion.

This session aims to bring together the findings from previous sessions and other themes. In the first part of the session, participants will be split into four groups to brainstorm, respectively, the strengths, weaknesses, opportunities and threats related to SEA. The brainstorming findings will be put on posters, and participants will be asked to “vote” on which of these are most significant. The second part of the session will be an open floor discussion focusing on the most significant SWOTs and on recommendations for the future of SEA theory and practice.

Theme chairs:

Lone Kørnøv, Aalborg University, lonek@plan.aau.dk

Ivar Lyhne, Aalborg University

Sanne Vammen Larsen, Aalborg University

“IA as a field of practice has the opportunity to take leadership and be critical agents to benefit climate change integration in policy and decision-making.” (Synthesis report, IAIA special symposium in Aalborg 2010)

The integration of climate change in SEA is an emerging practice. As concluded in the IAIA symposium on climate change and impact assessment in Aalborg, impact assessment has a role to play in the urgent need for both reducing green house gas emissions and adapting to the unavoidable changes already happening. Besides providing a legal framework for climate integration, SEA has the potential to secure a holistic assessment where climate change impacts are viewed and assessed along side other environmental concerns like, *e.g.*, biodiversity and human health.

The current practice though shows some tendencies challenging the climate change integration. We see a practice with, *e.g.*:

- Emphasis on climate change mitigation – dominating both science and policy-making
- Tendency to view and assess mitigation and adaptation as separate approaches – thus ignoring the possible positive and negative synergies
- Non-handling of climate change uncertainty – with the risk of misrepresentation of certainty to both the public and to the policy-makers

At the same time we experience a lot of interesting and explorative work going on within different sectors and with different institutional setups. The EU Commission is also progressing towards EU Guidance on climate change and biodiversity in SEA and EIA. The progress and challenges experienced within climate change integration in SEA is the point of departure for the theme stream, which raises questions like:

1. What consequences and dilemmas are related to climate change integration in SEA?
2. Why is especially adaptation challenging, and how do we improve SEA practice?
3. How do we secure a holistic perspective comprising mitigation, adaptation and other environmental and social objectives – and not at least the synergies between these?
4. Why is uncertainty ignored or postponed – and how to go about it in SEA?
5. Which institutional experiences do we have and how to setup organisational frameworks for climate change integration?

Session 5.1: Climate mapping, adaptation and water resources

Session 5.2: EC guidance and recommendations on climate change and biodiversity in SEA

Session 5.3: Institutional barriers and possibilities for climate change integration

Session 5.4: Climate game

Session 5.5 Climate mapping, adaptation and water resources

Aims:

- Give overview of some of the main discussions points during the special IAIA symposium on climate change and impact assessment
- Open up discussion on climate mapping, adaptation - and the need for assessing synergies in SEA
- Present and discuss challenges and possibilities for assessing climate change impacts in relation to drinking water and surface water

Co-chairs: Lone Kørnøv, Ivar Lyhne

Working method: Paper presentation.

Introduction and Follow-up from IAIA Special Symposium

Lone Kørnøv, DCEA, lonek@plan.aau.dk

Practical experiences and research presented at the Symposium on Climate Change and Impact Assessment will be presented and discussed as a point of departure for the theme. The introduction synthesizes and highlights main recommendations for SEA to take the critical leadership needed for climate change integration in planning and policy-making.

Climate Adaptation in Planning and Environmental Assessment: A Dutch Approach

Jan Nuesink - jan.nuesink@dhv.com

DHV developed a GIS tool and publicly-accessible web application together with partners at Wageningen University and Alterra research institution, which maps climate change risk and vulnerability on the regional and local scale. This climate change and adaptation urgency mapping has been implemented in a number of Dutch Provinces to be taken into account in their spatial planning updates and long term structure visions.

Furthermore, DHV has started using the climate maps in their environmental assessment projects for spatial plans for municipalities and urban areas. Integrating the strategic assessment and taking into account the climate adaptation strategies and its implications for water, infrastructure and the built environment give concrete guidance to spatial planners and urban architects. Our paper will deal with the scientific background and some aspects of the mapping process, as well as with the practical application for strategic assessments of spatial plans and urban or infrastructure programs.

Any Drop to Drink? SEA, Climate Change and Water

Elizabeth Wilson - ebwilson@brookes.ac.uk

Climate change will significantly affect water resources at global, European and national scales, with impacts on both supply and demand. However, there is evidence that water companies are among the most climate change-aware economic sectors. A report by the UK government in 2011 on climate resilient infrastructure identified the private sector as the leading player in addressing climate change risks, recognising the need to adapt both existing and new infrastructure such as reservoirs with long lead times. In England and Wales, privatized water utilities are required to prepare 25-year Water Resource Management Plans, which are subject to approval by central government. But while recent attention has been paid to the role of SEA in addressing climate change for public sector plans, such as land use plans and river basin management plans, there has been much less consideration of the role of SEA for private sector-led plans such as water resource plans. Such consideration will be increasingly important with the neo-liberalizing and deregulatory tendencies among many governments. This paper reviews the SEAs for the companies' water resource plans in England and Wales, examining particularly the role of the SEA in reviewing plan alternatives and testing assumptions about changes in the baseline environment beyond the plan period and over the century. The findings suggest that SEA is not fulfilling its potential in adding significant insights to the overall consideration of climate change adaptation over time. A number of reasons for this are explored, both internal and external to SEA practice, and suggestions are made for using a wider range of climate change and socio-economic scenarios, including consideration of 4°C warming by the end of the 21st century.

SEA of Spanish River Basin Plans and Climate Change

David Pereira - d.pereira@upm.es, Juan José Rodríguez, Juan José Oñate, Macarena Herrera

In this paper we update and complete a study about how climate change impacts are assessed in the recent river basin planning process performed under EU water framework directive through Strategic Environmental Assessment process. The study has been conducted using Spanish river basin plans as case studies. This study was initially presented in Puebla 2010 and it has been completed with more analysis of SEA documents to obtain stronger conclusions. The analysis covers the main procedural process during strategic assessment including: reference guidance provided by Spanish environmental authorities, environmental sustainability reports (the key assessment report in the Spanish SEA administrative procedure)

and finally, when they are available, draft and final basin management plans. A checklist was developed to study both the effects of climate change on water availability, water use and environmental good status. The checklist includes key issues identified in EU reference documents, IPCC assessment reports and Spanish national strategy on climate change. It also includes relevant methodological issues and best practices indicators developed under SEA conceptual framework. It covers effects analyzed, predictions tools used (qualitatively and quantitatively) and environmental indicators. This checklist also analyzes adaptive strategies to describe how these changes are integrated into management goals and activities and the level of influence of SEA process. The discussion topics include strategic impacts and their relationship with climate change (both as a cause and as a receiver of climate change impacts), the opportunities achieved and failed and, finally, the global influence and relevance of SEA process from a critical point of view.

Session 5.2: EC Guidance and Recommendations on Climate Change and Biodiversity in SEA

Aim: To provide overview of the main recommendation in the draft Practical Guidance and Recommendations for Integrating Climate Change and Biodiversity into SEA elaborated for the European Commission by a consortium of Millieu Ltd, Collingwood Environmental Planning Ltd. and Integra Consulting Ltd.

Chair: Lone Kørnøv

Working method: A workshop which will include introductory presentations, followed by facilitated discussion.

Rationale for the elaboration of the European Commission's Practical Guidance and Recommendations for Integrating Climate Change and Biodiversity into EIA and SEA

Louis Mueleman, European Commission, DG Environment

Key problems and challenges in integrating climate change and biodiversity concerns into EIA and SEA procedures identified by the study team

Ric Eales, Collingwood Environmental Planning Ltd.

Proposed approach to addressing climate change and biodiversity concerns within EIA and SEA procedures

Jiri Dusik, Integra Consulting Ltd.

Recommendations for further work and changes in the EIA and SEA systems

Bill Sheate, Collingwood Environmental Planning Ltd.

Session 5.3: Institutional Barriers and Possibilities for Climate Change Integration

Aims:

- Highlight the different elements of institutions and organisations (regulative, normative and cognitive) that hinder and support the integration of climate change in SEA
- Present and discuss different institutional models for integration

Co-chairs: Lone Kørnøv, Sanne Vammen Larsen

Working method: Paper presentation.

Climate Change Challenges for SEA

Sanne Vammen Larsen - sannevl@plan.aau.dk

This paper takes a theoretical perspective on the challenges that climate changes pose for SEA. The theoretical framework used is the sociologist Ulrich Beck's theory of risk society and the aspects that characterise this society. Climate change is viewed as a risk, and the theory is used to derive two challenges for the practice of SEA: delivering assessments and predictions, and handling differences in opinion and debate. Based on empirical evidence from document studies and interviews, the paper discusses the reflection of these theoretical challenges in practice.

NRM Education Strategies: A Partnership

Veronica Reoma - vlreoma@yahoo.com, Gloria Reyes, Nestor Morales, Valerio Cabalo

Forest and aqua-marine areas degradation give an alarming concerned of the local chief executives and the national leaders of the Philippines because the end result of these are natural calamities such as the rockslide observed in Guinsaugon, St. Bernard; landslides in Liloan and San Ricardo; and siltation of

SubangDaku river in Sogod, Southern Leyte, that cost many lives and attracted the international Natural Resources Management (NRM) advocates. Even before the recent catastrophes, the government had already enacted laws and measures dedicated to natural resources management as early as 1970s. However, in spite of this existing system, people in the locality are still very passive in the actual implementation and preservation of the environment as evidenced by massive burning of plastic and crop residues, waste disposal is still a problem and rampant violations against the mother earth both in the forest and in the seas are frequently observed. Thus, this study is conducted by the Southern Leyte State University to foster education as a potent tool to promote knowledge, awareness and practices for the restoration of the environment in Sogod Bay area and to analyze the dynamics behind a successful partnership of the academe, the Local Government Units of selected Sogod Bay Barangays and the community in sustaining the NRM. The most significant output that can be attributed to this activity is the enhancement of collaboration between the LGUs, community and academe to sustain NRM and the increase in community participation to its activities like massive tree planting, coastal and river clean up as part of the LGUs and pupils'/ students' routine activities, waste segregation and recycling, promotion of eco-friendly materials and adoption of organic agricultural production.

Using SEA to Deliver Climate Change Policy

Neil Deasley - neil.deasley@sepa.org.uk

This paper builds upon a paper first presented as a video at the IAIA Climate and Impact Assessment Conference in Aalborg 2010 [www.iaia.org/iaia-climate-symposium-denmark/proceedings.aspx]. It examines how SEA is being used in Scotland to help deliver world leading climate change targets and legislation. It explores the challenging targets and duties set by the Climate Change (Scotland) Act 2009 and explains how SEA as practiced in Scotland has an important role in helping their delivery. It also explains guidance on the Consideration of Climatic Factors within SEA published in 2010 to help SEA practitioners consider climate change. The paper is updated to explain the findings of the Scottish SEA Review published in July 2011, which makes specific recommendations about developing SEA procedures and practice in Scotland and climate change.

Transboundary Climate Impact Assessment

Jan Srytr - jan.srytr@eps.cz

Case study: Transboundary Climate Impact Assessment of Prunerov II power plant - a new approach towards improving states' climate decisions and policies (Czech Republic). In 2009 the Federated States of Micronesia (FSM) requested a transboundary environmental impact assessment (TEIA) of the Prunerov II coal-fired power plant plan in the Czech Republic. FSM asserted its right to be heard as a sovereign stakeholder due to potential impacts caused by the plant's contribution of GHG emissions. Based on the request of the Ministry, the documentation was supplemented with a separate expert's report prepared by a Czech climatologist. In 2010 the Ministry issued an affirmative EIA statement on the project. The Ministry stated that the plan cannot seriously affect the environment and populations outside the Czech Republic as the current CO₂ emissions of the plant are totally marginal compared to the global emissions. Despite this conclusion, the Ministry however requested the power company to suggest a compensation plan that would offset the additional CO₂ emissions. The case was the first-ever "transregional" use of transboundary EIA. The paper will present a case study of the FSM request for a transboundary EIA (TEIA) of the Prunerov II power plant. It will describe the development of the FSM intervention with the Czech Republic, discuss the most relevant climate arguments raised during the procedure (such as an energy efficiency requirements), examine the legal background of the case as well as it will describe and evaluate the actions taken by the Czech Ministry in reaction to the FSM request. The case study will be followed by an overview discussion of the technical legal obstacles to conduct TEIAs based on climate change concerns and an evaluation of the practical use of TEIA by sovereign island nations as supported by the international law.

Session 5.4 Climate Game

Aim: In an interactive and fun way raise the dilemmas and consequences related to integrating climate change in SEA.

Co-chairs: Ivar Lyhne, Lone Kørnøv

Working method: Dilemma and consequence game with active playing by the participants.

"Climate Game" is a life-size board game, which in a funny way challenges your ability to work with others in finding solutions to climate change dilemmas. "Climate Game" is developed as a team building tool in organizations facing climate change dilemmas and the intension is to inspire you to strengthen your own organisation's awareness and collaboration on climate change through gaming.

The conference participants are given a possibility for trying out the game and session participants are divided into teams that compete and learn through concrete dilemmas on climate change.

This theme will approach procedures and methods in SEA but in a critical and analytical way, looking at what is missing and what we need to do better or differently. Questions that will be approached are: How adaptive and robust is SEA in analyzing the impacts and issues that matter? What frameworks, approaches and tools are or can be used to best address cumulative effects, climate change and other broad scale environmental threats? Should SEA focus on the key issues linked to climate change, protection and enhancement of key ecosystems functions, resilience, promotion of eco-innovations and gradual transition to the green economy, and what methods could facilitate discussion on these matters during SEA?

Session 6.1: The Importance of Context when Applying SEA Methods

Session 6.2: Specific Methodologies for SEA

Session 6.3: Methodologies for Policy and National-level SEA

Session 6.4: Elements for Guidance on SEA: World Bank Experience in Africa

Session 6.5: SEA and Biodiversity: Is it Making a Difference?

Session 6.6: Wiki Web GIS Applications for Strategic Environmental Assessment

Session 6.7: Cumulative Effects, Mitigation and Enhancement

Session 6.1: The Importance of Context when Applying SEA Methods

Aim: To discuss the importance of context when applying SEA methods, considering different size regions, uncertainty and the need to be pragmatic.

Chair: *Elsa João*

Working method: Paper presentation.

SEA Best Practice and the Issue of Context

Denis Kirchoff - dkircho@uwaterloo.ca, Jean Andrey, and Brent Doberstein

For a number of years, scholars in the field of SEA have been engaged in producing sets of guidelines in order to promote better practice and implementation. This paper addresses these guidelines as lists of “SEA best practice components.” First, the article reviews the SEA best practice literature and summarizes the key identified components. Second, the paper illustrates how context influences the importance of each best practice component in regards to a specific case study in York Region, Ontario, Canada.

SEA in Small Islands: Specific Features/Approaches

Tomas Ramos - tabr@fct.unl.pt, Calbert Douglas, Sandra Caeiro, Alexandra Polido, and Ana Paula Martinho

Small islands have special vulnerabilities and unique characteristics (*e.g.*, relative small size, a narrow economic base, limited resources, small populations without proper skills or high population densities and hence high demands on resources, high ratio of coastline to land area and ecosystems extremely vulnerable). Additionally, small islands have to face several environmental and socio-economic problems (*e.g.*, marine and coastal resource degradation, rising sea level, water resource problems, geographic isolation, lack of employment opportunities, financial dependence, lack of public services facilities). In some islands, strategic environmental assessment (SEA) is already in practice and is a legal requirement but often what they have incorporated have probably been more influenced by outside agencies than any local agency. Therefore, there is a need to develop island-specific assessment techniques to separately highlight important biodiversity/ecological, socio-cultural and public health effects. The main aim of this research is to make a contribution to the understandings of the specific features, resources and approaches to include in SEA in island-specific applications and to develop a framework to meta-evaluate the SEA performance and establish a set of guidelines for conducting and reviewing SEA in small island territories. This framework seeks to incorporate a system analysis approach integrating the main relationships among the SEA process. For the framework development a checklist was designed to better understand questions and concepts related to the environment/ecological, social, economic, health and cultural aspects within island contexts. This research provides an overview situation analysis of the SEA elements in the case of the European ultra-peripheral regions. Specific areas identified for consideration in the development of good SEA performance in the islands included, the islands’ unique geographical and ecological features, scale effects, intra-insular regional dimension, social-economic constraints and limitations, training and education skills in SEA processes.

Assessing Spatial Strategies in Uncertain Contexts

Chiara Bragagnolo - chiara.bragagnolo@ing.unitn.it, Davide Geneletti

Understanding the future implications of land use changes has been deemed a fundamental part of planning for sustainable and resilient communities. Nonetheless, spatial planning decision-making faces a number of complexities and the extent to which different spatial development strategies would cope with significant environmental consequences of future growth is highly uncertain. The role of upcoming sectoral policies is rarely considered as a driver of future changes in common planning and assessment practice, even though supporting a better understanding of what strategies may be suitably addressed in a specific regional context has been considered at the heart of spatial planning and SEA processes. This paper aims to develop and test a method for comparing the environmental performance of spatial planning strategies under alternative scenarios resulting from different implementation of sectoral policies. The peri-urban region of Milan, in northern Italy, was chosen as a case study. It represents a complex planning context with critical environmental issues (e.g., urban sprawl, scarce air quality) and cross-cutting sectoral policies (e.g., large infrastructures, etc.). Firstly, two spatial planning strategies were designed based on land use zoning. Then a number of sectoral policy scenarios were generated and made spatially explicit to simulate a range of possible futures and assess the performance of the planning strategies against a set of environmental indicators. Results are presented and barriers for implementing the method in ordinary spatial planning practice discussed.

Session 6.2: Methodologies for SEA: Alternatives, Indicators, Significance and Vulnerability

Aim: To evaluate methodologies for SEA focusing in particular on determination of alternatives, indicators analysis, determining significance and vulnerability analysis.

Chair: Elsa João

Working method: Paper presentation.

Generating Alternatives: Benefits for Plan-Making

Amanda Chisholm - amanda.chisholm@scotland.gsi.gov.uk, Fiona Simpson, and Lewis Hurley

Article 5 of Directive 2001/42 requires that SEA of a plan includes assessment of its reasonable alternatives. A common perception is that SEA drives the identification of such alternatives. However, most plan- and policy-making models include the generation of alternatives as an integral component of the process. Based on recent Scottish Government experience, this paper explores the respective roles of plan- and policy-making and SEA in generating alternatives in terms of the variety of methods utilised across the range of policies and plans, and the preconditions for their successful application; the role that public consultation can play in this process; potential obstacles to the process (including the definition as to what constitutes a “reasonable” alternative); issues encountered across a range of policies and plans; the potential for efficiencies; and benefits for plan- and policy-making. It concludes with a set of action points for the effective generation of alternatives that will satisfy the requirements of both plan-making and SEA processes.

Indicator Analysis: Influence on SEA Implementation

Jingjing Gao - jingjing@plan.aau.dk, Per Christiansen, and Lone Kornov

Effectiveness of SEA has attracted many studies and researches, but only a few have dealt with the role of indicators in achieving this. Effectiveness is a relatively broad concept, but when we look into the whole process of SEA from an implementation theory perspective, it becomes clearer, as the analysis of SEA's effectiveness can be broken down to more stages. The influence of guidelines is one of them. This study takes China as a case study with its updated version of Chinese Technical Guidelines for Plan-EIA (2003). Instead of providing a general guideline, it consists of a series of guidelines focused on the planning and assessment within different sectors. They emphasise the core role of indicators in the SEA process, and pays more attention to the principles, and to the process of how to choose indicators. Why do these changes happen and what does it mean for SEA implementation and practice? Based upon case studies of Shenzhen and Dali, analysis of national level experience and inspiration from implementation theory, the paper explores the motivation behind this change of the guidelines and helps explain the role and influence of indicators on SEA practice.

Methodologies for Assessing Impact Significance

Mania Lamprou - manialambr@gmail.com, Kostas Tolidis, Christina Kalogirou

With the present paper is intended a) an in-depth analysis of SEA as it has been applied in the legal EIA system context in South Europe, b) to discuss the role of plans and programs as well as their structure in the EIA process and in the tourist sector in particular and finally c) to develop a combined methodology using fuzzy logic and matrix criteria for the estimation and measurement of the significance of the impact on biodiversity (services and goods). Among others the proposed methodology has implications in spatial planning processes, investment planning and land use management.

Vulnerability Analysis as a Tool for SEA

Alenka Cof - alenka.cof@bf.uni-lj.si, Nadja Penko Seidl

The overall aim of SEA is promoting sustainable development, focusing at protecting the environment and integrating environmental considerations into the preparation and adoption of plans and programmes. One of the potentially effective responses for promoting sustainable development is vulnerability analysis. The tool is mostly applied in the process of spatial planning, with an aim to optimize the distribution of land uses in terms of their environmental impacts. Coinciding spatial planning with environmental protection lay out stronger linkage between SEA and vulnerability analysis. Vulnerability approach, where confronting environmental components with planned activities, exceeds the level of environmental reports that are frequently prepared solely on the basis of subjective or expert opinion. Vulnerability analysis can be used as an optimisation tool to locate appropriate sites for certain activities and land uses. The advantage is that it is adapted for use, from the beginning throughout the planning process, as it is required by EU Directive 42/2001. Vulnerability analysis enables planners to consider the environmental characteristics before siting of different planned activities. An important benefit of the vulnerability analysis is that it is prepared for the whole area included in the planning process and therefore enables consideration of spatial distribution of impacts, which most other tools or models omit. Vulnerability analysis enables more objective estimation of the acceptability of planned activities in certain areas and the comparison of the acceptability level of certain areas with other potential sites for placement. This enables withdrawal of the environmentally aggressive activities from sensitive areas and at the same time allows some environmentally friendly activities to be sited. Vulnerability analysis as a tool applicable for the SEA is presented in a case study of the SEA for Spatial Plan of the Municipality Ig.

Session 6.3: Methodologies for Policy and National-level SEA

Aim: To evaluate methodologies for SEA focusing on the challenge posed by Policy and National-level SEA.

Chair: *David Annandale*

Working method: Paper presentation.

Recent Experiences of Policy SEA in Scotland

Fiona Simpson - fiona.simpson@scotland.gsi.gov.uk, Amanda Chisholm

In Scotland, as a result of broad transposition of Directive 2001/42, national level policies and strategies are regularly subjected to environmental assessment. This has provided an opportunity to develop new approaches and methods that are genuinely strategic. Based on recent examples of the SEA of Scottish Government policies and strategies, this paper will explore the ways in which SEA has stimulated the development of innovative methodologies which help both policy makers and the public to understand the effects of non-spatial policies. It will reflect on this experience to consider the meaning of “strategic” at different levels of the policy hierarchy.

Spatial Analysis in SEA of Agricultural Programs

Carlo Rega - carlo.rega@polito.it, Agata Spaziante, Chiara Murano, Mirko Carbone

In recent years, attention has been increasingly paid to the role that agriculture can play in providing environmental service and preservation of natural assets. In this framework, the new Common Agricultural Policy (CAP) of the European Union has shifted its emphasis even more towards protecting the environment by encouraging farmers to manage their land in a more environmentally beneficial way. Rural Development Programs (RDP) are the instruments that Member States and Regions have to elaborate to this end. SEA processes of RDPs thus represent an interesting field to study the influence of SEA on a very strategic decision making sector. One of the key issue in assessing the environmental effects of agri-environmental schemes concerns the spatial distribution of the implemented measures. Spatially-explicit methods can be used within ex-ante evaluation to identify target areas and establish spatial priorities; during the ongoing evaluation to re-orient the Program's implementation; and in the ex-post phase to monitor environmental impacts and provide feedback for the next decision making step. This paper discusses the use of Geographic Information Systems and spatially explicit methods in SEA of agriculture-related programs building on the experience of the ex-ante and ongoing SEA of a regional RDP in Italy. Results show that the spatial distribution of major environmental measures not always is the most performing ones in environmental terms, based on a series of spatial-explicit environmental indexes. Spatial analysis thus represent a useful tool to provide input to decision makers, especially when dealing with complex instruments like RDP, entailing a variety of objectives, stakeholders, beneficiaries, and environmental aspects to be considered. Research perspectives on this topic are also put forward.

Applying SEA in Hungary and Italy

Angela Poletti - angela.poletti@polimi.it, Kornelia Kissfazekas, Endre Burányi, and Antonio De Luca

In comparing the two national case studies we highlight the relationship between SEA and planning at different levels, regulations, the effects on the planning before and after the application of SEA's procedure, open questions such as the identification of the competent local authority and regulation of participation. Then we discuss the procedure applied to urban regeneration planning. What is the role of SEA as in specific application of urban redevelopment planning? How can you measure the quality of environmental and urban quality? It is not just a problem of natural components. Often the socio-economic assessment is totally neglected! Have relevant mitigation measures been adequately incorporated into the development and design? We want to investigate how the SEA's procedure can change the key elements of the planning discussing real cases in the two countries in view of the future of cities.

Strategic-Based SEA in National Electricity Transmission Grid National Planning

Maria Partidário- mrp@civil.ist.utl.pt, Bernardo Augusto

Rather than assessing the impacts of proposals, SEA offers the opportunity to assess development strategies, with the purpose of integrating environmental and social dimensions earlier on with economic priorities, and hence strategically influence decisions, aiming at avoiding impacts of proposals, rather than worrying about the mitigation of impacts. This approach, founded on collaborative, knowledge-based and learning theories, was proposed by Maria Partidário in 2006 as a strategic-based SEA, and may be implemented through the Critical Decision Factors (CDF) methodology for SEA. After some informal testing since 2004, the methodology was formally adopted by the Portuguese government in 2007. Several cases have been developed with this approach since then, both in Portugal and in other countries. The paper shares a balance of the strengths and weaknesses of the CDF methodology using the SEA of the National Electricity Transmission Grid (NTG) Investment and Development Plan (NTG Plan) in Portugal as a case example. After two planning cycles (2009-2014 (2019) and 2012-2017 (2022)) this process can provide a good base for discussion about the interest and advantage of the strategic-based SEA approach in influencing decision-making through the integration of (big picture) environmental issues at the core of strategic decisions. It can also provide an illustration of the limitations associated with a set of regulations that limits the strategic approach.

Session 6.4: Elements for Guidance on SEA: World Bank Experience in Africa

Aim: This session will present an overview of how SEAs are applied in World Bank operations in Africa. Building on previous guidance on SEA approaches (OECD DAC SEA Guidance, World Bank Policy SEA), the session will review and discuss lessons learnt in front-line operations on spatial planning and large infrastructure projects in Africa to develop elements for guidance applicable to World Bank investment operations.

Co-chairs: Led by Cary Anne Cadman, Yves Prevost, Fernando Loayza

Working method: Introductory presentation and directed discussion.

The session is an opportunity to discuss specific Bank guidelines for using SEAs to inform project preparation and promote best practice in the application of SEAs as a strategic development tool across regions.

Session 6.5: SEA and Biodiversity: Is SEA Making a Difference?

Aim: Biodiversity depends fundamentally on a variety of ecological functions and processes many which operate at the ecosystem and landscape level. SEA offered an opportunity to better meet the long term broad scale challenges for conserving biodiversity and ecosystem services that support our livelihoods. What progress has been made in achieving this? How can SEA better support the principle of no-net-loss and lead to positive outcomes for biodiversity? What are the lessons for good practice? How to move away from process to net positive gain for biodiversity? How can SEA support better ecosystem management?

Chair: Orlando Venn

Working method: Paper presentation followed by discussion.

SEA and Ecological Compensation in Land Use Plans

Carlo Rega - carlo.rega@polito.it

Environmental compensation (or offset) is one of the distinctive features of environmental assessment processes and its provided for by EU Directives on EIA, AA and SEA. The issue of ecological compensation has thus attracted interest within the EA domain in the last decade; however, attention has been paid so far more to the project level rather than to planning practices. On the other hand, there is a growing acknowledgement that a great amount of environmental depletion is being caused by the cumulative effects of small developments, which may pass through the net of environmental impact assessments. Urbanization is a paradigmatic example in this sense as it is acknowledged as one of the main drivers of

the erosion of environmental capital. Spatial/land use plans, which set the frame for future urban development and consequent land take therefore represent a particularly relevant field of research for studying the actual implementation of ecological compensation measures. This paper aims at addressing some of the theoretic and methodological implication of ecological compensation in spatial/land use planning and to collect empirical evidence on its actual implementation by analyzing a relevant sample of recent spatial/land use plans elaborated in Italy in the last decade. The objectives are to explore to what extent ecological compensation is used in plan-making and how the theoretical, methodological and operational challenges it poses are addressed by current practice, in order to identify factors that can facilitate or hinder its actual implementation in plan-making. The role that SEA can play in this respect is also examined and critically discussed.

Ecological Sustainability: Finnish Case Approach

Tarja Söderman - tarja.soderman@ymparisto.fi

To overcome weaknesses reported in treatment of the ecological aspect of sustainability in impact assessment and reflect on its relation to economic and social aspects an approach of ecosystem services criteria and spatial indicators was created. The approach was targeted for both strategic decision-making and large scale project level planning. The approach was developed and tested in strategic land use planning processes of two urban regions. The tool including criteria and indicators deal with prerequisites for maintaining ecosystem services and threats to ecosystem services in spatial context using the already available spatial data. The aim was to concretize conceptual thinking on ecosystem services for local land use and transport system planning SEA without generating an extensive survey and baseline data collection phase for the tool use. The approach proved to be useful in concretizing the abstract concept of sustainability among local planners and decision-makers and in helping them apply sustainability principles to local planning problems—usually needing locational measures. The ecosystem services criteria and indicators linked with economic and social ones are applicable in target setting, designing and assessing impacts of plan alternatives and monitoring. The experiences from piloting were mostly positive among stakeholders. There are still needs for improvement in data management, participatory target setting and knowledge sharing between planners and decision-makers and enhanced interface between research and practice.

Ecosystem Services in SEA of Land Use Plans

Davide Geneletti - davide.geneletti@ing.unitn.it

This paper aims at contributing to the theory and practice of integrating ecosystem services in land use planning and Strategic Environmental Assessment (SEA). The research developed an analytical framework to predict and represent the effects of planning choices on a range of ecosystem services, and eventually on the wellbeing of different social groups. The study was based on the following stages: 1. Development of scenarios to predict future landscape configurations under different land use planning strategies; 2. Spatial quantification of ecosystem services for the different scenarios, using different modeling tools; 3. Analysis of the tradeoffs among ecosystem services, conducted at different spatial scales and for different groups of beneficiaries; 4. Development of indicators to compare the effects of different planning strategies on human wellbeing, including measures of equity in the appropriation of services; A case-study approach was undertaken by focusing on land use planning in the Araucanía (southern Chile). The opportunities and barriers to integrate the proposed approach in SEA processes are discussed.

Session 6.6: Wiki Web GIS Applications for Strategic Environmental Assessment

Aim: To introduce participants to an innovative Web application

Chair: *Giuseppe Magro - giuseppe.magro@unibo.it*

The most significant issue related to environment, environmental impact, and strategic environmental assessment raised by Italian environmental legislation (National Decree 152/06 and subsequent amendments) is associated with the identification of SEA as an analytical, administrative, and technical procedure for the evaluation of potential impacts on a hypothetical spatial scale transformation induced by plans and programs. For this reason, the need to consider “qualitative and/or quantitative” aspects of alteration presupposes the need for appropriate tools which allow us to learn 1) the state of elements of environmental and territorial systems, 2) the relational status among elements, and 3) an effective communication and participation in SEA process. The WIKI-DCGIS application is a Web-based operative system for improving strategic environmental assessment, creating effective participation in the planning phase and involving different stakeholders (institutional, political, technical, social) through a geo-forum and a facilitating use of modeling on potential effects of plans scenarios and alternatives. The system is based on a structured and systematic open GIS methodology for characterization of impact scenarios. The WIKI-DCGIS application, supported by different computational software and tools for impact assessment analysis, is a 2.0 Web service for municipalities, planners and local stakeholders for exploring and managing the spatial-temporal evolution of the potential impact scenarios and related environmental and social implications and specific and cumulative impacts on each type of technical, social and environmental targets considered (environmental resources, human communities, ecosystems).

This theme builds upon the findings of the special IAIA SEA conference in Prague in 2005 on the linkages between SEA and other assessment and planning tools.

Establishing direct as well as indirect linkages is crucial for the effective delivery of the benefits that are supposed to arise from the application of SEA and related instruments. There are obvious linkages, *e.g.*, when different assessment instruments are applied to the same policy, plan or programme more or less at the same time, as is frequently happening in the UK (SEA, sustainability appraisal, rural proofing, equality impact assessment and other assessments for local spatial/land use plans). Furthermore, there are linkages arising from different types of tiering (both, at the same time and with—at times—substantial time gaps), including systematic tiering between, *e.g.*, policies, plans and programmes, administrative tiering between, *e.g.*, national, regional and local levels, as well as combinations of both. Finally, there may also be linkages across administrative, sectoral and other boundaries, *e.g.*, between SEA and environmental management systems (EMS). Methods and techniques that can support linking and helping to avoid overlap (eg GIS) are of particular interest.

Presentations in this theme revolve around the various aspects introduced above. The first two sessions deal with the important issue of how to integrate multiple strategic assessments. Assessments covered in a total of 8 presentations include SEA itself, sustainability appraisal, EIA, accidental risk assessment, habitats regulations appraisal, integrated biodiversity impact assessment, health impact assessment, rural proofing and others. The third session will be organized as a panel discussion, in which 6 panel members will be discussing the linkages of SEA and Habitats Regulation Assessments. In the fourth session, case studies are presented from Canada (marine spatial planning), Greece (oil pipeline) and Brazil (EIA/SEA). Furthermore, a Human Impact Assessment tool is introduced. The fifth session revolves around the different ways in which specific issues are dealt with in SEA. In this context, ecosystem services, LCA, and HIA are covered. The sixth and final session is another panel discussion. Eight panel members will reflect on the first 5 sessions and give an insight into their own experiences

Sessions 7.1 and 7.2: Integration of multiple strategic assessments

Session 7.3: SEA and appropriate assessment – panel discussion (Ausra Jurkeviciute)

Session 7.4: SEA type assessments – case studies

Session 7.5: Addressing specific issues in and through SEA

Session 7.6: Linking SEA with other assessment and planning tools – a panel discussion

Session 7.1: Integration of Multiple Strategic Assessments

Aim: discussing linkages of different types of assessments applied to one policy/plan/programme/big project

Working method: Paper presentation.

Relationship of SA and Other Assessments in the UK

Ryo Tajima - r.tajima@liverpool.ac.uk, Thomas Fischer

In the UK, Sustainability Appraisal (SA), which is considered a form of SEA, has been formally applied to spatial plans since 2004. At the same time, several other impact assessment tools, focusing on specific topics such as health, equality, and habitats, are commonly utilized, while in theory, SA is supposed to cover all the sustainability dimensions. The effectiveness and characteristics of each impact assessment have been studied, but the relationship between them in practice has not been clarified to date. This paper aims to clarify the linkage of impact assessment tools in English spatial planning. 83 SA reports have been analyzed, which revealed frequent overlap and little link between SA and other impact assessments. This is followed by a case study which reveals the relationship in detail.

Integration of SEA with Other Forms of Assessment

Cristina West - cristina.west@atkinglobal.com, Olena Popovych, Sarah Minett

In the UK, SEA has traditionally been combined with Sustainability Appraisal (SA) in many processes. More recently it is becoming increasingly frequent for SEA to be undertaken in conjunction with other statutory and non-statutory assessment processes. Such approach presents both challenges and opportunities for SEA practitioners and plan promoters. This paper will analyze various examples of application of SEA integrated with SA, Health Impact Assessment, Equalities Impact Assessment and Habitats Directive Appropriate Assessment for plans, and will look into the degree of success of such undertakings. It will be demonstrated how such integrated assessments can lead to assessment process efficiencies and better informed decision-making.

Integration of Accidental Risk Assessment and EIA

Takehiko Murayama - tmura@waseda.jp

After the huge scale of the earthquake and tsunami on March 11th, Japan has suffered from severe damages. In particular, the accident of a nuclear power plant brought an incredible amount of radioactive substances around the plant, and still continues to disperse such kind of particles. Evacuated people reached to one hundred thousand, and they cannot but live in refugee shelters or other temporary houses. Other people in the same region of the plant are obliged to live with radioactive substances. They have not only health risks induced by radiation, but also psychological stress due to the current situation of the accident and repeated earthquakes. While the Japanese EIA system does not deal with radiation risk by nuclear power plants, this severe accident requires us to consider technological risks of accident as well as environmental and social impact of dispersion of radioactive substances. Regardless of institutional limitation, I try to organize a framework of the integration of accidental risk assessment and EIA from the following points: experiences of the accident of a nuclear power plant, necessity of the integration, items to be considered in environmental and social impacts, and consideration of the probability and the scale of impact.

SA and SEA: The Story of the Chicken and the Egg?

Nivedita Mahida - ni_vi@hotmail.com

The established tool of Strategic Environmental Assessment (SEA) seems to be bitten by the “sustainability bug,” with Sustainability Appraisal (SA) and Assessment gaining popularity in environmental planning. In the UK, SA preceded SEA in town and urban planning. The introduction of SEA in the UK could possibly have led to a conflict between SA and SEA, the former being a tool to advocate sustainable development and the latter of environmental assessment. This study analyses the co-development of these two instruments in the UK and Germany followed by a discussion on whether sustainability has usurped the limelight from environmental concerns.

Session 7.2: Integration of Multiple Strategic Assessments

Aim: discussing linkages of different types of assessments applied to the same policy/plan/programme/big project

Working method: Paper presentation.

SEA and Habitats Regulations Appraisal Integration

Amanda Chisholm - amanda.chisholm@scotland.gsi.gov.uk

Directive 92/43/EEC (the Habitats Directive) requires that plans likely to have a significant effect on Natura sites be subject to appropriate assessment, under a process known as a Habitats Regulations Appraisal (HRA) in Scotland. Plans requiring HRA will also likely require SEA: recently published Scottish HRA guidance recognises linkages between the two processes. However, while there are opportunities for integration, the two processes also have significantly different requirements. An analysis has therefore been undertaken in support of efficient and proportionate working. This paper reports the results of this analysis. It identifies overlaps and divergences between HRA and SEA, based on lessons learned during the recent appraisals (including both SEA and HRA) of the Plan for Offshore Wind Energy and the National Renewables Infrastructure Plan. It considers areas where the two processes can and cannot be integrated and concludes with a set of recommendations for future working.

A Methodological Approach to Integrating SEA and BIA

Ainhoa Gonzalez - agonzal@tcd.ie, John Fry, Tamara Hochstrasser, Paul Scott, Peter Carvill and Mike Jones

Impacts on biodiversity (broadly defined) need to be assessed under the EU’s Habitats, SEA and EIA Directives, as well as under additional provisions such as the Water Framework and Environmental Liability Directives. Therefore, biodiversity impact assessment of plans, programmes and projects is required under various legislative remits, to ensure that potential negative impacts in both protected and unprotected areas are efficiently identified in a timely manner, quantified and subsequently avoided or mitigated. The procedural requirements of these legal obligations vary; SEA processes, for example, evaluate potential flora and fauna impacts on designated and undesignated areas, while Appropriate Assessment

(AA) under the Habitats Directive focuses on the detailed assessment of any potential effects on the qualifying features of designated European Natura 2000 sites. As a result, differing methodological steps, data gathering and processing methods, as well as impact assessment techniques, are commonly applied under each legislative requirement, often leading to uncoordinated assessment efforts and results (in terms, for example, of scale and assessment detail). The Irish Environmental Protection Agency has commissioned research into developing national procedure termed Integrated Biodiversity Impact Assessment (IBIA). The overall aim of IBIA is to provide a spatially-specific methodology that integrates EU requirements for AA with SEA and EIA to enhance the efficiency of legal, administrative and operational procedures. This paper presents the draft IBIA methodology, describing the progress made in relating impact assessment domains, as well as exploring the key constraints to such integration and the anticipated benefits of its application.

BIA in SEA: Addressing a Neglected Area

John Fry - john.fry@ucd.ie, Tamara Hochstrasser, Ainhoa Gonzalez, Jackie Whelan, Paul Scott, Peter Carvill and Mike Jones

Unlike the EIA Directive, the EU's SEA Directive makes specific reference to addressing impacts on "biodiversity" in addition to those on "flora" and "fauna." In doing this, the primary focus is usually on the *in-situ* or (increasingly) *ex-situ* assessment of priority species and/or habitats that are also subject to Appropriate Assessment (AA) under the Habitats Directive. AA provides a stronger protection imperative than SEA (or EIA) since impact avoidance is generally the only allowable mitigation. Furthermore, the AA emphasis on rare and often specialist elements is at odds with the need to sustain the more general biodiversity that constitutes the majority of the natural system, and which is being eroded by cumulative effects from multiple developments. There is evidence throughout Europe of loss of landscapes and their distinctive associated habitats—especially due to changes in rural management practices resulting from cumulative socio-economic pressures. SEA is usually regarded as a good model for addressing cumulative effects on some valued environmental/ecosystem components (VECs), and this is its major strength during application of the EU Water Framework Directive. Unfortunately, while "general biodiversity" is a valuable component of any concept of the environment, it is too amorphous to be treated as a single coherent VEC. Attempts to address such issues through the identification of "ecosystem services" during SEA have limitations for developed countries where there is little obvious economic exploitation of semi-natural biodiversity and few clear indicators of changes in it. Furthermore, "services" invokes financial "costs," a concept that may prove controversial in the current economic climate and provoke unhelpful argument over trade-offs. This paper argues that sustaining general biodiversity demands an assessment procedure that will address and support managed change in a broader socio-ecological context and in a comparatively silent manner.

Strategic Assessments under Australia's National Environmental Law

Carolyn Cameron - Carolyn.Cameron@environment.gov.au

Australia's national environment law, the Environment Protection and Biodiversity Conservation Act 1999, contains provisions to conduct strategic assessments of EAs on "policies, plans and programs" (PPPs). Seven strategic assessments have commenced on state or territory PPPs, with two completed. These assessments address urban development, irrigation, fire management and resource development programs. The Australian Government has released a sustainable population strategy, which includes a commitment to developing regional sustainability plans, and for those plans to be subject to the strategic assessment provisions. This paper will review our experiences with strategic assessments in the Australian federal and legislative context, and scope the role of Australia's national SEA in sustainable development

A review of experiences with strategic assessments in the Australian federal and legislative context, including expanding the role of Australia's strategic assessments to advance sustainable regional development.

Session 7.3: SEA and Appropriate Assessment

Aim: discussing linkages of different types of assessments applied to the same policy/plan/programme/big project

Chair: *Ausra Jurkeviciute*

Working method: Panel discussion.

Panel members:

- Jadwiga Ronikier
- Orlando Venn
- Riki Therivel
- Kaja Peterson
- Liucija Kursite
- Petr Roth

Assessment as required by Articles 6.3 and 6.4 of the Habitats' Directive 92/43/EEC (as amended by 97/62/EC, hereinafter Appropriate Assessment) is required also for plans for which SEA procedure is carried out (as per SEA Directive 2001/42/EC).

Since the SEA Directive has been in place for more than a decade, we are looking forward to experience and application of Appropriate Assessment within or outside SEA processes. We plan to examine good practice case studies, methodological approaches as well as suggestions for process improvements. The session will be held in the form of a panel which will encourage debate on lessons from application of Appropriate Assessment and SEA.

Among questions expected to be tackled by panelists:

- Main (substantive) differences between requirements of the SEA Directive and Appropriate Assessments
- Quality of the Appropriate Assessment carried out separately and within the SEA. Examples of the Appropriate Assessment carried out separately for strategic plans.
- Data collection and baseline studies for the purpose of Appropriate Assessment in SEAs. Good practice, methodologies and scope.
- Treatment of Appropriate Assessment in plans for the use of small areas at local level or are minor modifications to the above plans or programmes.
- The potential of the linkage between SEA and EIA processes enabled by Appropriate Assessment. Myth or reality?
- Indicators and indications of sufficient information provided in SEA for the decision-making on Appropriate Assessment.
- Treatment of Article 12 of the Habitats' Directive and Article 5 of Birds' Directive by Appropriate Assessment.

Session 7.4: SEA Type Assessments: Case Studies

Aim: To learn about various SEA type application case studies.

Working method: Paper presentation.

SEA, Marine Spatial Planning and Offshore Wind

Brady Romanson - bromanso@yorku.ca , Peter Mulvihill

In Ontario, Canada, wind energy has become a priority, with new public policy aimed at streamlining proposals for selected wind farm projects. There is increasing interest in the development of offshore wind projects on the Great Lakes in response to the constraints, limitations and opposition surrounding terrestrial wind projects. However, compared to the European experience with offshore wind planning, assessment and permitting, Ontario and North America are still in the preliminary stages. In this paper we review a recent case (the Toronto Hydro Offshore Lake Ontario wind project) that stalled due to public opposition, and discuss problems and challenges of the current assessment, planning and approval process. In particular, we examine the potential roles of two complementary processes, Strategic Environmental Assessment and Marine Spatial Planning, to contribute to more timely and informed decision making for offshore wind in Ontario. Our method consists of expert interviews, a review of the broader experience of Marine Spatial Planning, SEA and wind energy, the case study, and several other case examples. We conclude that an integrated approach involving SEA and Marine Spatial Planning has considerable potential to inform better decision making, and that close attention needs to be paid to lessons from jurisdictions with longer experience.

Evaluating the Social Impact of Major Energy Projects: Key Issues in Burgas-Alexandroupolis Oil Pipeline

Konstantinos Hazakis - kmhazaki@otenet.gr, John Mourmouris

The research identifies and assesses the potential social impacts of the projected oil pipeline on local societies of Northeastern Greece. The pipeline will be 259 km long, (150 km in Greek territory) and it would transport 15-23 million tons of oil per year from Burgas, (Bulgaria) to Alexandroupolis, (Greece). Based on the methods of SIA of IAIA, World Bank and Ipieca, the research focuses on the social impacts of the pipeline on the Greek areas crossed by the pipeline. The study focuses on the two major phases of the energy project (construction, operation) and covers nature, type and degree of reversibility of impacts as well as impact magnitude, impact significance and mitigation actions. Finally there is extensive analysis of the compatibility of the project sponsor targets (Transbalkan pipeline), with the development priorities of local societies in northeastern Greece.

Environmental Assessment System in Brazil

Isabela Cardoso - isabelapc@gmail.com , Eliane Oliveira

The Brazilian Environmental Policy - Law 6938/1981 - establishes the Environmental Impact Assessment (EIA) and Environmental Licensing as instrument of environmental management. The EIA process supports the environmental licensing of potentially polluting projects and activities that requires the use of natural resources. The recent economic growth in Brazil and the spreading of environmental awareness increased the social demands to a faster and qualified response of the public administration on environmental management. The EIA in Brazil is the most appropriate process to promotes the participation of different sectors of society and government in decisions related to sustainable development. Despite the strong social participation feature of Brazilian EIA method, most of the results related to prevention and mitigation of impacts are not considered satisfactory. The low efficiency and effectiveness of EIA in Brazil are a result of the problems on the governance and compliance model of Brazilian environment assessment system, that doesn't have an Strategic Environment Assessment (SEA) process involved. The decisions in the EIA are restricted to the improvement of projects; however, a representative part of the demands for environment impact prevention and mitigation are related to the improvement of politics, plans and programs. Therefore, the sustainable development in Brazil depends crucially on the implementation of the SEA process as an instrument of improvement of sectorial development plans and the support of EIA decisions. This paper presents the analysis of the environmental assessment system in Brazil and a proposal to redesign processes for the articulation of good practices in SEA as support for the improvement of EIA.

HIAtool.org: Human Impact Assessment Prototype

Toni Colom - colomantoni@gmail.com, Elena Cabeza, Ignacio Ricci, Cristina Riera

The idea came into being, across social determinants, to manage essential human needs in sectors like transport, housing, environment, social cohesion, goods and services, healthy economy and lifestyle. The overall objective is to give decision-making support at an EU level using an innovative and standardized Health Impact Assessment methodology which integrates human needs from social determinants and their inequalities. Results: Tangible outputs are the prototype itself with the 19-diagram flow chart created to make it. 5 proof cases are currently managed and as a consequence, the know-how in stakeholder focus groups and decision maker management is explained on prototype screens. Other results are preliminary but illustrate the whole work's result. Lessons: The resulting effects of the project lie in the fact and the effectiveness of HIA methodology as a lens that brings human needs issues into focus in a decision-making accountability process outside of the health sector. This aforementioned improves regional policies and instrument innovation opens the way to an influential capacity on EU regions of the internet Human Impact Assessment tool (www.HIAtool.org) as a common space "agora."

Session 7.5: Addressing Specific Issues in SEA

Aim: To hear about the way various specific issues are dealt with in SEA.

Working method: Paper presentation.

Ecosystem Services and SEA

Alex White - awhite@environcorp.com, Johanna Curran, Emma Jones

Ecosystems services, through the Millennium Ecosystems Assessment (MA) and the Economics of the Environment and Biodiversity (TEEB) is becoming increasingly discussed in the context of spatial planning. SEA provides a legislative process around which environmental protection is considered and ecosystems services would seem to lend itself to being part of this approach. This paper assesses some SEA case studies and examines the opportunities to retrofit ecosystems services to these cases to determine the potential of integrating these two processes.

SEA and Impact Prediction Tools Based on LCA

Aldo Treville - aldo.treville@gmail.com, Paolo Neri

The paper reports research demonstrating the potential of integrating LCA methodology as a support tool for decision makers for SEA at various scales—from projects to the territorial scale—through sustainable development. The research attempts to define an assessment tool to be used by local authorities (*i.e.*, municipalities) in order to evaluate the environmental impact of projects and spatial planning that needs preliminary approval, as part of the SEA process. Database profiles of the different case studies included in the fields of spatial planning and urban design are: residential and public buildings (construction or renewal), urban areas (new or renewal), industrial sites, infrastructure (roads, railways, electricity lines, water pipelines, etc.), waste treatment systems, etc. The paper explores both the limits and benefits of using an impact prediction tool that provides a quick evaluation of the environmental impact of public and private proposals through a software interface that links to a customized comparison (using different coefficients) of Life Cycle Assessments in the selected database. More generally, these results show the potential of integrating LCA methodology into the Strategic Environmental Assessment of urban and spatial planning.

Theme chairs:

Maria Partidário, Instituto Superior Técnico-Technical University of Lisbon, mrp@civil.ist.utl.pt
 Matthew Cashmore, Aalborg University, cashmore@plan.aau.dk

This theme builds upon the findings of the special IAIA SEA conference in Prague in 2005 on SEA Process Development and Capacity Building.

Concluding remarks in the 2005 theme discussion pointed to four major outcomes: 1. Bottom line is that SEA is context-specific; 2. SEA is a tool for sustainability; 3. Clarification of the purpose of SEA requires action beyond and outside SEA frontiers; 4. Improving SEA also strongly implies the need to improve EIA. Following these outcomes, the 2005 theme identified three key priorities: 1. To improve standards for SEA without conflicting with the context-specific nature of SEA; 2. The need for better capacity for decision-making towards sustainable development; 3. The acknowledged diversity in the interpretation of SEA's *raison d'être*. A strong point made under the overall theme is that there is still much to learn about SEA and that more empirical and theoretical research is needed to enable a better understanding of how SEA can be useful, effective and efficient.

The research and capacity development agenda theme in the 2011 SEA Conference proposes to take stock on progress made over the past years, particularly since 2005, to stimulate a critical, creative and constructive debate that will look at:

- Where are we with respect to SEA research
- How is capacity development catching up with evolving SEA knowledge
- What are the emerging priorities that challenge the evolution of SEA
- What do we want from future SEA research
- What should the SEA research and capacity development agendas consist of?

This purpose will allow the theme to address its starting question: How have SEA concepts, methodologies and practices been improved and extended through research, discourse and capacity building activities? What outstanding issues and aspects need to be addressed?

Session 8.1: Current Challenges

Session 8.2: Where are we with SEA? Different perspectives on new dilemmas

Session 8.3: What do we want from SEA research?

Session 8.4: Where are we with Capacity Development in SEA?

Session 8.5: How to bridge the gap: Concluding debate

Session 8.1: Current Challenges

Aim: what are the current challenges and problems, limitations, aspirations with, and for, SEA—to create a constellation of problems, aspirations, challenges?

Working method: Challenging opening address and open space to voice critical opinions.

Challenging Opening Address: Which Triumphs: Managing Complexity or Controlling the Abstract?

Maria Partidário - mrp@civil.ist.utl.pt

2 responding speakers

Is SEA Contributing, and to What?

Wil Thissen - W.A.H.Thissen@tudelft.nl

When Does SEA Perform at its Best and Worst?

Kaja Peterson - Kaja.Peterson@seit.ee

Session 8.2: Where are we with SEA? Different Perspectives on New Dilemmas

Aim: To learn from research analyzing the past five years of SEA related research and practice and to discuss different perspectives.

Working method: Paper presentations and discussion.

Impact Assessment Effectiveness Criteria

Chaunjit Chanchitpricha - C.Chanchitpricha@uea.ac.uk

In order to measure the effectiveness of impact assessment processes, this research has conceptualized effectiveness using a framework that consists of multiple criteria drawn from the literature. The framework comprises four categories: 1) procedural (considering policy framework, political context, financial resources, public participation, and experience gained at all levels); 2) substantive (considering regulatory framework, mechanisms in decision making, levels of public participation among stakeholders, and report characteristics); 3) transactive (considering how resources are used); 4) and normative (considering how perceptions of the assessment process can lead to changes in terms of views based on the lessons and experience learned, and how these views bring about normative policy outcomes). This framework was applied to measure the effectiveness of a community Health Impact Assessment (HIA) case study in Thailand, and so was tested at the project level. The results suggested that the lack of HIA regulation limited the ability of some interviewees to reflect on effectiveness. However, this framework was found to have merit. In particular, it was found that evidence of procedural and substantive effectiveness tended to rely on the existence of legal regulation while transactive and normative effectiveness tended to rely on levels of stakeholder involvement in the HIA process. For the transactive category, the findings demonstrated a need for capacity building to enhance effectiveness. Meanwhile, normative effectiveness relied on increasing involvement among stakeholders to facilitate learning, and cooperation to facilitate changes of view through the re-evaluation of cultural norms. This framework has yet to be tested at the strategic level, but is considered to present a useful conceptualisation of effectiveness for all types and levels of impact assessment.

Linking Practice and Research of Policy Appraisal

Camilla Adelle - c.adelle@uea.ac.uk

Policy appraisal has spread rapidly through the OECD and beyond, as has the associated academic literature. This paper presents the findings of a systematic review of this literature. It assesses the extent to which developments in academic research and in everyday appraisal practices have informed one other. While there are signs that policy appraisal research is moving away from the “technical-rational model” of appraisal, both research and practice remain heavily informed by it. The review reveals that research and practice are interacting in subtle and surprising ways, but these fall well short of what is sought by advocates of more reflexive approaches. This paper systematically examines the exact pattern of research-practice interaction depicted in the literature and explores how this may or may not change in the future.

SEA Research Since 2004: Results of a Survey

Thomas Fischer - fischer@liverpool.ac.uk

This paper reports on the results of a questionnaire survey on SEA research activities conducted globally since 2004. The survey was conducted over the summer of 2011 at the University of Liverpool, establishing what SEA research has been carried out where, when and how. A literature review preceded the survey, identifying contact details of relevant researchers. Furthermore, IAIA SEA section members as well as members subscribed to other SEA relevant websites internationally were also contacted. The focus of research, empirical findings, conclusions and recommendations are summarised.

Session 8.3: What Do We Want from SEA Research?

Aim: Creative space for brainstorming—the purpose is that people feel stimulated to generate ideas for research and capacity development.

Working method: interactive/visioning session: blank sheets to fill in, working groups – sum-up with rapporteurs’ assistance.

Session 8.4: Where Are We with Capacity Development in SEA

Aim: To learn about various experiences from presenters on SEA capacity development.

Working method: Paper presentations and discussion.

Learning from Capacity Development Evaluation

Rob Verheem - rverheem@eia.nl

Aside from its regulatory role in The Netherlands as independent quality reviewer of assessments, the Netherlands Commission for Environmental Assessment (NCEA) also supports capacity development abroad. Since 1993, the NCEA has been supporting the development of institutional, organizational and human capacities required for an effective environmental assessment system in developing countries and countries in transition. This work is mostly funded by the Dutch Ministry of Foreign Affairs. Regularly this Ministry evaluates the effectiveness of the organizations it funds. This year, a comprehensive evaluation study was completed on the effects of the capacity development activities of seven Dutch development co-operation organizations. The NCEA was included in this evaluation. An independent team of evaluators looked at the NCEA's activities between 1998 to 2009 in the countries of Georgia, Guatemala, Mozambique, Burundi and Ghana. The evaluation presents several lessons that are shared in this presentation: the role of independent advice on concrete EIAs and SEAs for capacity development of the EA system; the need to focus on enabling conditions for learning, such as institutional memory and structural funding for staffing; essential issues in capacity development, such as good understanding of power relations and context, and application of flexible and truly demand driven approaches. Spin off from the evaluation is the development by the NCEA of a more explicit intervention theory and strategy for her capacity development work. And new ideas on a possible framework for her own learning and monitoring: the "5C" model.

Capacity Development for SEA in the Context of the European Directive: Successful and Unsuccessful Experiences in Portugal

Maria Partidário - mrp@civil.ist.utl.pt

Capacity development concept has been mostly used in the development cooperation context. However, learning and knowledge sharing and exchange is relevant all over the world, and indispensable for innovation and improvement to happen. This paper will share the experience in Portugal concerning capacity development for SEA, meaning what have been efforts developed by responsible authorities, and other organizations, in creating capacities for SEA, and what seems to be the current perception of what SEA is, and could deliver as a decision support instrument at strategic levels.

Seeing the Power in SEA: Capacity, Institutional Reform and Social Theory

Matthew Cashmore - cashmore@plan.aau.dk

This paper builds on recent developments in the impact assessment research agenda by examining if, and how, insights from the broad body of thought known as "new institutionalism" can help use the power of Strategic Environmental Assessment (SEA). A conceptual framework is developed to explore why unsustainable practices appear often to persist in the face of the introduction of SEA (and other impact assessment systems), what features or dimensions of SEA might disrupt the self-replication of unsustainable practices, and where, when and why SEA might not be successful. The conceptual framework is based broadly on the idea of capacity, but uses a new institutionalism as a theoretical lens through which to rigorously and systematically explore the power of SEA in contested policy milieux. The conceptual framework is to be applied to probe SEA in Denmark and Regulatory Impact Assessment in England.

Session 8.5: How to Bridge the Gap and Concluding Debate

Aim: Discuss what is missing and what are key priorities for research and capacity development in SEA.

Working method: Interactive session: blank sheets to fill in, working groups, sum-up with rapporteurs' assistance.

Implementing programmes within the EU Cohesion Policy have many various environmental and sustainable development consequences and thus SEAs for these programmes might potentially influence significantly future development directions and priorities in the EU Member States.

The Handbook on SEA for Cohesion Policy 2007 – 2013 provides that “environmental assessment, specifically SEA, is a key tool for ‘greening’ plans and programmes, and for improving their overall logic, consistency and chances for success within the overall Cohesion Policy objectives.” Considering this statement, the session will address the real role SEA had within preparation and implementation of documents for EU Cohesion in the period 2007 – 2013, comparing experience gained during preparation of the programmes for current programming period both from old and new EU member states. Inviting SEA practitioners, representatives of DG Envi, programming and implementing agencies as well as planning and ex-ante experts into the discussion the session aims at formulating recommendations for efficient application of SEA for the programming documents for period 2014+.

Following specific issues will be discussed within the session:

- What is/should be the role of SEA in preparation of SF’s programmes?
- Did SEA for SF’s programmes 2007 – 2013 fulfill this role? Why yes, why not?
- Is/should be there a link between SEA and *ex-ante* evaluation?
- Are SEAs effectively integrating priorities for sustainable, green and competitive economy into programming process and use of EU Structural Funds?
- Are there any important issues (environmental, social, economic, sustainable, etc.) to be specifically addressed in/promoted by SEAs for the next “generation” of SF’s programmes (*e.g.*, green economy, climate change adaptations, etc.)?
- What methodological lessons can be drawn from the mid-term review?
- How have the results of SEA been used during project preparation and implementation?

Session 9.1: Key issues related to SEA for EU Cohesion Policy – panel discussion

Session 9.2: Approaches and methods

Session 9.3: National experience

Session 9.4: What to improve for the period 2014+?

Session 9.1: Key Issues Related to SEA for Cohesion Policy

Aim: To define a set of the key issues to be addressed in further sessions within the theme.

Working method: Panel discussion

Panel members:

- George Kremlis, Director, Directorate A: Legal Affairs & Cohesion, Environment DG, European Commission
- Daniel Braun, Deputy Minister - State Secretary, Ministry for Regional Development, Czech Republic
- Gordon McLaren Chief Executive, ESEP Ltd., Scotland
- Mojca Hrabar, Senior Consultant, Oikos, Slovenia
- Witold Woloszyn, University of Maria Curie-Sklodowska, Poland

The panelists will introduce their view on the questions provided in the theme presentation above by a short (3 – 5 min) summary highlighting the opinion on expected role of SEA in the period 2014+.

Aim: Provide an overview of possible approaches to SEA for EU Cohesion Policy programmes and present its benefits and “added values” from the programming and implementing agencies point of view.

Working method: Paper presentation. Main conclusions from the discussions within the session will be put on the paper stand with a call for further written comments. Collected comments will be then considered in the last session (group work and wrap-up discussion) and incorporated to the conclusions from the theme.

SEA Handbook for EU Cohesion Policy

Jiri Dusik - jiri.dusik@integranet.cz

In 2005, the EC-funded GRDP consortium produced the SEA Handbook for EU Cohesion Policy, which was endorsed by the European Commission DG Environment and DG Regio for a wide application. This document and its national adaptations became one of the most widely used reference materials for undertaking SEA during 2007-2013 programming process. Reflecting on the latest trends in SEA theory and practice, the lead author of this material will present his recommendation for small adjustments of the analytical approach and methodology promoted by this Handbook.

Cohesion Policy and SEA: Implementation Lessons

Peter Hjerp - phjerp@ieep.eu

This paper is based on the findings from a recently completed study (June 2011) for DG Regio on the integration of environmental considerations into the future of Cohesion Policy post 2013. The consortium was led by the Institute for European Environmental Policy (IEEP) and consisted of CEE Bankwatch Network, BIO Intelligence Service S.A.S, GHK, Institute for Ecological Economy Research (IÖW), Netherlands Environmental Assessment Agency (PBL) and Matrix Insight. As part of this study, the implementation of SEA was also addressed as part of the evaluation of 26 case studies (10, Member States, 10 Major projects, 3 Interreg Projects and 3 Cities) from the current Cohesion Policy funding period. The study found that SEA experiences across Member States and regions vary significantly in terms of scope, timeliness, methodology and effectiveness. In several Member States there is a general uncertainty whether operational programmes (OP), which do not foresee big infrastructure investments with unlikely negative impacts on the environment, should be subject to an SEA. Overall, however, the case studies provide a number of positive developments and innovative applications of SEA, such as ongoing SEAs, with a feedback mechanism into the actual implementation of the OP as well as the implementation phase of the programming; proposed methodology for reviewing SEAs for OPs biannually; improvement of the link between SEA and the EIA, where critical environmental issues identified in the SEA are followed up as part of the EIA; use of SEA in order to develop indicators or project selection criteria for the OP; and adapt the SEA to better correspond to the scope of the OP, where funding authorities are required to consider the SEA and its categories in the assessment of project proposals.

SEA Performance of Five Interreg IV Programmes

Alexandra Jiricka - alexandra.jiricka@boku.ac.at, Ulrike Pröbstl

Comparing five case studies of first applications of Strategic Environmental Assessment at cohesion policy level—Interreg IV—allows us to discuss the limitations and benefits of this instrument for cohesion funding. The five programmes examined are Interreg IVB Alpine Space II 2007-13, Central Europe Programme 2007-13, South-East Europe Programme 2007-13, Transnational programmes Austria-Czech Republic 2007-13, Austria-Bavaria 2007-13. We discuss the various methodological approaches as suggested, *e.g.*, by the Handbook on SEA for Cohesion Policy 2007-13. The paper examines the special requirements and challenges at the program level given the conditions for stakeholder involvement, integration of SEA in the program development process and strategies to cope with uncertainties to ensure real compatibility with policy goals. The combination of action research and in-depth interviews with SEA planners and program managers enabled us to analyse crucial factors during the process management. Furthermore we used a retro prospective approach analysing past calls and the selection of suitable projects, which permits us to look at the consequences and success of the SEA for cohesion funding programmes.

SEA for Environmentally Friendlier Rural Development

Ivana Kasparova - kasparova@knc.czu.cz, Vladimír Zdražil and Miroslav Martiš

The paper examines the effectiveness of SEA procedures with regard to influence on the final form of implementation of the Common Agricultural Policy instruments into the national agricultural and rural policies. Does this policy implementation affect the final quality of rural environment? The paper summarizes the experience from the period 2000 – 2011 (SAPARD, HRDP, OP RDMA, RDP 2007 – 2013).

Aim: Present and compare experience from old and new EU Member States gained during the period 2007 – 2013.

Working method: Paper presentation. Main conclusions from the discussions within the session will be put on the paper stand with a call for further written comments. Collected comments will be then considered in the last session (group work and wrap-up discussion) and incorporated to the conclusions from the theme.

The Role of SEAs in Mainstreaming Sustainable Development

Gordon McLaren - gmclaren@esep.co.uk

Article 1 of the SEA Directive aims to integrate “environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.” This paper considers how the SEA process is one of a range of measures to integrate sustainable development into future EU Structural Funds Programmes. An integrated approach has the potential for policy alignment (the experience in the Scottish Programmes is that treating social, economic and environment together is consistently mutually beneficial). Our mainstreaming work shows the value of placing sustainable development at the centre of decision making processes. SEAs can raise awareness of the benefits of sustainable development, presenting opportunities such as renewable energy potential alongside challenges like vulnerability to climate change. How can we use SEA as part of a holistic approach identifying and addressing social, economic as well as environmental concerns? Criticism of SEAs notes they institutionalise environmental matters as separate from social and economic components; it is seen simply as a “tick-box” exercise or a “bolt-on” or as technical and complicated. The SEA process can be moved beyond “green-proofing,” recognizing the beneficial role SEAs can play in assisting the delivery of sustainable development through a proactive methodology which recognizes the importance of leadership, partnership, involvement of stakeholders, and by embedding sustainable development in core business. Consultation on the 5th Cohesion Report identified “sustainable development, environment and energy” as the top policy priority area for 2014-2020. How do we ensure that seven-year programmes have the flexibility to respond to future sustainable development challenges such as climate change, energy security, increased migration, and deliver on the Europe 2020 targets? Future programmes need the resources to establish robust and relevant monitoring frameworks, using the SEA as baseline from which we can mainstream sustainable development into policies, procedures, and activities supported by the Programmes.

SEA of Cohesion Policy 2007 – 2013 in Slovenia

Mojca Hrabar, mojca.hrabar@oikos.si

In early days of SEA Directive implementation in Slovenia, SEA was used for spatial plans on various levels. This changed in 2006 when the Operational Programmes (OPs) for the new Cohesion policy period were prepared. The Government Office for Local Self-government and Regional Policy, the Managing Authority for Structural Funds in Slovenia, recognized early on the importance and obligations of SEA for new Operational Programmes and has therefore incorporated SEA into preparation of the OP for Development of Environmental and Transport Infrastructure (Cohesion Fund) and OP for Development of Regional Potentials (ERDF). As these were the first SEAs for Operational Programmes in Slovenia, there were some difficulties because the experience of both authorities and practitioners was based on SEA for spatial plans. This was overcome by close cooperation of MA, SEA authorities, practitioners as well as several stakeholders who provided useful data (e.g., on indicators, infrastructure, demographics). Mitigation measures were effectively integrated both into OPs and the selection processes for projects applying for Structural Funds. However, some of the mitigation measures, e.g., on sustainable mobility, were not taken into account due to strong interests of some authorities. Moreover, the assessment of achieving environmental objectives might be difficult; in the current mid-term evaluation phase it has turned out that too many indicators were based on national indicators that proved too coarse or influenced by too many external factors to be appropriate. In the next programming period, SEA should be integrated with the OPs even earlier so that early findings can be used as a basis for objectives and priorities formulation. Moreover, monitoring should be designed in such a way that could more easily be part of the OP implementation activities. Nevertheless, SEA has proved to be a useful tool for better integration of environmental issues into Cohesion Policy Operational Programmes.

Interim Evaluation of Environmental Requirements

Danute Burakiene - d.burakiene@finmin.lt

In 2006, before the start of implementation of 2007-2013 Operational Programmes financed from the EU Funds, the strategic assessment of the effects of these Programmes on the environment (SEA) mandatory under SEA Directive and appropriate national legislation, was carried out. This year the Ministry of Finance of the Republic of Lithuania (as Managing Authority) has organized the interim evaluation of environmental requirements implementation, the need for which was predetermined by the fact that SEA was

carried out at programme level, as in 2006 more detailed documents were not prepared yet (no measures/projects established). After the implementation process of the Operational Programmes gained pace, it was essential to assess whether the SEA conclusions had justified themselves, to verify whether the indicators set in the Operational Programmes allowed measuring the impact of interventions on the environment, to analyze other topical issues of evaluation in relation to the implementation of environmental requirements.

Application of the SEA Directive in Poland

Witold Woloszyn - witwol@poczta.umcs.lublin.pl

The idea of introducing a SEA system in Poland has its origin in the 1990s. A form of SEA—Environmental Assessment Prognosis of local land use plans—was introduced in 1995. The SEA requirements were limited only to local land use plans and were strongly associated with the land use planning law adopted in 1994. SEA situation changed in 2000 when the Act on Access to Information on the Environment and its Protection and on Environmental Impact Assessment was adopted and especially in 2001 when the fundamental EIA and SEA requirements were created by the Environmental Protection Law. Current SEA provisions were established in 2008 in the Act on the Provision of Information on the Environment and its Protection, Public Participation in Environmental Protection and Environmental Impact Assessment. The study first provides an overview of the formal Polish SEA requirements and then confronts the “spirit” of the existing legislation with practice experience. More specifically the study provides an analysis of the SEAs carried out in Poland for major programmes under the European Union Funds scheme 2007-2013. The paper examines the handling of the key SEA stages, especially scoping, baseline reporting, content of the SEA Report, consultation and public participation. An attempt is made to identify major deficiencies in the existing Polish SEA system. The influence of SEA on a final formulation of development policies is also presented as well as suggestions as to possible measures to increase the effectiveness of the Polish SEA system are outlined.

SEA for the Czech OP Enterprise and Innovations

Martin Smutny - martin.smutny@integranet.cz

Operational programmes stipulate sectoral priorities at the national level to be supported from the EU funds in the EU Member States and in accordance with requirements of the EU SEA Directive they should be a subject of SEA. This paper describes the SEA carried out for Operational Programme Enterprise and Innovations 2007 - 2013 of the Czech Republic as an example of the assessment conducted (almost) in parallel with programming process and following recommendations provided by the Handbook on SEA for EU Cohesion Policy. It presents main features of the SEA, approach and a tool used, and highlights benefits delivered through SEA process as well as key obstacles addressed. It specifically focuses on monitoring system suggested by SEA and its practical application during OP’s implementation. The paper also reflects the Managing Authority’s view (i.e., the Ministry of Industry and Trade of the Czech Republic) on the SEA process and its effectiveness.

Session 9.4: What to Improve for the Period 2014+?

Aim: To reflect and summarize discussions within previous sessions in the theme.

Working method: Group work and roundtable discussion.

The session will be introduced by a summary of the main points raised in the previous sessions presented by the theme chairs. Small groups will be then organized along the main issues in order to provide opportunity for an approximately 30-minute group discussion on selected issues and prepare a short statement on behalf of each group on how that particular issue should be tackled in SEAs for programming documents for 2014+ period. Conclusions achieved by the groups will provide a base for the final roundtable discussion.

Theme chairs:

Rob Verheem, Netherlands Commission for Environmental Assessment, rverheem@eia.nl
Bobbi Schijf, Netherlands Commission for Environmental Assessment; bschijf@eia.nl

This theme aims to contribute to good practice in SEA within development co-operation activities. We explore two topics:

- When European and other donor agencies support and use SEA in developing countries it is commonly accepted wisdom that each SEA system and application should be adapted to the countries' specific contexts. But what does this actually mean? In three consecutive sessions, we will cover different experiences of European and international donors in promoting forms of SEA that are fully adapted for the decision-making cultures in the respective recipient countries. We conclude with a discussion session to extract the key lessons learned on adapting SEA to context.
- Under this theme we also consider how well donor organizations that support SEA in recipient countries are coordinating their efforts. In the final theme session we look at two existing co-ordination mechanisms—the OECD DAC SEA task team Survey and the donor coordination system in Vietnam—and discuss options for further improvement of co-ordination.

Session 10.1: Introduction and keynote presentation

Session 10.2: Paper presentations

Session 10.3: Paper presentations

Session 10.4: One paper presentation followed by panel discussion

Session 10.5: Session 'Getting our act together': donor co-ordination in SEA support

Session 10.1: Introduction and Keynote Presentation

Brief presentation to kick off session series

Rob Verheem, Netherlands Commission for Environmental Assessment

When European and other donor agencies support and use SEA in developing countries, it is commonly accepted wisdom that each SEA system and application should be adapted to the countries' specific contexts. But what does this actually mean? Should, for example, the SEA approach to spatial planning in Indonesia be very different from SEA for comparable planning in Spain? And if so, how should it differ? Is it a good idea to start in all countries from a common basis, such as the OECD-DAC SEA task team guidance, or are differences between for example southern Asia and Sub Sahara Africa too fundamental for that? And do we in the long run work towards the same kind of SEA systems in all countries, or should we have different goals for different regions? Where possible, concrete cases will be discussed, and contributors asked to show how adaptation to context improved on the ground result. This stream aims to bring together SEA experts that wish to explore how contextual factors should influence the design of the process, procedural integration and content of an SEA. The focus will be on development cooperation, but the topic of adaptation to context is equally important within the European Union.

Keynote: SEA Guidance Fit for Purpose?

Peter Nelson - peterjonnelson@gmail.com

This paper examines use of guidance in current SEAs in the EU and Africa, drawing on findings from OECD-DAC case studies and the presenter's experience. The main focus is on the formative stages when the views of clients and stakeholders are likely to be most significant in terms of outcomes.

Plenary discussion on key themes for adapting SEA to context

Session 10.2: Paper Presentations

Understanding and Systematizing the SEA Context

Rodrigo Jiliberto - rjiliberto@taugroup.com

The concept of the context of SEA embraces the core of the experience of environmentally improving a strategic decision making process. The context shapes the SEA itself, and determines what the SEA might be. Understanding the context means understanding the role of SEA in decision-making.

SEA in the Context of EU Development Cooperation

Juan Palerm - juan_palerm@yahoo.es

Analysis of the application of SEA in the context of European Commission development cooperation, addressing how the approaches to development cooperation, as well as the country-specific context condition the design and effectiveness of SEAs.

Policy SEA: Lessons from Development Cooperation

Anna Axelson - Anna.Axelsson@slu.se

This practice report reflects upon lessons learned from piloting and evaluating an innovative approach to policy SEA in developing countries. The primary analytical focuses of the approach are institutions and governance characteristics, plus it places strong emphasis on learning. Insights on the conduct of SEA at the policy level and in challenging socio-political contexts are presented. We reflect upon the importance of appropriate ownership of an SEA, the practical implications of working in contested political environments; the challenges in using SEA as a tool to promote good governance, and the centrality of a long-term perspective to environmental and social mainstreaming.

Questions and discussion (concluded with summary of points for the discussion session 10.4)

Session 10.3: Paper Presentations

The Habit Doesn't Make the Monk: Why and How Should SEA Be Context-Specific?

Maria Partidário - mpartidario@gmail.com

In setting up SEA systems, and in practicing SEA, what is that people expect of SEA that fits their cultural decision context? What are current practices in long-term decision-making that can serve as a support for SEA-type instruments? This paper will address such questions based on practical experience in different cultural contexts.

Policy SEA: The Significance of Context

Anders Ekbohm - anders.ekbom@economics.gu.se

SEA has been developed primarily in OECD countries. Currently, there is growing recognition of the need for contextually sensitive practices. This is poorly reflected in most systems. This article analyzes how context matters for policy planning in developing countries using information from the World Bank's pilot program on policy SEA.

Adapting SEA to Planning Processes: The case of Decision-Maker Buy-In

Bobbi Schijf - bschijf@eia.nl, Rob Verheem

Decision maker buy-in is essential for the effectiveness and influence of an SEA. But how to achieve that in the specific context of developing countries or countries in transition? We will highlight two SEA cases where high level decision makers were actively drawn into the SEA. The presentation does not draw conclusive answers—for that it is yet too early—but aims to inspire more in-depth discussion.

Questions and discussion (concluded with summary of points for the discussion session 10.4)

Session 10.4: Paper Presentation and Panel Discussion

Customizing SEA for the EU Overseas Countries and Territories and Indonesia

Jiri Dusik - jiri.dusik@integranet.cz

The paper compares lessons from customizing SEA for the specific context of EU overseas countries and territories with those obtained in Indonesia. Comparison of lessons from both processes provides some generic lessons that may be of use in various SEA capacity building projects undertaken in development cooperation.

Findings and conclusions on session series 10.1-10.4:

A selected panel of experts working both in developed and developing countries will discuss with the audience their personal observations on basis of the earlier presentations: What do they think are the key findings and conclusions on how to adapt SEA to context, particularly in developing countries?

Session 10.5: “Getting Our Act Together”: Donor Coordination in SEA Support

This session aims to bring together European and other donor organizations that support SEA in recipient countries, to look at how well we coordinate our efforts. On the basis of two keynote addresses—on the role of the OECD DAC SEA task team and on the case of Vietnam—we will discuss three issues:

- 1) Keeping up with the need for support: Who asks for support? And what do they ask? Is the need for SEA support growing? How do we keep a collective overview of support requests?
- 2) Reality check: How well are we coordinating our work? How effective are existing frameworks that facilitate coordination, such as the OECD DAC SEA task team survey? Or the government-driven donor coordination in Vietnam?
- 3) New opportunities: Do we need to improve? How?

Government - Donor Coordination on SEA in Vietnam

Jiri Dusik - jiri.dusik@integranet.cz, Le Hoai Nam, Tham Phuong

In 2005, a new Law on Environmental Protection started requiring SEA of various development strategies and long-term plans at the national, provincial and regional levels. Following the passage of this law, the Ministry of Natural Resources and Environment initiated a coordination programme for various donors engaged in various SEA activities in Vietnam. The programme was used by Sida, GTZ, World Bank, ADB, Danida, SDC, and WWF to coordinate their support to the elaboration of various SEA technical guidance documents, SEA training manuals and training events, and piloting SEA for different plans and sectors on national level and in provinces. The paper will examine lessons from this mechanism and provide recommendations for similar processes in other countries.

Presentation on OECD-DAC SEA Task Team Facilitation of Donor Coordination

Barry Dalal Clayton - barry.dalal-clayton@iied.org

This presentation will highlight the work on the OECD-DAC SEA Task Team in response to the SEA commitments under the Paris Agreement on Aid Effectiveness. The Task Team has sought to raise SEA awareness within the development cooperation community, producing guidance, advisory notes and other products, worked to build capacity and provide training. The Task Team tracks implementation through a regular survey of donor SEA activities to help aid harmonization. The presentation will discuss how effective these activities have been in facilitating cooperation and coordination and what improvements are currently planned.

Facilitated discussion

The theme focuses on the application of SEA at the highest level of decision-making into the development of national and sector policies and legislation.

The application of policy level SEA has been sparse. From a legal point of view, there are no international or European Union-wide mandatory requirements for governments to undertake SEA when preparing policies and legislation. However, the SEA Protocol to the UNECE Convention on EIA in a Transboundary Context, in force since 2010, provides a framework that requires its Parties to “endeavor” to apply SEA to policy and legislation and requests them to report on their implementation of this provision (as set out in article 13). The mandatory reporting on policy SEA will, as of 2014, shed light on the current practice and has the potential of promoting the application of policy level SEA.

SEA of policy has been made mandatory in few jurisdictions such as in Canada. It has also been used by the international cooperation community. Over the last decade, application of SEA in policy and sector reform has increased in World Bank’s supported projects. In this context, the SEA for policy making theme aims at pointing out lessons learned, featuring case studies and identifying opportunities for expanding the application of policy SEA. Overall, this theme seeks to promote reflection on the following questions:

- What have been the results of applying SEA in policies in Europe and globally?
- Has SEA been an effective tool for environmental mainstreaming in policy-making?
- How SEAs at policy level have dealt with/adapted to political economy, institutional and cultural constraints that are critical in policy formulation and implementation?
- Have SEAs been an effective process for channelizing civil society’s environmental and social concerns in policy reform?
- What is the potential for policy SEA to inform development and growth policies and enhance governance?
- How to make the best use of the Article 13 of the SEA Protocol for promoting consideration and integration of environmental concerns into the preparation of policies and legislation.

The stream will focus on analyzing the prospects of SEA as a key instrument for fostering economic growth that takes into account the costs of environmental damage and loss of natural resources. It will then discuss ways in which SEA could improve environmental governance. The next two of the sessions will be devoted to identifying and examining the lessons learned and challenges encountered in applying policy SEA in Europe. Experiences in integrating environmental considerations into policy and legislation by non-European countries will be the focus of another session. The last session will aim at pointing out certain key factors—methods, criteria and indicators—that influence the effectiveness and successful application of policy SEA.

Session 11.1: How can SEA contribute to greening the economy?

Session 11.2: Lessons from SEA and integrated impact assessment of policies in Europe

Session 11.3: How can policy SEA contribute to greening governance?

Session 11.4: Challenges of applying policy SEA in Europe

Session 11.5: Lessons from non-European countries on policy level SEA

Session 11.6: Key factors of policy SEA: Accountability, equity and modeling

Session 11.1: How can SEA Contribute to Greening the Economy?

Aim: The session aims to analyze how SEA can be a key instrument for fostering economic growth that takes into account the environmental degradation costs, climate change and loss of ecosystem services. It will promote discussion on how SEA can assist in green jobs creation and the fostering of technical change in natural resources management. The session will analyze SEA approaches and environmental mainstreaming challenges for promoting a green economy. Acknowledging that green economy is a vision of what governments are trying to achieve, it aims to stir discussion on how to make SEA a key policy instrument of the green economy toolkit.

Chair: *Fernando Loayza*

Working method: The session will be organized around presentations of four papers and will open the floor for contributions from the audience.

Greening Growth through SEA of Sector Reforms

Daniel Slunge - daniel.slunge@economics.gu.se, Fernando Loayza, Anna Axelsson, Rob Verheem

The need for greening economic growth is receiving increasing political attention by international organizations (e.g., OECD, World Bank, UNEP). This paper argues that the crucial challenge for greening growth is at the national level where particularly sector reforms represent unique opportunities for major policy and institutional changes. Based mostly on results of the World Bank's SEA Pilot Program, this paper discusses key elements that can make SEA at the policy level an essential approach for greening growth-oriented sector reforms.

The Challenges of Environmental Mainstreaming

Barry Dalal-Clayton - Barry.dalal-clayton@iied.org

Environment and development remain separate agendas. IIED's work shows that, in a majority of countries, tools such as EIA and SEA don't work as effectively as they could or should. However, IIED's recent work has uncovered a wide array of other approaches that are commonly being used to mainstream environment in development decisions and institutions in planning, budgets, training, etc. This presentation introduces Environment Inside, an open access online resource that builds on the above work and unpacks the purpose and approaches to environmental mainstreaming.

SEA of Trade and Transport Reforms

Raja Aurangzeb Khan, Ernesto Sanchez-Triana - senriquez@gmail.com, Javaid Afzal, Santiago Enriquez

Pakistani industry is outdated and risks losing markets at a time when it may have the opportunity to occupy the space being left by industrial giants like China. As part of its strategy to support industrial competitiveness, the Government of Pakistan intends to adopt policies that promote agglomeration economies (i.e., the availability of specialized labor, inter-industry spillovers, higher road density, local transfer of knowledge, and access to international supplier and buyer networks, etc.). However, the Government also recognizes that, if not well managed, the "public bads" associated with this process (i.e., time—congestion, crime—urban violence, and grime—pollution) may dissipate the benefits of economic growth. In this context, an SEA was developed by the Government of Pakistan with World Bank support to analyze alternative interventions for the development of clusters with the necessary freight transportation infrastructure to help industries take advantage of location economies. The SEA identified cost-effective opportunities for improving the efficiency of the freight transport system in order to meet the goals of enhancing export competitiveness, decreasing spatial inequality and poverty, and reducing environmental degradation.

How SEA can Inform Lenders

Zsuzsa Banhalmi-Zakar - z.banhalmi-zakar@griffith.edu.au, Sanne Vammen Larsen

SEA can be a powerful tool to improve decision-making for plans, policies and programs, but it can also be useful for banks. SEA can help lenders address the reputational risks they are exposed to through financing projects that may have a negative impact on the environment and it can also help with identifying the financial incentives that "green" projects attract. Although bank lending decisions apply to projects, examination of the lending practices of an Australian and a Hungarian bank have shown that decisions about the type of projects to target or avoid are also made at strategic level, such as in the credit policies. It was also found that in some cases lenders become involved in project planning at a very early stage, when projects are conceptualized, and certainly before formal approval is sought from relevant authorities and an EIA is conducted. This suggests that SEA can be a useful tool to inform bank lending decisions.

Session 11.2: Workshop on Lessons from SEA and Integrated Impact Assessment of Policies in Europe

Aim: Since 2001, the European member states are obliged to apply the SEA Directive to focus on the impacts of their plans and programmes on the environment. Since 2002, the European Commission conducts impact assessments of its policy initiatives (policy IA) to identify their impacts with view to sustainable development. Despite its rather environmental focus, SEA is also regarded as an instrument to reach sustainable development. Further, it plays an increasing role for policies, too, especially since the interaction of SEA and policy assessment types is rather fluent in some countries.

This workshop aims to build on the similarities of these two assessment approaches in order to identify lessons learnt to improve SEA for policies as well as policy IA.

Co-chairs: Aranka Podhora, Kaja Peterson

After a short introduction to SEA and policy IA, three main questions will be discussed with the audience:

- How could SEA contribute to policy assessment with view to sustainable development and which are its current methodological, conceptual, legal and institutional limits to this objective?
- Which lessons can be learned from SEA to improve policy IA?
- Which topics can be regarded as research needs in terms of SEA for policies and policy IA?

Session 11.3: How Can Policy SEA Contribute to Greening Governance?

Aim: The session will discuss opportunities and means in which policy SEA could be used as a tool for enhancing environmental governance. It also highlights SEA's role as a lever for increasing accountability of decision-makers, transparency of government policies and public support for their implementation.

Chair: Tea Aulavuo

Working method: This session will be organized around presentations of four papers and will open the floor for contributions from the audience.

Cooperation in SEA in a Decentralized Governance System

Alessandro Bonifazi - a.bonifazi@poliba.it, Carlo Rega

Like other forms of environmental assessment, SEA aims to insinuate ecological rationalities into systems of governance. A clear bias towards public participation and institutional cooperation to the detriment of non-collaborative governance approaches is however distinctive of SEA. This paper investigates how the implementation of the SEA Directive in the European Union (EU) is contributing to fostering cooperation among environmental authorities. These are being broadly defined so as to encompass both planning authorities and the organizations entrusted with specific environmental responsibilities. Italy is chosen as a research context, as it illustrates the difficulties of implementing supra-national legislation in a decentralised governance system where regions have a prominent role. Based on a detailed analysis of both national legislation and regional SEA systems in Italy, we designed and carried out a questionnaire survey, and supplemented it with in-depth interviews with key players, covering both institutional actors and planning and SEA experts. The main research issues included: i) the distribution of powers and roles under diversified regional systems; ii) the prevailing modes of interaction among environmental authorities (cooperation, negotiation, competition, conflict, etc.); iii) the procedures, methods, or informal practices to stage institutional co-operation; iv) the role assumed for SEA in the decision-making process (e.g., setting objectives, discussing strategies, introducing mitigation measures); v) how is SEA work shared among environmental and planning authorities; and vi) what influence is SEA actually having on environmental policy integration. The results show that SEA is positively contributing to foster cooperation among different government tiers and environmental agencies, while improving transparency and accountability and, to a certain extent, becoming a gateway for environmental policy integration. On the other hand, time and resource constraints, conflicting political mandates and the inertia of established administrative procedures and hierarchies are hindering collaborative governance in SEA processes.

SEA in Scotland, SA in England—Sustainability?

Samuel Hayes - samuel.hayes@manchester.ac.uk, Carys Jones, Adam Barker

The promotion of, or movement towards, sustainable development is commonly noted as the overall aim and justification for the implementation of strategic level impact assessment (IA). A decade ago EU Directive 2001/42/EC (the SEA Directive) introduced the requirement for member states to conduct Strategic Environmental Assessment (SEA). However, the SEA Directive does not stipulate methodological approaches, therefore enabling variation in implementation. The paper considers the effectiveness of systems of strategic level IA in the UK. Case studies are selected from applications of SEA in Scotland and Sustainability Appraisal (SA) in England from both development planning and water sectors. Literature indicates many influential factors when considering effective strategic level IA. Of particular relevance in this research is the possible marginalization of the environment and potential double counting of social and

economic impacts in forms of assessment such as SA. Also highlighted as important is the possible need for environmental assessment to act as an environmental advocacy tool. Aspects of practice have also been identified as influential on IA effectiveness, including who carries out IA, the techniques used, the use of professional judgment, consultation with stakeholders, and specifically the distribution of power between stakeholders. The central aim of the research is to establish the extent to which strategic level IA contributes to the consideration of sustainability in plan and programme formulation. The research objectives are to investigate and compare the purposes, processes and practices of SEA and SA, including their networks of actors, to enable comparative analysis of IA system outcomes. The paper presents the initial impressions and key themes emerging from the analysis of the case studies.

SEA of Water Frame Plans and Democracy: Why is Public Engagement Necessary for Successful Planning and Policy Making?

Bo Elling - be@ruc.dk, Helle Nielsen

This paper describes how technical knowledge and democratic aspects of planning/policy making and environmental assessment can be brought together and, in particular, why public involvement is important when SEA is integrated into planning and policy processes. Further, the paper outlines why public involvement and democracy are not only about making planning and policies feasible but first and foremost about enabling planning/policy-making and assessment to meet substantial demands and to be relevant for the issues at stake. The SEA process in connection with water frame policy-making and planning will serve as empirical case and provide examples of basic issues. Since the EU Water Framework Directive prescribes a new type of European planning and monitoring, this case can deliver essential insights into the need for more democratic processes in environmental management and to the reasons why technical knowledge and public involvement should be looked upon as two sides of the same matter.

Session 11.4: Challenges of Applying Policy SEA in Europe

Aim: The session discusses limitations of the regulatory basis for SEA in the European Union and challenges in applying SEA in the drafting of European Union directives and national implementing legislation in the EU. The session showcases challenges and lessons from recent practice in the UK and in Estonia.

Co-chairs: Tea Aulavuo, Fernando Loayza

Working method: Paper session. Organized around presentations of three papers followed by interventions from the floor/discussion and conclusions.

Impact Assessment of European Directives

Thomas Fischer - fischer@liverpool.ac.uk

European Union (EU) directives are policy documents with wide ranging implications and impacts for the 27 member states and regions that need to implement them. When drafting directives, the EU is conducting an impact assessment (IA) which is supposed to cover economic, social and environmental aspects. In reality, however, the main focus is on economic and to a somewhat lesser extent social impacts. Furthermore, currently IA is not able to take into account the spatially heterogeneous nature of the directives' impacts. This paper reports on a current ESPON research project on Territorial Impact Assessment (TIA), an instrument which aims at involving the regional and local level throughout the EU in the impact assessment process of draft directives. Ultimately, through the application of TIA, it is hoped that a better spatial picture of positive and negative impacts may be obtained. Whether the ideas developed in this project are realistic and practical is open for discussion.

Time to Have Policy-Level SEA

Kaja Peterson - kaja.peterson@seit.ee

It is time to include policies into the scope of SEA directive. Description: SEA Directive covers programs and plans, but leaves the policies out of scope. The practice has shown that there is a need to include policies, regulations and strategies into the systematic assessment of impacts similar to SEA process. SEA process provides a framework of impact assessment and public engagement with deadlines and consultees that the policies, regulations and strategies are not subject to. Since most of the policies, regulations and strategies are initiated at European Union level, there is a need for policy-level SEA prior to adoption of new policies or directives at EU level. Similar policy-level SEA is needed at Member States (MS) level. The paper shall provide insights into the current practice of policy-level impact assessment in Estonia, with special reference to the assessment of environmental impacts associated with draft policies and legislation. Based on the study, it is concluded that since there are no quality standards for the outcome or for the process of policy-level impact assessment, there is need for regulation both at EU and MS level, similar to SEA and EIA directives.

Effectiveness of National Assessments in the UK

Ric Eales - r.eales@cep.co.uk, William Sheate

This paper explores the challenges and lessons from recent practice and experience of applying tools such as SEA and Sustainability Appraisal at the more strategic and national policy level in the UK. It investigates whether or not these tools have been effective and helped to deliver more sustainable development at the high level of national policy development. The analysis is illustrated by spatial planning and energy policy case examples from the UK. It concludes that the current performance in implementing the SEA Directive for national level strategic actions is far from exemplary. At the root of the problem is the poor consideration and evaluation of reasonable alternatives, the fundamentally weak conception of sustainability adopted and the apparent perception that having to undertake an assessment and comply with the SEA Directive is a hurdle, rather than a useful mechanism for helping to deliver better and more sustainable evidence-based policy making. Measures are proposed for tackling these deficiencies, which in this case is not related to failure to transpose the Directive for these classes of decisions, but poor application.

Session 11.5: Lessons from Non-European Countries on Policy-Level SEA

Aim: The session aims at showcasing application of policy SEA in non-European countries. It will point out specific challenges faced by the developing countries and the opportunities of application of SEA in terms of fostering sustainable development but also economic growth and improved governance and accountability. The session will also draw lessons from more than 40 years of US experience in EIA implementation to identify factors that could be successfully “adopted” for improving the effective implementation of policy SEA elsewhere.

Co-chairs: Fernando Loayza, Tea Aulavuo

Working method: This session is organized around presentations of four papers followed by interventions from the floor/discussion and conclusions.

Addressing Environmental Priorities in Sindh

Mir Hussain Ali, Javaid Afzal, Ernesto Sanchez-Triana, Santiago Enriquez - senriquez@gmail.com

Environmental degradation constitutes a significant obstacle for economic growth and poverty reduction in Pakistan. The direct and indirect costs of environmental health risk factors are estimated to represent almost 9% of the country’s GDP. In the province of Sindh, environmental health risks also seem to be a major constraint, particularly as inadequate water supply, sanitation and hygiene; indoor air pollution; and outdoor air pollution affect a significant share of the population, particularly young children and women. In addition, degradation of natural resources is affecting a number of livelihoods and ecosystems, with significant economic implications. The Government of Sindh has initiated with the World Bank support the preparation of an SEA that will identify the province’s environmental priorities, assess alternative interventions to address them, and incorporate sustainability criteria across a number of sectors to promote sustainable economic growth. The SEA builds on previous World Bank efforts to support countries, including Pakistan, Colombia, and Peru, in using quantitative and participatory methods to identify environmental priorities and build consensus on policy reforms, investments, and technical assistance needed to address them. The SEA is envisioned as a planning tool that can align domestic and international resources with the province’s efforts to reduce environmental degradation.

Comparing SEA in the US and Germany

Gesa Geißler - gesa.geissler@tu-berlin.de, Johann Köppel, Jessica Reisert

Hidden treasures overseas! Celebrating the 10th anniversary of the EU SEA Directive means actually more than 40 years of US NEPA (National Environmental Policy Act). Against this background we analyze US strategic level environmental impact assessment practice—so-called Programmatic Environmental Impact Statements (PEIS)—and compare it to German SEA practice. With the field of renewable energy development and related infrastructure gaining in importance, we focus on examples of this sector. The results show a much wider application of PEIS than SEA in Germany with much more “real” strategic assessments of policies in early stages. Furthermore, a much more extensive and open public involvement practice in PEIS preparation could be identified in the US. We discuss the possible implications for the German SEA system and conclude that Germany could benefit from a look at the US and the adoption of certain aspects of PEIS practice such as policy level SEAs.

SEA for Pakistan’s Industrial Policy

Javaid Afzal - jafzal@worldbank.org and, Ernesto Sanchez-Triana

The Government of Pakistan considers industrialization as an important engine for the economic growth that the country needs to reduce poverty. However, Pakistan's manufacturing products consist mostly of low-skilled goods, many of which have declining shares in export markets. In order to support the industrial sector's competitiveness, the Government has initiated the preparation of a new industrial policy. In that context, it prepared with World Bank assistance an SEA that identifies opportunities to integrate environmental management into Pakistan's industrial growth policies in order to reduce the social costs of environmental degradation, spur technological innovation, enhance product quality, increase productivity of labor and other factor inputs, reduce firms' pollution-related financial and reputational risks, and create new business opportunities. The SEA also recognizes the important role that industrial environmental management can have in realizing the industrial sector's potential, particularly as compliance with environmental standards, adoption of cleaner production practices, certification to ISO 14,001 and other, related measures that can generate substantial benefits for firms, *e.g.*, costs savings from more efficient use of resources such as water and energy, and access to export markets in which poor industrial environmental performance can be a barrier to entry. In addition, the SEA helped to identify cross-sectoral linkages needed to spur industrial competitiveness in Pakistan.

SEA in Québec (Canada): A Work in Progress

Michel Crowley - michel.crowley@enap.ca, Nathalie Risse

This paper presents the evolution of SEA in the province of Québec, Canada, and highlights institutional and methodological opportunities and challenges that its implementation implies. In Québec, an EA regulation targeting projects and a few programs was adopted in 1980. From 1988 to 1995, initiatives to include SEA in the EA legal framework have been unsuccessful. Since 1998, the Québec Ministère du Développement Durable, de l'Environnement et des Parcs (MDDEP) has been developing process and methodological aspects of SEA suitable for the Québec context. Although no formal SEA process exists in Québec, some mandates on strategic issues have been given since 1998 to an independent board, the Bureau d'audiences publiques sur l'environnement (BAPE). These wide-ranging enquiries and public hearings have shaped major government policies, particularly in waste and water management. Following the BAPE's 2004 report on seismic surveys in the Saint-Lawrence estuary and gulf, the government initiated for the first time in 2009 an ad hoc SEA on gas and oil activities in the Saint-Lawrence. The first phase of this SEA, covering the estuary and part of the gulf led the government to decide in 2010 that there would be no such activities in that region. The SEA's second phase is expected in 2012. The BAPE's 2011 report on the highly controversial shale gas industry recommended that an SEA be done on the matter. In May 2011, the government mandated an independent committee to undertake that SEA and set up a strategic assessments coordination bureau in the MDDEP. Also, the Québec government recently announced a major plan to develop the northern part of the province—the Plan Nord. Several actors, including the James-Bay Advisory Committee on the Environment, feel that an SEA of that plan would be highly relevant.

Session 11.6: Key Factors of Policy SEA: Equity, Accountability and Modeling

Aim: This session focuses on policy SEA selected topics of equity, accountability and modeling.

Co-chairs: *Fernando Loayza, Tea Aulavuo*

Working method: The session is organized around presentations of two papers followed by interventions from the floor/discussion and conclusions.

How is SEA Addressing Sustainability Principles?

Lydia Lamorgese - lydia@tin.it, Davide Geneletti

According to the EU SEA Directive, strategic environmental assessment should contribute to the integration of environmental considerations in plans and programs, with a view to promoting sustainable development. This paper presents the result of a review of SEA reports aimed at understanding if and how current practice is addressing sustainability principles. The review focuses on the methods, criteria and indicators used in the assessments, and on the extent to which they provide suitable information to support decision-making processes aimed at promoting sustainability, or at least environmental sustainability. Particular emphasis is given to the inclusion of key concepts, such as intra-generational and inter-generational equity, and on the associated analysis of trade-offs through time and space. Conclusions are drawn related to the inclusion of sustainability in different SEA contexts, and recommendations for future improvements are proposed.

Opportunity of Modeling Tools for Energy SEA

Posters

The Scottish SEA Review

Neil Deasley - neil.deasley@sepa.org.uk, Sofia Billett, Silvia Cagnoni Watt

The Scottish SEA review set out to assess the effectiveness and efficiency of SEA and was the first formal consideration of how SEA is performing in Scotland. A number of different methodologies were developed and applied to secure data from the wide range of Scottish SEA practitioners and participants, as well as a comprehensive analysis of 32 SEA cases. This poster will provide an overview of the high level findings of the review and how they were translated into practical recommendations for SEA practice.

A Comparison of Different National SEA Frameworks

Carlo Rega - carlorega@gmail.com, Giorgio Baldizzone, Ralf Aschemann, Martin Smutny, Juan Pablo Singer, Marius Nistorescu, Victoria Tanner-Tremaine

The SEA Directive provides a common EU wide framework that is to be applied to 27 different countries, differing as for languages, forms of government, institutional architectures, legal frameworks. The Directive itself leaves a certain degree of freedom to Member States in establishing the specific provisions to implement it, in relation to scoping, consultation, integration with the decision making process and public involvement/consultation. The Directive also states that Member States shall exchange information on the experience gained in applying it, but so far extensive accounts on SEA implementation are available only for a relatively limited number of forerunners countries. This presentation aims to provide inputs on the implementation of the SEA directive based on researchers and practitioners experience from a number of relatively less covered countries comprising Italy, Spain, Czech Republic and Romania as well as from more experienced ones such as UK and Austria. SEA national systems are examined and compared against a set of key SEA-related issues drawn from the international literature including: i) scope of application; ii) forms of integration with the decision-making process (e.g. is SEA an exogenous process or it is fully subsumed in the planning process? Are there specific authorities in charge of evaluating the ER?) iii) Monitoring and follow up provisions iv) provisions for public involvement; v) costs of the SEA processes; vi) importance and responsibilities of different administrative tiers (national, regional, local) vii) quality control/assurance of SEA processes and reporting on the influence of SEA on decision making. A tentative clustering of national and sub-national "SEA models" based on the above mentioned aspects is provided.

SEA of Municipal Plans: Review of Effectiveness

Asdis Hlokk Theodorsdottir - hlokk@ru.is, Einar Jonsson

SEA was formally implemented in Iceland with a special legislation five years ago, on the basis of the EU SEA Directive. Since then, planning practice has been adjusting, and the key question raised here is how practice has lived up to expectations raised by the new legislation. The study reviews the performance of the SEA system and evaluates the quality and effectiveness of SEA application to municipal planning through five case studies, *i.e.*, SEA of five municipal plans. The main aim is to study how SEA has dealt with environmental and sustainable policy integration in planning through SEA. The purpose is also to analyze and evaluate the effectiveness of SEA in general and its impact on the planning process and decision making. Structured interviews and a checklist are used to explore these cases. These two different data sources tell partially a different story, but when put together, they portray both the strengths and weaknesses in the implementation of the assessment. SEA has contributed positively to transparency and decision making, but has not (in these cases) attained full effectiveness. Effects on sustainability or the large scale environmental change through impacts on the main policy direction of these plans are limited. The study concludes by making recommendations, aimed at improving quality in SEA and increasing its effectiveness. Most importantly though, the planning community seems to be learning to use this tool and there seems to be general optimism about the future development of SEA.

The Role of SEA of Municipal Climate Change Plans

Anja Wejs - wejs@plan.aau.dk

The poster is based on initial findings of the role of SEA of climate change plans (CC plans) based on a review of the Danish CC plans. The CC plans are voluntary, conducted by municipalities and cover the municipalities as geographical areas. They are conducted without any national guidelines and are as such not a defined plan type. The presented research therefore defines four different types of CC plans. The initial findings show that the CC plans at this point of time are not environmentally assessed though several CC plans set instructions for future administration. Furthermore, the poster discusses the role of SEA of CC plans such as a wider environmental scope than climate change and the legal effect of the CC plans.

Posters

SEA of Municipal Plans: Review of Effectiveness

Asdis Hlokk Theodorsdottir - hlokk@ru.is, Einar Jonsson

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Policy IA in the European Commission

Aranka Podhora - aranka.podhora@zalf.de, Katharina Helming, Thomas Heckelei, Jacques Jansen, Petrus Kautto, Pytrik Reidsma, Klaus Rennings

Since 2002, the European Commission conducts impact assessments of its policy initiatives (policy IA) to identify their impact with view to sustainable development. The IA reports usually work with tools to come up with robust and reliable results. Policy makers that conduct the IA apply these tools within the IA process ("tool users"). In contrast, scientists develop the tools, thereby often following a specific focus on the tool application within the IA process ("tools suppliers"). The poster consists of two parts. Part (A) describes the research project LIAISE (Linking Impact Assessment Instruments to Sustainability Expertise). Its tasks is to identify and bridge the existing operational gaps between researchers of IA tools and the practitioners within the policy making community in order to improve the quality and application IA tools resulting in enhanced effectiveness and efficiency in decision making. Part (B) presents recent LIAISE research results. They build on an extensive mapping of projects funded in the Framework Programmes 6 and 7 of the European Commission. The authors selected projects that focus on ex-ante policy IA, especially on tools. The results show that these research projects (i) cover all impact areas relevant for the policy IA process, (ii) a variety of policy areas, but few specific policies and (iii) mainly but not only the European level. The poster emphasizes the advantage of a close cooperation between scientists as "tool suppliers" and policy-makers as "tool users" in order to improve the quality of the policy IA itself and based on scientific evidence and thus the policy making process.

Adopting Economic Valuation to SEA in Korea

Youngchul Shin - ycshin@daejin.ac.kr

The concept of SEAs is increasingly utilized within government decision-making in Korea. Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth. It is time to adopt economic valuation of ecosystem assessment to SEA for evaluating the impacts of policies. The meaning and method of adopting economic valuation of ecosystem assessment to SEA are explained in some cases in Korea.

Adaptation of Data to Tiering of Decisions about Use of Marine Areas

Martin Lund-Iversen, martin.lund-iversen@nibr.no

The poster proposes that data and models developed under the iCoast research -project (such as sea floor topography and sedimentation, currents and distributions in water bodies, etc.), and by The Norwegian Institute for Water Research (mapping of marine habitats) are adequate for use in the SEA for municipal comprehensive planning of marine areas, and also form a basis for subsequent data collection in EIA. To do this, theory about differences in SEA and EIA methodologies is referenced.

Posters

An Integrated Evaluation of Landscape Change

Zuzana Dvoráková Lísková - zu.li@seznam.cz, Emílie Pecharová, Miroslav Martis, Petr Samek

The theoretical domain attempts to define the concept “area” on the basis of various solutions given within the differentiation of scientific disciplines, however, the identification of nature of the real (landscape) is still concerned. At some time, the real area may be considered as the result of long-term evolution the particular phases of which have a common denominator hidden in a logic of setting of local natural geosystems. Apart from the natural area formed by natural processes, and minimally represented in the planetary scale nowadays, the cultural area dominates in its varied degrees of modification. An extreme type is the artificial landscape, an exemplary country for mining. The cultural area may be recognized as a point of intersection of natural, economic, and social processes. This poster focuses on evaluating the changes of the landscape for reasons of economics and technological needs, changing social values of society, as well as the influence of social relationships. Innovation step for that approach is not only social-cultural recognition of landscape values but also its space layout.

SEA for Sustainable Bioenergy Production

Rocio A. Diaz-Chavez - r.diaz-chavez@imperial.ac.uk

Renewed interest in biofuels has been motivated by different concerns such as high oil prices, energy security and the effects of climate change. Though the use of biomass is widely favoured, the negative social and environmental implications may outweigh the outcomes. Therefore, there is a need to demonstrate that bioenergy crops are sustainably produced and comply with either national regulations or international standards derived from the market requirements. There is no single best methodology for assessing the sustainability of biofuel crops. Rather, this requires the use of a wide range of analytical tools, such as those which derive from Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). Other environmental management tools and methodologies are already in use, including Environmental and social impact assessment (ESIA), Corporate Social Responsibility (CSR) and stakeholders participation, GIS, LCA. Government enforcement can also contribute towards pointing the way forward to sustainable production.

SEA of “3rd Development Axis” in Slovenia

Klemen Strmsnik - klemen.strmsnik@oikos.si, Anes Durgutovic, Mojca Hrabar, Ursa Solc, Tereza Cernigoj

The “3rd development axis” was planned through poorly accessible Slovene regions based on successful development along the two most important transport corridors. A study on integrated regional development of the axis was prepared. The axis was later divided into three segments, so separate spatial plans and SEAs were prepared. This has watered down the original intent to plan regional development jointly with transport corridors in a sustainable way. Despite the efforts, each SEA got limited to spatial planning approach and failed to integrate regional development issues.

The concept and planning of the “3rd development axis” in Slovenia showed very well how regional development and transport infrastructure planning can depart when planning takes place at different scales. SEA was a useful tool to point out the differences and consequences of lowering the strategic decisions to the local level.

GIS Analysis to Enhance the Factual Basis of SEA

Davide Geneletti - davide.geneletti@ing.unitn.it, Alberto Pitocchi

Even though the use of GIS has become widespread in SEA practice worldwide, it is not yet stretched to its full potential, being often limited to the representation of spatial information and to some basic analysis, such as map overlay. This presentation aims at improving current practice related to the application of GIS in SEA by providing an overview of advanced GIS indicators for SEA; discussing how different types of GIS analysis can provide support to different stages of SEA; discussing current bottlenecks, in the lights of data availability, scale of analysis, etc. These issues are addressed by referring to eight SEA experiences in land use and urban planning, where GIS-based indicators and spatial analysis represented the core of the studies. The conclusion is that a more extensive use of GIS may contribute to expand the factual basis of SEA decision-making, particularly during three key stages: scoping of relevant issues, design of strategies, and comparison of alternatives.

General Information

Registration and Fees

The registration fee entitles delegates to the list of participants, final program, attendance at all sessions, coffee breaks, lunches, and special events, unless an additional fee is noted. Delegates will receive a name badge upon check-in. The badge is an official pass and must be worn to obtain entry to conference functions. If tickets are required for any events, they will be distributed at the registration desk. Please drop off your badge holder at the registration desk at the end of the conference: IAIA will reuse/recycle!

Registration fees should accompany the registration form. Fees are accepted in cash (Euros) or by credit card (MasterCard, Visa or American Express). Any registration after 9 September must be made on-site. Official receipts for registrations made after 9 September will be issued by email after the conference.

IAIA will refund registration fees upon written request received before 1 September 2011. A 50 Euro processing fee will be retained. After 1 September, no refunds will be issued for cancellations or no-shows. Substitutions for paid registrants may be made in writing without financial penalty.

Lunches

Lunches will be served in the Rondel dining hall at the University campus (see the attached map of the campus). The dining hall will be open for the conference participants daily from 1145 to 1400. A selection of a minimum of three main dishes (including vegetarian) will be offered. The meal includes one bottled drink (soft drink or beer) and tea/coffee. Any additional snacks or beverages can be purchased at the university cafeterias.

There are no lunch vouchers—the conference delegates will be admitted to the dining hall during the lunch hours upon displaying the conference name badge.

Coffee Breaks

Coffee will be served in general areas outside the session rooms.

Conference Dinner

The conference dinner takes place at 1930 on Wednesday, 21 September, at the Monastery restaurant and brewery Strahov.

A ticket for the dinner costs 25 Euros and must be purchased by 6 September through the IAIA website.

The party menu consists of typical Czech meals, including spit-roasted piglets and a variety of salads and simple vegetarian dishes. Two drinks (beer or wine or soft drinks) and a cup of coffee or tea per person are available to all paid delegates and paid guests. Additional beverages may be purchased.

About the Monastery

The rustically-styled Monastery is part of the Prague castle area and is located on a hill which overlooks the Prague Castle, the Vltava River, and the historic centre of Prague.

A very good beer has always been served in the Monastery restaurant. The local brewery is famous with its own dark 14° “St. Norbert” beer, named after the founder of the Premonstratensian order. The wine served by the restaurant also comes from the Moravian Premonstratensian cellars and bears the name of the founder of the order – St. Norbert.

How to get to the Monastery by public transport:

Address of the Strahov Monastery: Strahovské nádvoří 302, Praha 1.

The Monastery is within walking distance of the hotel Pyramida (2 minutes).

If you are travelling from hotel Diplomat, take Bus No. 180 or 217 from the Dejvicka station to the Bus stop Malovanka. From here the restaurant is just a few steps away—please follow the signs (“IAIA-SEA PARTY, STRAHOV”).

If you are travelling from central Prague, take tram 22 at the stop Národní třída and continue in the direction of the stop Pohorelec. You can take trams no. 22 or 23 to get to Pohorelec from other parts of Prague, too.

Conference Venue

The IAIA-SEA Prague 2011 conference takes place in the conference center on the Czech University of Life Sciences campus.

The university campus is located in Prague-Suchdol, at the Northwest edge of Prague. Address of the Czech University of Life Sciences is: Ceska zemedelska univerzita (Czech University of Agriculture), Kamycka 129, 160 00 Praha 6 – Suchdol. The map on the back inside cover of this programme illustrates the location of main buildings that will be used during the conference.

Opening and closing plenary sessions and the registration desk will be located in the Congress Hall and the Study and Information Center (SIC) the morning of 21 September and will thereafter move to the Faculty of Environment, room Z 118 where the IAIA office can be found as well.

Most concurrent sessions (Z1-Z2) and the conference secretariat are located at the Faculty of Environment. Four concurrent sessions (A-A4) take place in the nearby building of the Faculty of Agrobiological, Food and Natural Resources.

Business Services

The Faculty of Environment provides free WiFi connection and twenty computers with Internet access free of charge. The facility is open during conference hours. Professional photocopying services are also available at the university campus; however, interested parties must cover their costs.

Presentation Equipment

All conference rooms are equipped with computers and IBMcompatible PowerPoint facilities. Participants should prepare presentations in MS Office Tools (up to version 2007) or Adobe to ensure compatible animation schemes. Presenters should plan to arrive at their sessions early to load their presentations and coordinate with the University staff who will be helping with downloads.

List of Participants

A list of pre-registered participants will be provided to delegates upon check-in at the registration desk.

General Information

Getting In and Around

Prague's Ruzyně Airport is located 15 km west of the city centre. Car-rental office, public phones, bar, shops, ATMs and a bank for money exchange are available at the Terminal I daily from 0600 to 2230. If you arrive at night, you are advised to change money before you pass through customs).

You can travel from the airport to the conference campus either by city bus, airport shuttle or taxi.

CSA (Czech airlines) operates from 0730 to 1900 an airport shuttle bus from the Airport to Dejvická metro station (which serves also a transportation hub to the conference) and to Namesti Republiky (this stop is the very center of the Prague city). The shuttle costs approximately Kc 90,- to Dejvicka metro station and Kc 120,- to Namesti Republiky.

Even less expensive transport to the Prague city and the conference is offered by bus no. 119, which goes every 10-15 minutes from the airport to the Dejvická metro station (main transportation hub close to the conference). The bus ticket costs Kc 24,-. The travel time between the Prague Ruzyně airport and Dejvicka is about 30 minutes.

Official airport taxis are plentiful and line up in front of the arrival terminal. Expect to pay about Kc 400,- to Kc 500,- for the 20 minute ride to the Dejvická and up to Kc 700 for ride to the center of Prague. If you travel from the Prague Airport directly to the conference venue, advise taxi driver to go directly to Suchdol (i.e.,not via Dejvicka) – this whole trip should take 15-25 minutes.

Getting to the Conference Venue

The conference venue is located in Suchdol (the outskirts of Prague 6 district) which can easily be reached in 15-20 minutes by public transport from Dejvická station. Bus no. 107 or bus no. 147 can take you from Dejvicka to a stop called "Ceska zemedelska univerzita." Then you will cross the main street and go to the University campus where the signs will direct you to the conference facilities.

Those staying at the IAIA SEA 11 official hotels can easily reach the conference venue by the following means of public transport:

From Hotel Diplomat- walk about 300 m to Dejvicka station and take a bus no. 107 or bus No. 147 to a stop called "Ceska zemedelska univerzita." The whole trip should take up to 25-30 minutes depending on the waiting time.

From Hotel Pyramida – walk to the bus stop directly in front of the hotel and take bus no. 180 or 217 to Dejvicka station (the trip will take 9 minutes and both buses stop there). Then change to bus no. 107 or 147 and go to a stop called "Ceska zemedelska univerzita." The whole trip may take 40-45 minutes depending on the waiting time.

Getting Around Prague

Public Transport

The Metro network consists of 3 lines (A, B, C). IAIA SEA 11 participants are most likely to use mainly A (the green line), which connects the city center with station Dejvicka, the central hub for public transport to the conference venue. All metro lines operate daily from 0600 to 2230. Intervals between trains are 2-3 minutes (workday rush hours) and 4-10 minutes (off-peak hours).

Trams and buses operate daily from 0430 to 2400 and their schedules are located at individual stops.

The Funicular onto Petrin Hill (nearby the Prague Castle Hill) operates daily from 0900 to 1120 with traffic intervals from 10 to 15 minutes.

Tickets and Fares

Passengers have to obtain their tickets before boarding the trams, buses or entering the metro system. The ticket is valid only if marked in the validation appliance.

Basic tickets that enable transfer between any means of public transport cost Kc 32,- and can be used 90 minutes from validation. Short term tickets cost Kc 24,- and can be used only for 30 minutes from validation. These tickets can be bought at most metro stations, hotels, news stands, travel bureaus, department stores, etc. Basic and short-term tickets can also be bought from the slot machines located at metro stations or near some stops of surface transport.

Short-term tickets include 24-hour ticket (Kc 110,-) and 72-hour ticket (Kc 310,-). These tickets are valid for all the city transport facilities and allow transfers. On such a ticket, owner's name and the date of birth have to be filled in. The ticket is valid from the moment of its marking. These tickets can be bought in the Information Centres of the Prague Information Service (PIS).

Taxi

Taxis can be found in front of hotels (more expensive) and at all the important places. The prices for taxi services must be stated at a noticeable place of the car. Approximate prices in 2011:

- Ride in the district of the capital city of Prague Kc 19,- — 27,- / 1 km
- Boarding fee Kc 30,- — 40,-
- Waiting Kc 4,- — 6,- /1minute

The cheapest and the best quality service is usually ensured by ordering a taxi from one of the following nonstop taxi dispatching offices:

- AAA Taxi (phone 140 14)
- Citytaxi (phone 257 257 257)
- Halotaxi (phone 244 114 411)
- Profitaxi (phone 14015)
- Modry anděl (Blue Angel) 737 222 333)

SEA Implementation and Practice: Making an Impact?

21-23 September 2011 | Prague, Czech Republic | Final Program



International Association for Impact Assessment

www.iaia.org, info@iaia.org

IAIA was organized in 1980 to bring together researchers, practitioners, and users of various types of impact assessment from all over the world. IAIA members number over 2,500 and reside in over 100 countries. IAIA activities are carried out locally and regionally through its extensive network of Affiliates and Branches.

IAIA's Vision: IAIA is the leading global authority on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans, and projects.

IAIA's Values: IAIA promotes the application of integrated and participatory approaches to impact assessment, conducted to the highest professional standards.

IAIA believes the assessment of the environmental, social, economic, cultural, and health implications of proposals to be a critical consideration to sound decision-making processes, and to equitable and sustainable development.

IAIA's Mission: IAIA provides an international forum for advancing innovation and communication of best practice in all forms of impact assessment to further the development of local, regional, and global capacity in impact assessment.



Integra Consulting Ltd.

www.integranet.cz, integra.cr@integranet.cz

Integra Consulting provides services in strategic environmental assessments (SEA); environmental impact assessment (EIA); environmental planning and mainstreaming tools; strategies and research for sustainable development; climate change and eco-innovations.

Our experts routinely work in the Czech Republic and abroad as team-leaders and/or specialists in environmental assessments of the national-, regional-, and local-level policy documents. We also facilitate various sustainability planning process and helped develop and introduce the sustainability appraisal concept which has been legislated in the Czech Republic since 2007.

We allocate part of our time to pro bono support to awareness raising and constituency building in areas related to our professional services. We are proud to support IAIA SEA 11 Prague.



The Faculty of Environmental Sciences, University of Life Sciences in Prague

www.fzp.czu.cz, www.czu.cz

The Faculty of Environmental Sciences of the University of Life Sciences in Prague was established in 2007 in response to current trends in education and the demand for experts to work in the field of environmental protection. The Faculty consists of 6 departments (Department of Applied Geoinformatics and Spatial Planning, Department of Environmental Engineering, Department of Ecology, Department of Land Use and Improvement, Department of Water Resources and Environmental Modeling, Department of Landscape Ecology).

The faculty offers a wide range of specializations, covering the fields of nature conservation and landscape management. There are programs which combine various proportions of biological and technical aspects of environmental conservation. Our graduates head for positions in planning offices, in the civil service, in nature conservation organizations, in research, or in real estate development and management.

The Faculty of Environmental Sciences aims to have all the attributes of a modern college. We strive to create an environment supportive to scholarly dialogue between student and teacher, an environment for our alumni to return to, where they can continue their studies, update their knowledge and, at the same time, pass their practical experience on to us.

This SEA conference is a special IAIA thematic meeting separate from IAIA's Annual Conference. For more information on the annual conference and other special meetings, please visit www.iaia.org for information or contact IAIA HQ (info@iaia.org).

