

Transactional Environmental Support System  
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## **Environmental Assessment, an international perspective**

**MRPartidário**  
**Professor, IST, Portugal**  
**past-President IAIA**

# Content

- Early days - evolving emphasis & family of EA / IA
- International practice - forms and approaches - merits and difficulties
- Delivery of EA to the environment

# Background literature

- Munn, 1975, Canter, 1978, Wathern, 1988
- Sadler, 1996, EA Effectiveness Study
- Dalal-Clayton and Sadler, 2005, International Review of SEA
- OECD-DAC, 2006, SEA Guidance
- EU Report 5 years EIA, 2002, Review of EA in MS
- Cowi Report, 2009, Review of SEA in MS
- IAIA Newsletters

# Early days

## Remind original purpose of EA - emphasis

- Early identification and assessment
- Alternatives
- Integration
- Transparency

Munn, 1975

Canter, 1978

Wathern, 1988

# Early days

wider scope

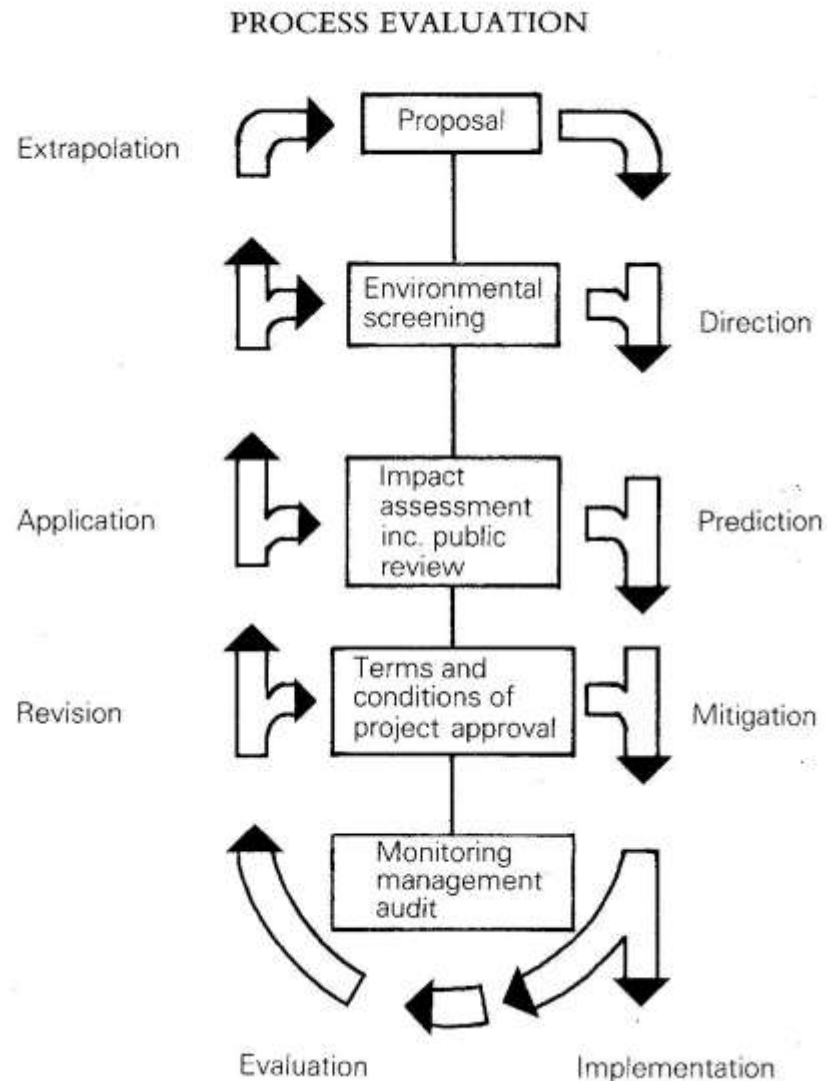
## Munn, 1976

An action - any engineering project, legislative proposal, policy, program or operational procedure with env implications

EIA - activity designed to **identify, predict, interpret and communicate** information about the impact of an action on **man's health and well-being** (including the well-being of ecosystems on which man's survival depends)

# Early days

## cyclic process



EIA lifecycle  
(Sadler, 1988)

# Early days

## Remind EIA Objectives

Lynton Caldwell (1998) reminds EIA purpose in NEPA (1969):

- The environmental impact of the proposed action
- Any adverse effects which could not be **avoided...**
- **Alternatives** to the proposed action
- The relationship between local short term uses (...) and the maintenance and enhancement of **long-term productivity**
- Utilize a systematic, **interdisciplinary** approach to ensure the integrated use of **natural and social sciences** (...) in planning and in decision-making (...)

# EA - evolving emphasis

Late 1970's

I- Key functions

Scoping ↓	What are key issues?
Alternatives ↓	How and where?
Baseline and impacts ↓	Area of influence Effects Best alternative
Mitigation ↓	Minimize
Monitoring	Control and follow-up



# EA/IA - evolving emphasis

1980's

II- Key functions - moved backwards

**Piecemeal**  
**Descriptive**  
**Detailed**  
**Reactive**

Scoping ↓	What are key issues?
Alternatives ↓	How and where?
<b>Baseline and impacts</b> ↓	<b>Area of influence</b> <b>Effects</b> <b>Best alternative</b>
<b>Mitigation</b> ↓	<b>Minimize</b>
Monitoring	Control and follow-up



# EIA as a proactive tool?

## The Sceptics:

An unstructured addition to project's authorization procedure (Bisset, 1983)

The weakness is [EIA] greatest emphasis on description rather than on prediction (Beanlands and Duinker, 1983)

In Britain EIA is a post-decision approach during the 1970's (Foster, 1985)

Many planners consider EIA as a reactive mode of planning (Reiner, 1990)

## The advocates

The continuous and proactive character of the EIA process is increasingly emphasized (Clark, 1989; Sadler, 1988; Wathern, 1988)

EIA from a rather itemized and descriptive blueprint to a more integrative process of evaluation, designed to support better decision-making (Clark, 1989)

Fundamental issues in EIA (Wathern, 1988): role in the comparison and choice of alternative actions

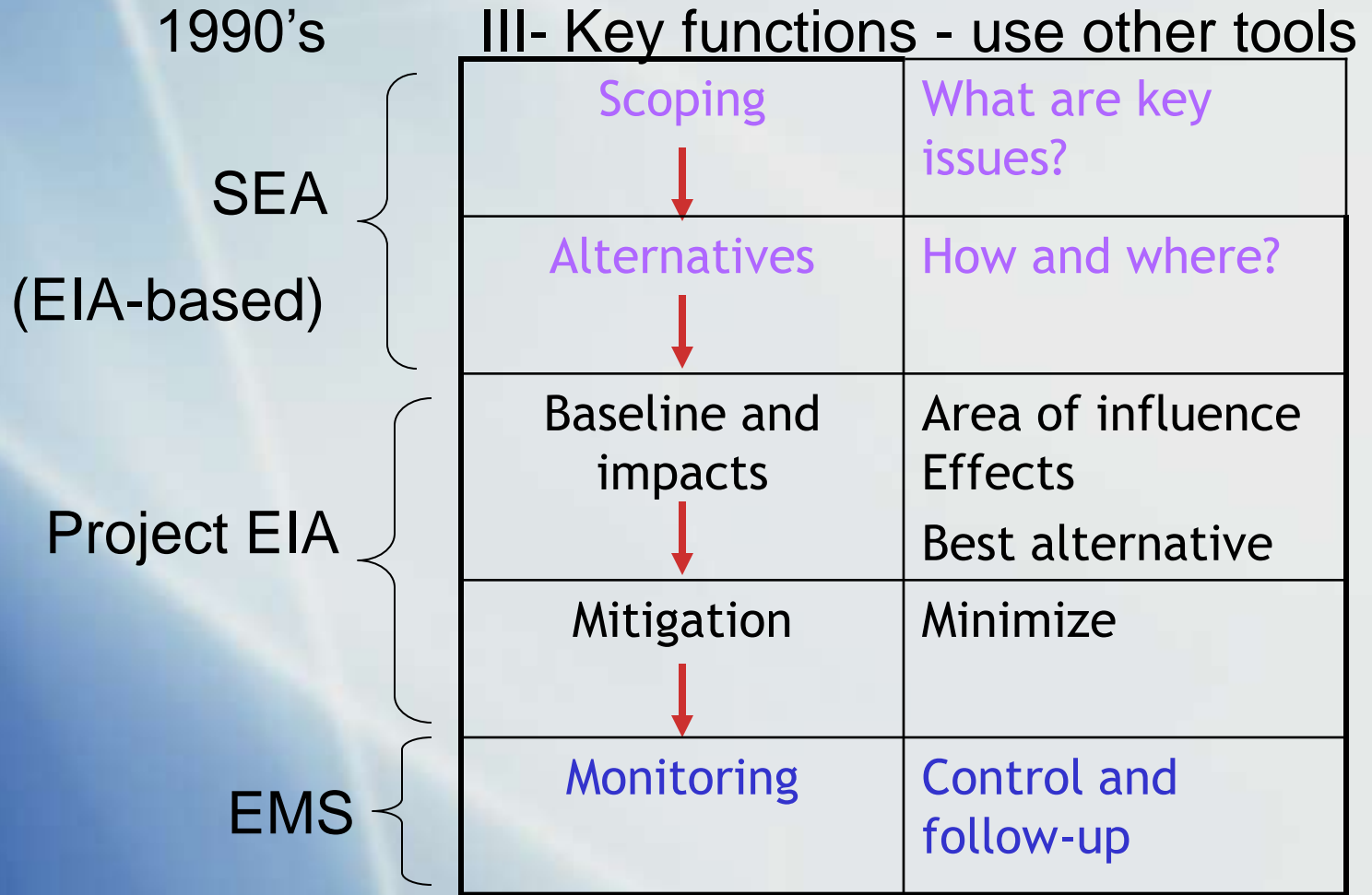
EA and related procedures can help bridge the transition from reactive short-term basis to proactive long-term sustainable development (Sadler and Jacobs, 1990)

# Family of EA/IA tools

- EIA - Environmental Impact Assessment
- SIA - Social Impact Assessment
- Technological IA (Impact Assessment)
- Cumulative IA
- SEA - Strategic Environmental Assessment
- Health IA
- Ecological IA
- etc.

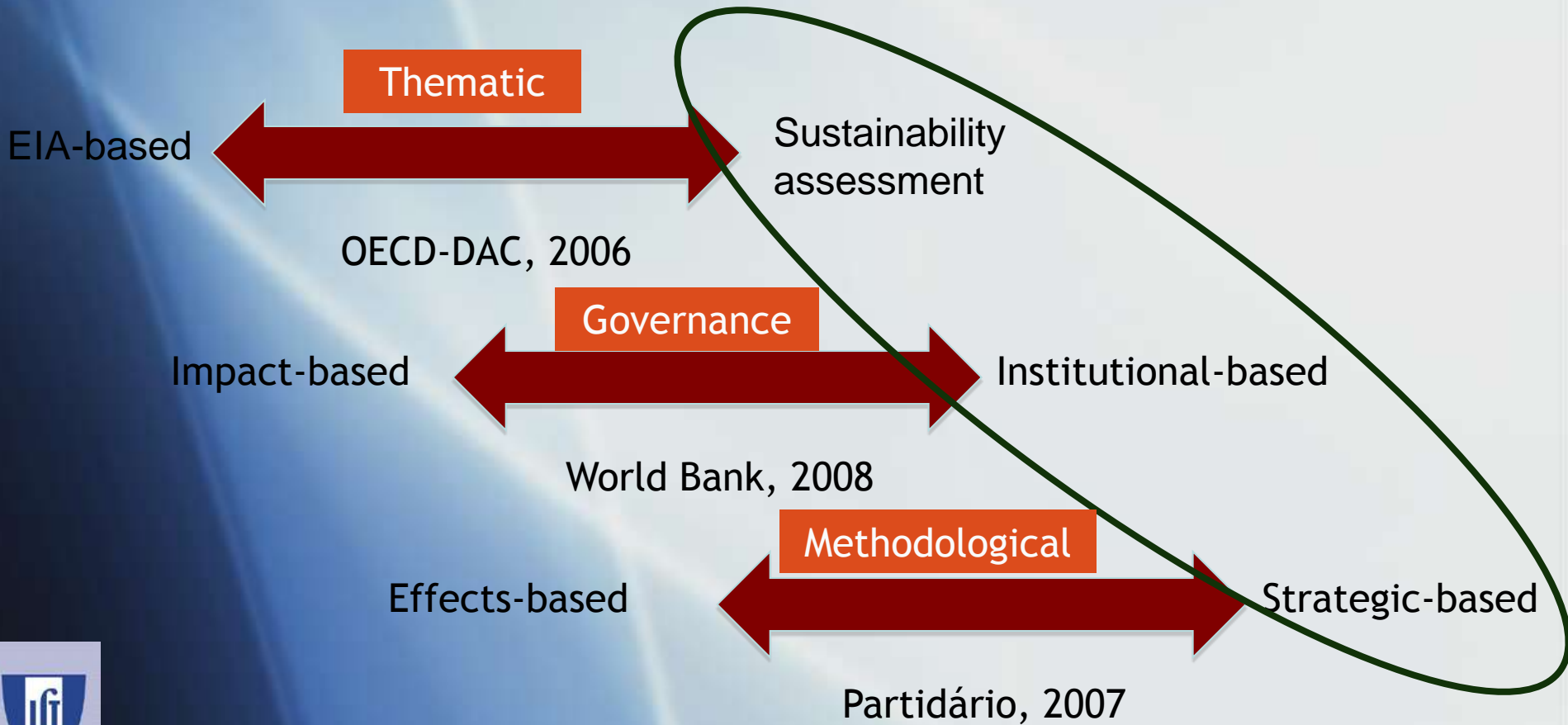
IAlA promotes impact assessment instruments

# EA/IA - evolving emphasis



But focus remains on projects and spatial/physical impacts

# Continuum in SEA



# EIA in the EU

COWI study (2009) concerning the report on the application and effectiveness of the EIA Directive

## The Study:

- Contains analysis of 27 MS
- Examines organisational and legal arrangements in place, expertise and level of experience
- It is the fourth review of the EIA Directive, previously in 2003, 1997 and 1993.

## General findings of the Study:

- The EIA procedures ensures that environmental considerations are taken into account in the decision-making process
- The EIA procedures ensures transparency in the environmental decision-making

# EIA in the EU

COWI study (2009) concerning the report on the application and effectiveness of the EIA Directive

Specific findings - most problematic areas:

- Screening - the use of thresholds, lack of capacity in ensuring sound screening, variations in application, combined procedures
- (Cumulative effects - require more guidance, lack of experience on how to address)
- (Alternatives - not sufficiently address, proponents resist to study environmental alternatives)
- Transboundary consultations - different procedures, time frames applied in the various Member States. Language differences and cost of translation
- Quality control - challenges in assuring quality
- Monitoring - lack of provisions in the EIA Directive

# SEA in the EU

COWI study (2009) concerning the report on the application and effectiveness of Directive 2001/42/EC

## The Study:

- Contains analysis of 27 MS
- Examines organisational and legal arrangements and level of experience with carrying out SEA

## General findings of the Study:

- The Directive contributes to the **systematic and structured consideration** of environmental concerns in planning process
- The Directive provides by way of its formality **further structure to existing** planning procedures
- Contributes to a **transparent and participatory** decision-making process



# SEA in the EU

COWI study (2009) concerning the report on the application and effectiveness of Directive 2001/42/EC

Specific findings:

- Overall picture in the 27 MS is diverse
- Diverse picture because some provisions of the Directive may **create powers rather than duties** which are discretionary rather than mandatory
- MS report **limited experience** - there is limited basis of evidence
- Institutional arrangements - largely planning authorities supported by environmental authorities
- Legal arrangement: both integration in existing legislation or new independent act
- No conclusions on effectiveness** of institutional and legal arrangements

# SEA in the EU

COWI study (2009) concerning the report on the application and effectiveness of Directive 2001/42/EC

Specific findings:

Procedures - different key stages have created problems:

- Scoping: wide discretionary power left to MS

- Alternatives: how to select the reasonable and relevant alternatives to a plan or a programme

- Baseline reporting: right scale of data, availability and access to data for baseline description, level of detail of the environmental report, lack of good quality information, time consuming, etc.

- Assessment: lack of reliable and relevant assessment methods, including forecasting and impact significant criteria, indicators for monitoring

- Monitoring is a non-issue, generally not happening

# SEA in the EU

COWI study (2009) concerning the report on the application and effectiveness of Directive 2001/42/EC

Other specific findings:

- Difficulties in linking with EIA assessments
- Concerns re proper coordination of SEA with the Habitats Directive procedures

Benefits identified by MS

- SEA integrates environmental consideration into decision-making
- Allows for participation and consultation of public authorities
- Increases transparency in decision-making
- Helps to comply with specific environmental policy requirements

# EIA and SEA in other countries

Some countries use same “approach” or legal requirements

**China** - Amendment in 2003 of the Chinese EIA Act, SEA regulations in 2009 (separate from EIA?)

**USA** - still NEPA, 1969

Some European member states (e.g. Czech Republic)

**Canada** - 1990 / 2001 Directive for SEA, 1995 EIA Act

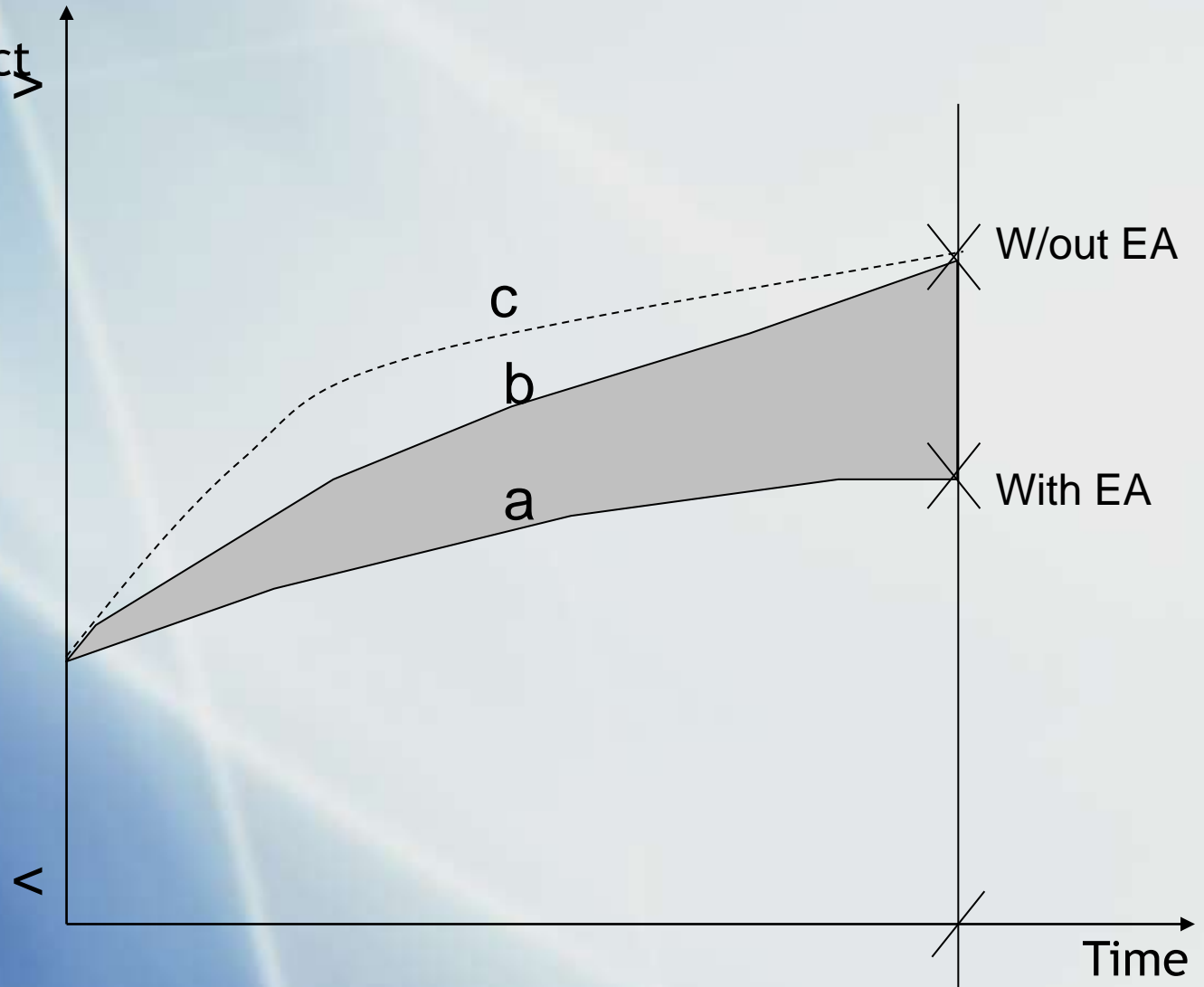
**Australia** - EIA, SEA and sustainability assessment

**New Zealand** - Resources Management Act, 1991

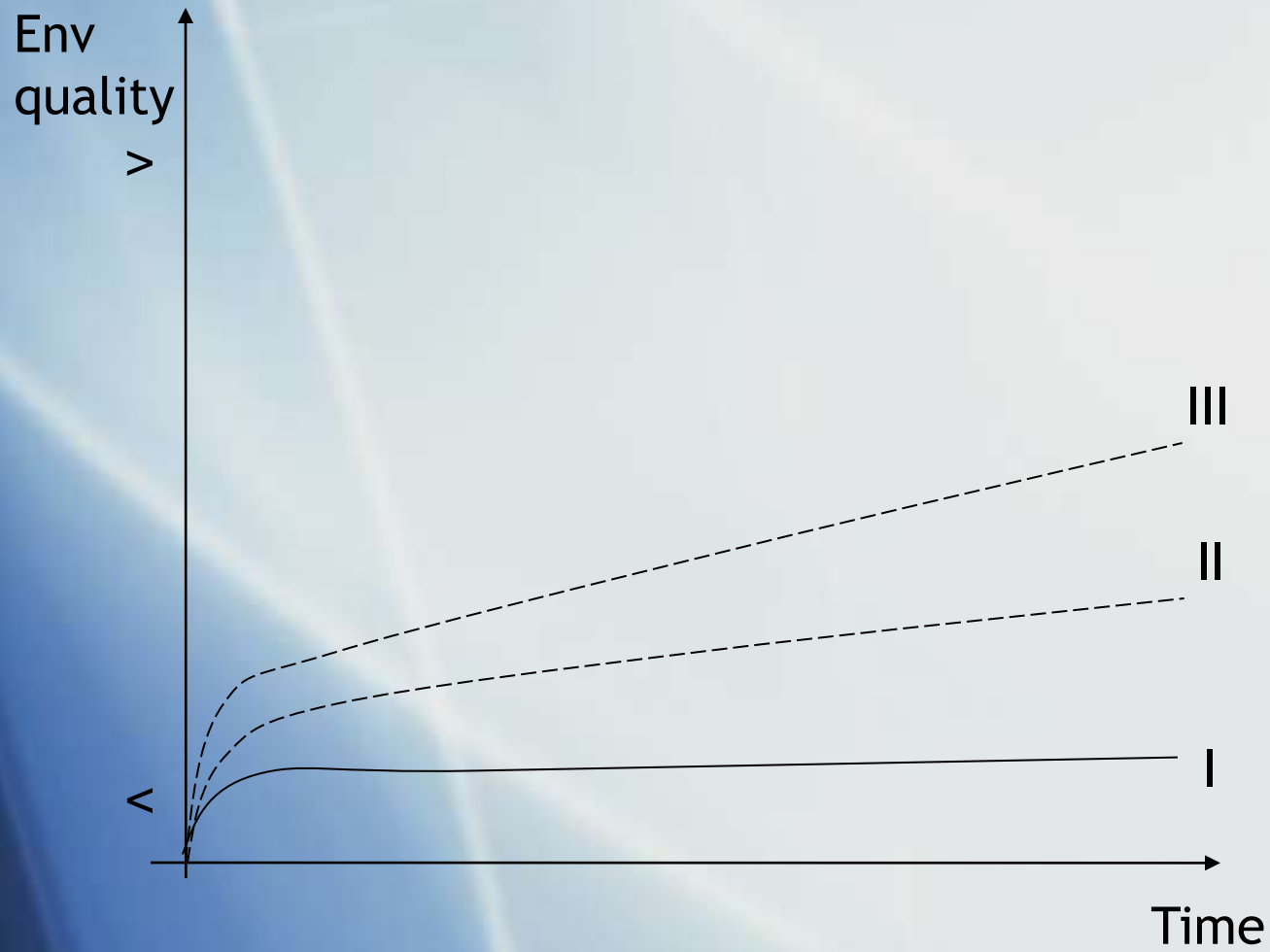
**South Africa** - Environmental Management Act, 1998

# Delivery of EA to the environment

Project's Impact  
on the  
environment



# Delivery of EA to the environment



# TRENDS - PROBLEMS

- Old rules for new challenges - Old site-specific EIA shows difficulties in responding to the challenges of globalization and integration
- Limited focus and scope
- Proponents perception of EIA as a barrier
- Public perception of EIA often as useless and inoperative
- SEA is performing as EIA was originally conceived
- SEA has not been able yet to differentiate as a strategic approach

## Concluding remarks

# Benefits of EA

- ✓ Place the environment on the development agenda
- ✓ Increase transparency and justification of decisions
- ✓ More participation both in relation to physical as well as social issues
- ✓ Stimulate search for better alternatives
- ✓ Reacting time leads to reconsider projects
- ✓ Prevent that projects with major impact will proceed
- ✓ Avoid conflicts in certain cases
- ✓ Adherence to environmental solutions
- ✓ Minimization of negative impacts and maximization of positive
- ✓ Potential links with EMS
- ✓ Education (public, proponents, authorities)