Topic 2

Law, policy and institutional arrangements for EIA systems

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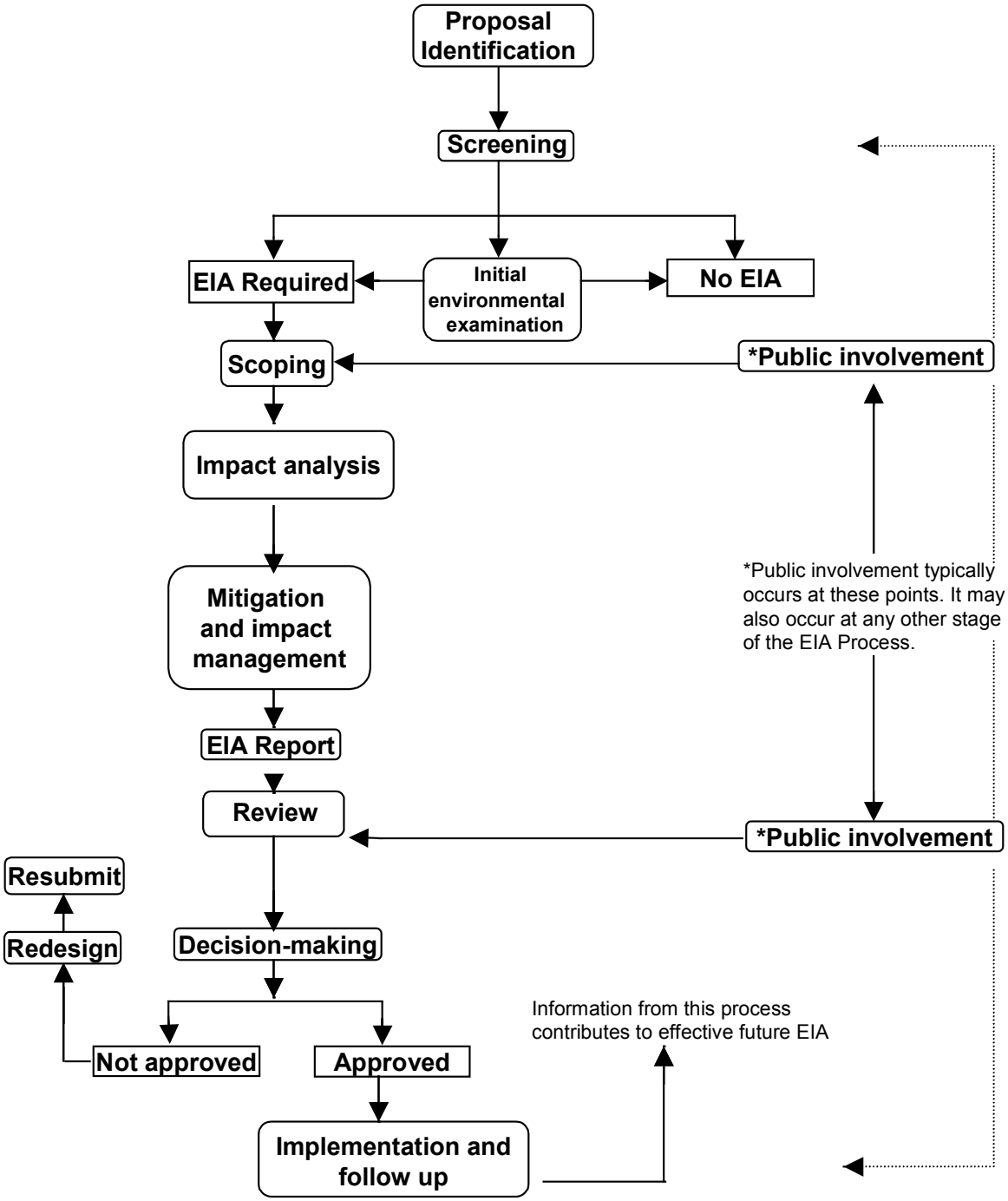
Generalised EIA Process Flowchart



Topic 2—Law, policy and institutional arrangements for EIA systems

Objectives

To provide an overview of the different types of EIA systems which are in place.

To identify the legal, policy and institutional arrangements and directions which are important.

To consider the factors that are important when establishing or modifying an EIA system.

Relevance

EIA takes place within the legal and/or policy frameworks established by individual countries and international agencies. Its practice can be improved through a better understanding of the different arrangements that are made for EIA provision and procedure, and how these can contribute to successful EIA. Those developing or reviewing EIA systems need to be particularly aware of the strengths and weaknesses of existing arrangements and the elements that can improve EIA as a tool to achieve sustainable development.

Timing

Two to four hours (not including training activity). Note that the length of the session will depend upon whether the UNECE recommendations in Handout 2–1 are worked through in detail.

Important note to trainers

You should design your presentation with the needs and background of participants in mind, and concentrate on those sections most relevant to your audience. The session presentation timings are indicative only.

Time taken for the training activities can vary enormously depending on the depth of treatment, the existing skills and knowledge of participants and the size of the group.

☑ Information checklist

Obtain or develop the following, as appropriate:

- ❑ EIA legislation, regulations, orders and directives that are used in the country or region;
- ❑ information on any proposed changes to these;
- ❑ guidelines, agreements or memoranda of understanding that apply to EIA;
- ❑ agreements or means of resolving conflicts where more than one set of EIA arrangements apply to the project;
- ❑ information about how the EIA system addresses any responsibilities that the country has under the international environmental agreements;
- ❑ reviews and analyses of the strengths and weaknesses of applicable legal, policy and institutional arrangements;
- ❑ contact names and telephone numbers of people, agencies, organisations and environmental information/data resource centres able to provide assistance and information regarding national EIA arrangements and developments; and
- ❑ other resources that may be available such as videos, journal articles, computer programmes, lists of speakers, case studies.

Session outline

Welcome participants to the session by introducing yourself and getting them to introduce themselves. Outline the overall coverage of the session, its objectives, and why they are important.


1 & 2

This topic provides insight into the different types of EIA systems, the range of legal, policy and institutional arrangements that can be provided and the directions in which these are developing. It also examines the factors that need to be considered when establishing or modifying a national EIA system.

Very briefly review the aims and main elements of the EIA process.


3

Briefly run through the main stages and components of the EIA process.

Review the key trends in the development of EIA systems.


4

Emphasise that EIA is an evolving process. When establishing or strengthening an EIA system, there is an opportunity to build upon the experience of others and to move towards legal and policy frameworks that support environmental sustainability.

Begin by noting that EIA systems have become progressively more broadly based, encompassing a wider range of impacts, higher levels of decision-making and new areas of emphasis (as described in Topic 1 – *Introduction and overview of EIA*). In particular, there are trends toward:

- more systematic procedures for EIA implementation, quality control, compliance and enforcement;
- integrated consideration of biophysical, social, risk, health and other impacts;
- extended temporal and spatial frameworks, which include cumulative, trans-boundary and ecosystem-level effects and, to a lesser extent, global change;
- increasing provision for strategic environmental assessment (SEA) of policy, plan and programme proposals;
- incorporation of sustainability perspectives and principles into EIA and SEA processes; and

- greater linkage of EIA systems with other planning, regulatory and management regimes.

These trends are identified in the International Study of EA Effectiveness. This study also illustrates how EIA has become institutionalised and looks at the strengths and weaknesses of current practice in relation to different legal policy and institutional arrangements. Other recent and relevant sources of information include the *Handbook of Environmental Impact Assessment* and the *Environmental Assessment Sourcebook Updates* issued by the World Bank (see references).

Many lessons can be drawn from these materials by those who are responsible for introducing or modifying EIA systems, or are amending particular legal, policy and institutional arrangements to international standards. Not all aspects may be appropriate or replicable in certain developing countries without further EIA capacity development (see Section B). However, there is a general trend toward strengthening the foundations and key features of EIA systems in both developed and developing countries. Key institutional milestones are summarised in Box 1.

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Box 1: Key international developments in EIA law, policy and institutional arrangements – the last decade

- Rio Declaration on Environment and Development calls for use of EIA as an instrument of national decision-making (Principle 17); other principles also relevant to EIA practice (e.g. Principle 15 on the application of the precautionary approach).
- UN Conventions on Climate Change and Biological Diversity (1992) cite EIA as an implementing mechanism (Articles 4 and 14 respectively refer)
- Comprehensive reform of long-established EIA systems; e.g. New Zealand (1991), Canada (1995), Australia (1999).
- New or revised EIA legislation enacted by many developing and transitional countries; e.g. Vietnam (1993), Uganda (1994), Ecuador (1997).
- EIA requirements and procedures applied by international financial and aid agencies to loans and projects in developing countries.
- Amendment of EC Directive on EIA (1997) required all member states to be in compliance by 1999; also being transposed into the EIA laws of certain countries in transition, which are in the process of accession to the European Union.
- EC Directive on SEA of certain plans and programmes (2001) which is to be implemented by member states by 2004.
- UNECE (or Espoo) Convention on EIA in a Transboundary Context (1991) entered into force in 1997 as the first EIA-specific international treaty.

- Doha Ministerial Declaration encourages countries to share expertise and experience with Members wishing to perform environmental reviews at the national level (November 2001).
- UNECE (or Aarhus) Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (1998) covers the decisions at the level of projects and plans, programmes and policies and, by extension, applies to EIA and SEA (Articles 6 and 7 respectively refer).

Updated and amended from Sadler, 1996

Briefly identify the legal and institutional characteristics that are in place in a given country or region and consider how they may need to be developed or strengthened.

Every EIA system is distinctive to some degree, reflecting the political system of a country. An EIA framework or components from one country (or international organisation) may not be readily imported into another, at least without significant adaptation. The information gathered during the Training Needs Analysis should help in identifying current and needed activities in the development of an EIA system (see Section C).

What are the key features to look for, and how do they differ? Table 1 provides a framework for examining EIA systems. It can be used to develop a profile of the key provisions that apply, including:

- the designation of an authority responsible for overseeing the implementation of EIA procedure;
- the requirement for public participation, and whether it is a mandatory or discretionary procedure; and
- procedural checks and balances for EIA quality control, comprising key stages of the EIA process (outlined in the flow chart).

The matrix will be most useful when used to compare the EIA systems of countries in the same region. When completed, the table can be used to identify directions in which legal, policy and institutional arrangements might be strengthened. In some developing countries for example the arrangements for public participation made by individual countries may vary significantly, reflecting different traditions and styles of governance. Some countries have established a separate EIA authority; in others the EIA process is administered by the environment department or by the planning authority. No single EIA model is appropriate for all countries.

Table 1: Analysing legal, policy and institutional arrangements

Country	Type of EIA Authority	Legal provision Yes/No	Mandatory compliance Yes/No	Requirement for public participation Yes/No	Procedural checks and balances Yes/No identify types*

**Refer to stages of the flow chart on the verso of the Topic Divider*

Finally, consideration also can be given to the extent to which SEA or a near equivalent process is in place. An increasing number of developed countries and countries in transition now make formal provision for SEA of policies, plans and programmes. Many developing countries also have planning systems that include elements of SEA. The legal, policy and institutional arrangements for SEA are more varied than those for project EIA (see Topic 14 – *Strategic Environmental Assessment)*.

Now review types and examples of EIA systems that may be adopted. Also consider international developments that are relevant and/or applicable to EIA legal, policy or institutional arrangements for a given country. Identify particular aspects that may be used in designing or developing the EIA framework.

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Two main types of legal provision are made for EIA:

- general environmental or resource management law, which incorporates EIA requirements and procedure; and
- an EIA specific law, which can either be comprehensive or take the form of a framework or enabling statute.

Selected examples of national and international EIA systems are given below to illustrate legal, policy and institutional arrangements that are of particular interest. These include the EIA components and responsibilities that apply

internationally under certain treaties or as result of the lending requirements of the major development banks. Their geographical scope of application varies and not all aspects will be relevant to particular countries.

Some national and international examples of EIA legislation

Examples of EIA legislation that set precedents or have been used by other countries include:

- *US National Environmental Policy Act (NEPA, 1969).* NEPA has been called the Magna Carta of EIA. It is both the founding legislation and remains a pre-eminent statement of the spirit and purpose of EIA. The language in the purpose and declaratory sections of NEPA corresponds to the objectives and principles of sustainability, anticipating by more than 20 years that contained in the Rio Declaration. Section 102 defines the procedural requirement for the preparation of an environmental impact statement (EIS), which have been subject to considerable reinterpretation by the courts.
- *New Zealand Resource Management Act (RMA, 1991).* Internationally, the RMA is significant as a sustainability benchmark, which was the result of a four-year process of law and government reform. The RMA is an omnibus law, which repealed or amended numerous statutes, regulations and orders and integrated their functions into one legal regime with a single purpose of 'promoting the sustainable management of natural and physical resources'. Section 5 of the Act defines sustainable management amongst other things as avoiding or remedying adverse environmental impacts. This imposes a biophysical test of sustainability on activities. The RMA does not define an EIA process (instead this is detailed in a good practice guide issued by the Ministry of Environment).
- *Canadian Environmental Assessment Act (CEAA, 1993; proclaimed in 1995).* CEAA is an example of a comprehensive EIA-specific law, passed in response to a series of legal challenges and rulings on the previous 1984 Guidelines Order. The legislation is of interest internationally because it entrenches the principle of public participation, designates the responsibilities of federal authorities in regulations (the law list) and prescribes the requirements and procedure for undertaking different levels of EIA (initial screening report, comprehensive study and public review by either an independent panel or a mediator). The Act applies only to projects; a separate SEA process applies to policy and plans (established 1990; amended 1999).
- *European Commission (EC) Directive on EIA (1985, amended 1997).* The EIA Directive is a framework law that is binding upon member states. It sets out the principles and procedural requirements for EIA within the European Union, leaving it to the discretion of member states as to how these are transformed into national legislation. Recent

amendments to the Directive have strengthened a number of key provisions, notably in relation to screening, consideration of alternatives, public consultation and decision-making. A proposed EC Directive on SEA of plans and programmes, currently under negotiation, is closely modelled on the EIA Directive (see Topic 14 – *Strategic Environmental Assessment*).

The requirements of the Directive are also reflected in the EIA legislation, policy and institutional arrangements of countries beyond the boundaries of the European Union, notably by applicant countries of Central and Eastern Europe (CEE) which are bringing their own EIA systems into line with them. In addition, the Directive can be expected to influence EIA law making in other CEE countries in transition and may have a more generalised influence as a relatively standardised, commonly accepted, minimum process for EIA (see Box 2).

Box 2: Provisions of the European Directive on EIA

The current Directive (97/11/EC) amends the earlier EIA Directive (85/337/EEC).

Key provisions include:

- broad definition of the effects to be considered
- mandatory application for specified projects
- requirement to submit an EIA report
- types of information to be provided by developer
- outline of alternatives studied and reasons
- submission to be made available for public comment
- results of consultations and information must be taken into consideration in decision-making
- content and reasons for decisions made public detailed arrangements for public consultation to be drawn up by Member States

International environmental law and policy of relevance to EIA

As shown in Box 1, significant developments have taken place in international environmental law and policy which are relevant to or applicable by the EIA systems of all countries. These can be divided into:

- non-binding instruments, such as the Rio Declaration, that establish important principles for sustainable development, including those which need to be reflected in EIA arrangements (e.g. the application of the precautionary principle);
- legal conventions and treaties related to environmental protection at the global or regional level, which carry obligations for signatory countries that may be met through EIA arrangements; and

- legal conventions and protocols that apply specifically to EIA arrangements – of which the Espoo Convention is the most notable example.

A number of international environmental agreements establish substantive obligations on the countries that ratify them (see Annex 1). The Conventions on Climate Change and Biological Change are flagship agreements because of their global scope, the importance of the issues that are addressed and their ratification by a large number of countries. EIA is specified as a mechanism for implementing certain aspects of both agreements. More generally, it can ensure that the proposed actions of signatory countries are in compliance with these and other international environmental agreements, including those listed in Annex 1.

The UNECE (Espoo) *Convention on EIA in a Transboundary Context* (adopted in 1991 and entered into force in 1997) is the first multi-lateral EIA treaty. It stipulates the responsibilities of signatory countries with regard to proposals that have transboundary impacts, describes the principles, provisions and procedures to be followed, and lists the activities, content of documentation and criteria of significance that apply. At present, the signatories of the Convention are from the UNECE region and include many Central and Eastern European countries in transition. In this region, the Convention has had an important role in strengthening EIA arrangements.

EIA requirements of the World Bank and regional development banks*

**African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank*

The World Bank and the regional development banks listed above now have well-established EIA procedures, which apply to their lending activities and projects undertaken by borrowing countries. Although their operational policies and requirements vary in certain respects, the development banks follow a relatively standard procedure for the preparation and approval of an EIA report. This procedure generally follows the stages outlined in the flow chart shown on the verso of the topic divider. Borrowing countries are responsible for the preparation of the EIA, and this requirement possibly more than any other has influenced the introduction and development of EIA in many developing countries.

The EIA policies and arrangements of the development banks remain important, especially in countries that have weak or non-existent domestic arrangements. Recently, the World Bank has made a number of changes to make the application of its EIA procedure more systematic, notably through its linkage to new environmental and social safeguard policies. In addition, the Bank's broader environmental policy has moved from a 'do no harm' approach to minimise the adverse effects of its projects to the use of SEA as part of a strategy of promoting long-term sustainability (see Box 3).

Box 3: The World Bank environmental agenda

The Bank's environmental agenda is evolving from a 'do no harm' policy to one of promoting environmental sustainability and integrating environment into sector programmes and macro policies.

- **Do-No-Harm** To mitigate the potential adverse effects of the Bank's investment projects on the environment and vulnerable populations, EIA procedures and safeguard policies are applied. In many cases, these have contributed to better project design and environmental management plans have helped to improve project implementation.
- **Targeted Environmental Assistance** To foster long-term environmental sustainability and improve conditions in developing countries, designated Bank projects target the following areas: sustainable natural resource management, including watershed protection and biodiversity conservation; pollution management and urban environmental improvements; environmental institution and capacity building, and global environmental actions, in accordance with international environmental conventions and commitments.
- **'Mainstreaming' the Environment at the Level of Policy and Programmes** To integrate environmental concerns at the macro level, the Bank has reviewed the policies of the energy, rural development and other sectors, established an environmental framework for its country assistance strategies and intends to make greater use of SEA at the programme and regional level.

Source: World Bank (1999: 8-10)

Review the guidelines that apply or could be used to implement the provisions and requirements of the EIA system. Discuss the problems that can be caused by the lack of coherence in the EIA procedures established by international agencies. Note the OECD framework to ensure coherence of EIA requirements when more than one donor system applies.

Many countries provide various types of guidance on how to apply their EIA procedure. Where the guidance is official, it is usually prepared by the overseeing authority to ensure compliance with EIA requirements. This material is aimed primarily at the proponent, government agencies and others with designated responsibility for implementation of EIA arrangements. In certain countries, procedural guidance is oriented more toward promoting EIA good practice for key stages and activities of the process, such as screening and scoping.

When procedural guidance is not available, it may be developed by reference to guidelines prepared by other countries or international agencies.

There are many examples on which to draw. A useful starting point is the *IIED Directory of Impact Assessment Guidelines* (see references). It contains numerous entries organised by country, sector and agency, and includes guidelines issued by development banks, bilateral-donor, inter-governmental and UN organisations. (More specialised guidance on appropriate EIA methodology, and applications to particular types of projects and areas can be found in the World Bank's *Environmental Assessment Sourcebook).*

In many jurisdictions, more than one set of EIA procedures may apply to a proposal. The lack of coherence between the EIA requirements of various governments or agencies can lead to uncertainty, confusion and added expense for proponents. Problems commonly occur when:

- countries receive aid from a number of donors, each having its own prescribed assessment process; or
- a proposal is transboundary in nature, requiring compliance with EIA procedures in two or more countries, states or levels of government (see Espoo Convention above).

The problems of coherence of EIA for international bilateral aid were addressed by the Working Party of the Development Assistance Committee of the OECD. A practical guide on this subject was prepared to aid both officials in bilateral donor agencies and their counterparts in developing countries. It summarises the various EIA procedures used by the different agencies and provides two key means of promoting coherence:

- a framework Terms of Reference for the EIA of development assistance projects; and
- a comprehensive checklist for managing EIA.

Outline the legal, policy and institutional arrangements that provide the foundation for an effective national EIA system. Note other features that are important to support their application. Ask the participants about any implications these may have for EIA locally and if they can identify any other factors that may be relevant.


7

Experience in many countries indicates that the foundations of an effective EIA system are established by the following arrangements:

- explicit basis in law and regulation;
- clear statement of objective(s) and requirement(s);
- mandatory compliance and enforcement;
- comprehensive scope of application to proposals with potentially significant impacts;
- prescribed process of steps and activities;
- provision for public consultation and access to information; and
- linkage to project authorisation, permitting and condition setting.

In terms of legal provision, aspects of specific importance include:

- broad definition of the environment and 'effects';
- duty to avoid, mitigate or remedy adverse effects arising from an activity;
- requirement for an EIA report to specify mitigation measures the proponent intends to apply;
- procedural guidance on compliance and good practice in applying EIA arrangements; and
- giving reasons for decisions on proposals subject to EIA.

These components can be used to evaluate how current EIA systems measure up against accepted standards for law, policy and institutional arrangements. Where these pre-requisites are in place, they do not guarantee, in themselves, good EIA practice and effective performance. Other factors may intervene. However, where the basic arrangements are inadequate, then the EIA process is very unlikely to lead in the direction of good outcomes.

In developing countries experience has shown a number of underlying conditions will determine whether and how an EIA system is instituted. These are interrelated and reinforcing, and include:

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- a functional legal regime;
- sound administration and flexible policy-making;
- stakeholder understanding of the aims of the process and its potential benefits;
- political commitment;
- institutional capacity for implementation;
- adequate technical capacity, data and information;
- public involvement; and
- financial capacity

Legislation should make clear and explicit provision for the EIA process and identify the responsibilities of the various participants. It needs to be framed specifically to achieve the goals or outcomes that have been identified and incorporate provision for periodic review (to allow for the lessons of experience, changing societal expectations and new demands). A functional legal system is needed if EIA legislation is to be implemented effectively.

Sound administration and flexible policy-making

The legal and institutional arrangements for EIA need to be implemented fairly, consistently and efficiently. EIA policy should be developed flexibly and its effectiveness monitored, giving particular attention to the following factors:

- the reasons for introducing EIA and the problems that it is meant to resolve;

- the goals of the EIA process and how their achievement can be measured;
- the most appropriate approaches to implementing, enforcing and monitoring the outcomes of the EIA process; and
- mechanisms for reviewing and adapting the EIA process to ensure that it continues to meet needs.

Stakeholder perception of the aims and benefits of the process

It is important for all stakeholders to have a realistic understanding of the role that EIA is intended to play in development approvals. Also, in order to ensure continued support for the EIA process, its benefits need to be explicitly recognised and acknowledged, and if necessary, action taken to add value (see above).

Political commitment

The EIA process cannot succeed in its aims without political commitment, public support and adequate resources. Poorer developing countries with weak economies and/or unstable political conditions might need to gradually introduce or strengthen their EIA systems.

Institutional capacity

The successful operation of an EIA system requires the responsible institutions to have the capability to carry out the key functions and activities. Otherwise, even if EIA legislation is in place, its potential benefits will not be delivered. Even where institutional capacity is sufficient, particular care may need to be taken to facilitate good communication, coordination and co-operation between the various government departments responsible for development and environmental management.

Technical capacity, data and information

In particular, the successful operation of the EIA system depends upon the availability of qualified people with the technical skills and expertise to carry out the research, analysis and preparation of an EIA report to the level necessary to inform decision-making. The quality of technical work also reflects upon the availability of baseline data and information on the natural environment, and the research and education system that is in place in a particular country.

Public involvement

Although attention to technical matters is essential, public involvement is crucial to identifying the issues and information that may be of importance in EIA. Local knowledge also may be of considerable benefit to the development and viability of a project. Many projects have failed because

they did not take into account local or traditional factors or because they failed to gain public acceptance and support.

Financial support

Part of the political commitment to the EIA process is the provision of adequate funds to administer the process and carry out required activities. Where necessary, this commitment should include funds for EIA capacity building and training. Often, too, there is a need to provide funding for public involvement programmes, especially in cases where major projects result in involuntary resettlement or other types of social dislocation.

Generally, the need for these programmes is greatest where financial resources are scarcest. Realistically, in many cases progress will be limited without international assistance. In the long term, adequate funding will depend upon the recognition of the benefits that the EIA process brings to a country. These benefits need to be recorded (such as in case studies) so that they are available for later use.

Summarise the key factors to be considered, and the steps involved, when establishing or modifying a national EIA process. Ask if any of the participants have experience in this area that they could share with the group.


2–1


2–2

The UN Economic Commission for Europe (UNECE) has developed a number of guidelines related to the provision of legal, policy and institutional arrangements in the EIA systems of member countries (See Handout 2–1). If appropriate, review or provide a copy of these to the participants and adapt or add to them to meet the needs of the local situation. Criteria for choosing and customising an EIA system to suit are contained in Handout 2–2.

Getting ready


9

The development or modification of a country's EIA procedures requires:

- gaining the support of government;
- establishing the pre-conditions noted in the previous section;
- understanding other planning and regulatory processes and their relationship with the EIA system so as to avoid duplication of requirements and functions;
- consideration of the relative strengths and weaknesses of legal, policy and institutional arrangements;
- identification of appropriate means of implementing them; and
- taking account of key trends and directions for EIA development and their relevance to the political, social and economic circumstances.

Steps towards establishing an EIA system


10

A number of steps can be taken in adopting or adapting a national EIA system to meet the needs of a particular country, including the following:

- establish the goals and objectives of the EIA process;
- review EIA systems established in neighbouring and other countries, especially those that are similar in nature and level of development;
- identify, and cater for, international obligations and commitments such as those arising from ratifying the Conventions on Biological Diversity and Climate Change;
- learn from the experience of others (consider international reviews such as the effectiveness study but also look for regional examples);
- incorporate features that will facilitate the move towards sustainability;
- identify appropriate standards and procedures;
- develop trial guidelines to test the system in practice;
- draft or revise the legislation necessary to implement the necessary changes; and
- incorporate measures to appropriately monitor and review the EIA process to ensure that it is working as intended, and, where necessary, adapt it to meet new requirements and needs of the country.

Experience with the operation of EIA systems has generated a number of 'rules of thumb' that may be generally applicable or useful when adopting or adapting legal, policy and institutional arrangements. Do they apply in the local situation? Do the participants have any others to offer the group? Use OHP 11 to record local 'rules of thumb'.


11

Developing 'Rules of Thumb'

Consider the following in developing the list:

- Without a clear legal and institutional framework, EIA is *ad hoc* and the benefits are lost or reduced.
- EIA relies on and is assisted by other environmental policy and regulatory systems which set objectives and standards (e.g. for ambient air quality, emission and discharge limits etc.).
- Other EIA systems always need to be adapted to the 'political culture' of a specific country, particularly in the area of public involvement.
- EIA should apply equally to private and publicly funded projects; their environmental significance is what matters.
- In order to achieve maximum effectiveness, the EIA process should be integrated with the project cycle at the earliest pre-feasibility stage.
- A quick start up to gain 'hands on' experience with EIA arrangements is usually preferable to lengthy preparatory studies.

- This approach will pay most dividends when it is part of an explicit attempt to 'learn and adapt as you go'.
- Even though institutional capability may be at an early stage, EIA can still lead to substantial benefits in the form of better environmental protection.
- When proponents, the government and the public are experienced in the process they are more likely to have realistic expectations of the process and its outcomes.

Include a training activity to reinforce the topic (if desired).

Summarise the presentation, emphasising those key aspects of the topic that apply locally.

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Reference list

The following references have been quoted directly, adapted or used as a primary source for major parts of this topic.

Donnelly A, Dalal-Clayton B and Hughes R (1998) *A Directory of Impact Assessment Guidelines, (Second Edition).* International Institute for Environment and Development (IIED). Russell Press, Nottingham, UK.

OECD /DAC (1994) *Towards Coherence in Environmental Assessment: Results of the Project on Coherence of Environmental Assessment for International Bilateral Aid.* 3 vols. Canadian International Development Agency, Ottawa.

Petts J (1999) (ed) *Handbook of Environmental Impact Assessment Volume 2: Environmental Impact Assessment in Practice: Impact and Limitations.* Blackwell Science Ltd., Oxford, UK.

Sadler B (1996) *Environmental Assessment in a Changing World: Evaluation Practice to Improve Performance.* (Final Report of the International Study of the Effectiveness of Environmental Assessment). Canadian Environmental Assessment Agency and International Association for Impact Assessment, Ottawa, Canada.

Sadler B and Verheem R (1996) *Strategic Environmental Assessment: Status, Challenges and Future Directions*. Ministry of Housing, Spatial Planning and the Environment, The Hague.

Scott Wilson Ltd. (1996) *Environmental Impact Assessment: Issues, Trends and Practice*. Environment and Economics Unit, UNEP, Nairobi.

UNECE (1991) *Policies and Systems of Environmental Impact Assessment*. United Nations, New York.

World Bank (1999) *Environment Matters.* (Annual Review on the Environment). World Bank, Washington, D.C.

World Bank (1996) *Environmental Assessment Sourcebook Update No. 10.* International Agreements on Environment and Natural Resources: Relevance and Application in Environmental Assessment. World Bank, Washington, D.C.

Further reading

Petts J (1999) (ed) *Handbook of Environmental Impact Assessment Volume 2: Environmental Impact Assessment in Practice: Impact and Limitations.* Blackwell Science Ltd. Oxford, UK.

The following chapters provide information on EIA law, policy and institutional arrangements that are applied internationally and in particular regions of the world.

Bond A and Wathern P Environmental Impact Assessment in the European Union (pp. 223-248).

Briffett C Environmental Impact Assessment in East Asia (pp. 143-167).

Brito E and Verocai I Environmental Impact Assessment in South and Central America (pp. 183-202).

Clark R and Richards D Environmental Impact Assessment in North America (pp. 203-222).

Kennedy W Environmental Impact Assessment and Multilateral Financial Institutions (pp. 97-120).

Kokange J Environmental Impact Assessment in Africa (pp. 168-182).

Rzseszot U Environmental Impact Assessment in Central and Eastern Europe (pp.123-142)

Schrage W The Convention on Environmental Impact Assessment in a Transboundary Context (pp.85-97).

Wood C Comparative Evaluation of Environmental Impact Assessment Systems (pp. 10-34).

Annex 1: International environmental agreements relevant to the application of EIA

Key agreements are listed below. They are divided into two broad categories (the so-called green and brown lists). Emphasis is given to those agreements that apply worldwide and primarily cover issues related to the management of the 'global commons' or transboundary environmental impacts, which can be addressed only if countries adopt commonly agreed principles and rules of action.

Agreements related to the Conservation of Nature and Biological Diversity (the Green List)

- *Convention on Biological Diversity* (Rio de Janeiro 1992, entered into force in 1993) promotes conservation of biological diversity and sustainable use of its components.
- *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (Washington 1973, entered into force in 1975) prohibits or regulates commercial trade of listed species.
- *Convention on Wetlands of International Importance Especially in Waterfowl Habitat* (Ramsar 1971, entered into force 1973) aims to prevent loss and encourage wise use of wetlands. Signatory Countries are required to designate at least one site to the Ramsar list.

Agreements related to the Control and Prevention of Pollution (the Brown List)

- *Framework Convention on Climate Change* (New York 1992, entered into force 1994) aims to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent 'dangerous interference with climate'.
- *Convention for the Protection of the Ozone Layer* (Vienna 1985, entered into force 1998) including *the Protocol on Substances that Deplete the ozone layer* (Montreal 1995) aims to reduce and eliminate emissions of specified ozone-depleting substances and control other harmful activities.
- *Convention on Control of Transbounday Movements of Hazardous Wastes and Their Disposal* (Basel 1989, entered into force in 1992) aims to control and reduce transboundary movements of hazardous wastes, and assist developing countries in environmentally sound management of the hazardous and other wastes they generate.

Source: World Bank (1996)

Training activities

Training activities will be more instructive if they are framed around a local proposal. Consider inviting prospective course participants to make a presentation if they have expertise in this area of EIA.

Discussion themes

2-1 What would be the most effective way of introducing or strengthening a national EIA system? How should this be related to other processes such as those for permitting discharges, land-use planning etc?

2-2 How should EIA be administered if the full potential of the process is to be achieved?

2-3 What are the advantages and disadvantages of using discretionary versus prescriptive procedures for the various stages of the EIA process?

2-4 How can EIA be extended to address policies, plans and programmes?

2-5 What other strategies could be used to improve the consideration of environmental factors in decision-making?

2-6 How could the local EIA process be adapted to encourage the consideration of cumulative and large-scale impacts? What information or other resources might be needed to implement these improvements?

2-7 What are the main challenges in implementing an environmental policy or strategy for assuring the sustainability of development?

Speaker themes

2-1 Invite a speaker to discuss the harmonisation of EIA frameworks of the donors involved in development.

2-2 Invite a speaker who has been involved in the successful implementation of EIA procedures locally or under similar conditions to discuss how this was done.

2-3 Invite a speaker to outline the way in which strategic environmental assessment is or could be used to establish the context for project EIA.

1 – 3

Identical to 1–10

Identical to 1–1 and 1–2

4

Key EIA trends as identified by the Effectiveness Study

- more systematic procedures for EIA implementation
- greater consideration of biophysical, social, risk, health and other impacts;
- extended temporal and spatial frameworks
- provision for SEA of policy, plans and/or programmes
- incorporation of sustainability perspectives and principles
- linkage to other planning, regulatory and management regimes

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5

Milestones and points of reference for EIA arrangements

- Rio Declaration on Environment and Development
- UN Conventions on Climate Change and Biological Diversity
- EIA procedures of development banks and donor agencies
- European Directive on EIA (and proposed Directive on SEA)

6

Types and examples of EIA legal provision

- general environmental law (e.g. NEPA)
- comprehensive resource management and planning law (e.g. New Zealand RMA)
- enabling or framework EIA law (e.g. European Directive)
- comprehensive or prescriptive EIA law (e.g. CAEE)

7

Legal and institutional cornerstones of an EIA system

- based on legislation
- clear statement of purpose and requirements
- mandatory compliance and enforcement
- application to proposals with potentially significant impacts
- prescribed process of steps and activities
- provision for public consultation
- linkage to decision- making

8

Basic conditions supporting an EIA system

- functional legal regime
- sound administration and flexible policy-making
- common understanding of the aims and potential benefits of the process
- political commitment
- institutional capacity
- adequate technical basis, data and information
- public involvement
- financial support

9

Developing EIA procedures requires:

- government support
- establishing the basic conditions
- understanding the relationship to other decision-making processes
- consideration of the effectiveness of different EIA arrangements
- identification of the ways in which they can be implemented
- taking account of key trends and directions for EIA

10

Steps to developing an EIA system

- establish goals
- review other EIA systems
- identify obligations under Treaties
- learn from the experience of others
- incorporate features to move towards sustainability
- identify procedures and standards
- develop trial guidelines
- produce legislation
- incorporate processes for monitoring and review

11

EIA Systems – 'Local Rules of Thumb'

The Economic Commission for Europe (ECE) has made a number of recommendations to ECE governments for establishing EIA procedures.

Principles for the Implementation of Environmental Impact Assessment

It is recommended that:

1. Priority should be accorded to the implementation of EIA through legislation, which should:

(a) In the case of separate legislation, provide for linkage with other legislation which, *inter alia,* governs land-use planning and planning in different economic sectors, licensing and permit systems and environmental management;

(b) Provide for the analysis and evaluation of possible environmental impacts (including health impacts) of activities before a decision is taken, as well as in the construction and operation phases;

(c) Contain provisions to promote the integration of environmental considerations into planning and decision-making processes;

(d) Promote integrated environmental management in relation to sustainable economic development; and

(e) Allow for the necessary resources to be allocated to the EIA process.

2. Existing legislation and practices should be examined to ensure that EIA is fully integrated into decision-making, so that a comprehensive environmental management approach can be implemented.

3. EIA should, in principle, be applicable to a wide range of activities including urban development, agricultural and industrial development (including retrofitting into old technology) and energy generation and transportation, the development and operation of physical infrastructures, natural resources exploitation, treatment, storage and disposal of waste.

4. There should be more harmonisation of EIA practices, at the national and international levels to unify terminology, *inter alia* through the development of a list of terms, to facilitate mutual understanding and to enable the undertaking of EIA in a transboundary context.

5. In each country, an authority should be identified to introduce and oversee the administration of national EIA programmes.

6. An EIA process should provide for:

(a) A clearly defined application of the process to certain activities and to specific levels of decision-making;

(b) Scoping procedures;

(c) Procedures for independent review;

(d) Public participation opportunities;

(e) Identification of mitigation measures;

(f) A linkage with decision-making including a record of decision(s);

(g) Post-project analysis and monitoring; and

(h) Institutional and organizational requirements.

7. For the sake of effectiveness and the optimum allocation of financial and human resources, EIA should particularly be applied where anticipated activities are likely to cause significant environmental impacts, in particular those with a long-term or irreversible character. Mechanisms for identification should be used, such as the enumeration of activities subject to EIA (based on, *inter alia,* sensitive ecosystems, vulnerable resources, non-renewable resources, specific criteria and threshold levels, or combinations of these methods) or initial environmental evaluation procedures.

8. EIA legislation should apply to individual projects and could allow for application to regional development schemes and programmes as well as general policies and strategies.

9. Depending on the nature and degree of the assessed impacts, EIA should continue during the construction, operational and decommissioning phases of activities in order to:

(a) Monitor compliance with the agreed conditions set out in construction permits and operating licences;

(b) Review environmental impacts for the proper management of risks and uncertainties;

(c) Modify the activity or develop mitigation measures in case of unpredicted harmful effects on the environment;

(d) Verify past predictions in order to transfer this experience to future activities of the same type.

10. Procedural arrangements ('scoping') should be adopted to determine the issues to be examined, as well as to develop and to select reasonable alternatives to proposed activities.

11. Scoping processes should be undertaken early in EIA by involving and consulting all parties concerned in order to avoid unnecessary cost and delay, and to accommodate early on the conflicting interests of parties involved.

12. The EIA documentation should undergo an independent review to control the quality and adequacy of the information prior to the decision being made.

13. Review procedures should be defined in relevant legal provisions, regulations or other appropriate arrangements, and be undertaken by an interdisciplinary team with the relevant expertise, in order to assure the preparation of well-balanced and complete results, to enhance the acceptability of the outcome and to improve the management of uncertainties and risks in EIA.

14. EIA procedures should allow for the direct involvement of the affected public, individuals, groups and organizations early on in the EIA process, as they can make important contributions to the identification of objectives, impacts and alternatives.

15. Programmes should be developed as early as possible in the EIA process in order to inform the public of planned activities through direct notification and the use of mass media such as newspapers, television and radio.

16. Efforts should be increased to develop or improve:

(a) Integrated monitoring programmes;

(b) Methods and programmes for the collection, analysis, storage and timely dissemination of directly comparable data regarding environmental quality in order to provide an input to EIA.

17. In order to improve the efficiency of EIA and to obtain a better understanding of its cost-effectiveness, information should be collected to determine the benefits and costs of EIA as a tool for both planning and environmental protection as well as for the integration of environmental values into the decision-making process.

18. When applicable, the consideration of alternatives should take into account different activities, options in technology, process, operation, location, mitigation and compensation measures as well as production and consumption patterns.

19. Appropriate measures should be promoted that allow for and facilitate the assessment of environmental impacts from new technological developments in all economic sectors; to this effect regulations, guidelines and criteria should be developed in order to apply the principles of EIA to technological innovations.

20. EIA documentation should contain, as a minimum:

(a) The setting of the activity (purpose and need);

(b) Which authority(ies) is (are) required to act upon the documentation, and the nature of the decision(s);

(c) Description of the activity itself and reasonable alternatives to it, if appropriate, including the do-nothing alternative;

(d) The potential environmental impacts and their significance attributable to the activity and its alternatives as well as the socio-economic consequences of environmental change owing to the activity or its alternatives;

(e) The relevant environmental data used and, for reasons of clarity, an explicit indication of predictive methods and underlying assumptions made during the assessment procedure;

(f) The identification of gaps in knowledge and uncertainties which were encountered in compiling the required information;

(g) An outline of monitoring and management programmes and mitigation measures to keep environmental degradation at a minimum; and

(h) A non-technical summary including a visual presentation (maps, graphs, etc).

21. Special consideration should be given to the setting up or intensification of specific research programmes aimed at:

(a) Improving existing qualitative and quantitative methods for assessing the environmental impacts of proposed activities;

(b) A better understanding of cause-effect relationships and their role in integrated environmental management;

(c) Analysing and monitoring the efficient implementation of such decisions with the intention of minimising or preventing impacts on the environment (post-project analysis);

(d) The development of methods to stimulate creative approaches in the search for environmentally sound alternatives to planned activities, production and consumption patterns;

(e) The development of methodologies for the application of the principles of EIA at the macro-economic level. The results of the programmes listed above should be exchanged at the international level.

22. Education and training should be regarded as an important tool to improve the practical application and implementation of EIA:

(a) For managers (both proponents and competent authorities);

(b) For practitioners; and

(c) For students (at universities and other appropriate higher schools).

Managers and practitioners should be provided with additional training. For students, curricula should include the concept of the integrated approach of EIA. Governments should exchange information on planned EIA training courses.

23. Co-operation in the field of EIA in a transboundary context is necessary and should be developed and intensified among countries concerned, taking into account national sovereignty over natural resources, to enable:

(a) The provision of information, notification and consultation as early as possible in the EIA process and prior to decisions being taken on planned activities with potentially significant environmental effects on other countries;

(b) The exchange of relevant environmental data and information on the planned activities and their possible transboundary effects;

(c) Public participation in the affected areas based on the principles of reciprocity and non-discrimination;

(d) When appropriate, the provision of a mechanism for independent review which may involve a joint commission, joint monitoring and preparation of assessment documentation, implementation of mutually agreed mitigation measures and means to incorporate the views of the affected country(ies) into the decision-making process.

24. Governments should incorporate EIA provisions in existing and new bilateral or multilateral treaties or agreements with potential environmental implications.

(From ECE, 1991)

Criteria for choice of EIA process

Effectiveness criteria, involving the likelihood of the EIA procedures achieving their stated goals:

Information. The availability of a sufficient information base to allow effective design and implementation (impinges on all other criteria).

Dependability. The extent to which one can be sure that the EIA procedures will achieve the desired outcome or specified goal under existing conditions.

Timing. The time required for the EIA procedures to take effect, in relation to the time perceived available for redressing the problems.

Adaptability. The ability of the EIA procedures to be applied in the face of heterogeneity within one time period.

Flexibility. The degree to which the EIA procedures will continue to be effective, or will require modification, in the face of changing social or economic circumstances.

Cost. The gross demand on economic resources for implementation of the EIA procedures.

Efficiency. The EIA procedures that can realise the policy goal for the least possible cost. Efficiency is differentiated from cost by the consideration of the achievement of the policy goal, thus moving beyond simple expense.

Cross-sectoral influence. The potential for the EIA procedures to offer other benefits (economic efficiency, equity, human health, etc) aside from the achievement of the environmental policy goal. Conversely, the degree of surety that the EIA procedures do not entail a risk of disbenefits in such terms.

Implementation criteria, involving the likelihood of being able to implement the favoured EIA procedures in the relevant social and institutional operating environment.

Equity. The distributional implications; who bears what costs associated with the changes brought about by the application of the EIA procedures.

Political feasibility. The likelihood that the EIA procedures will be acceptable to major political/interest groups and the wider electorate.

Institutional feasibility. The ability of the existing of realistically envisaged institutional arrangements to implement the EIA procedures.

Monitoring. Whether monitoring the impact and use of the EIA procedures over time is feasible and/or affordable.

Enforcement/availability. Consequent on monitoring, whether adherence can be enforced if that is necessary and/or appropriate.

Communicability. Can the particular details of the EIA procedure, and the reasons for its use, be adequately communicated to those involved in its implementation or upon whom it will impact.

(Adapted from Dovers, 1995)