
Aims and objectives of EIA

EIA can:

- **modify and improve design**
- **ensure efficient resource use**
- **enhance social aspects**
- **identify key impacts and measures for mitigating them**
- **inform decision-making and condition-setting**
- **avoid serious and irreversible damage to the environment**
- **protect human health and safety**

Environmental impacts

- type and nature
- magnitude
- extent
- timing
- duration
- uncertainty
- reversibility
- significance

Integration within EIA

EIA process addresses the following environmental effects:

- **biophysical and resource use**
- **social and cultural**
- **health and safety**
- **economic and fiscal**
- **landscape and visual**
- **indigenous peoples rights and traditional areas**

US National Environmental Policy Act

(proclaimed in 1970)

NEPA called for:

- consideration of environmental values in decision making**
- use of a systematic, interdisciplinary approach**
- a detailed statement on:**
 - the environmental impact of proposals**
 - any adverse effects which cannot be avoided**
 - alternatives to the proposed action**
- making the statement available to the public**

**This process became known as
Environmental Impact Assessment**

Evolution of EIA

- early 1970s – initial development
- 1970s to 1980s – increasing scope
- mid to late 1980s – process strengthening and policy integration
- mid 1990s – towards sustainability (SEA, Biodiversity)

EIA– Three core values

- **integrity - the EIA process will conform to agreed standards**
- **utility - the EIA process will provide balanced, credible information for decision-making**
- **sustainability - the EIA process will result in environmental safeguards**

Source: Sadler, 1996

EIA – guiding principles

The EIA process should be:

- **purposive – meeting its aims and objectives**
- **focused – concentrating on the effects that matter**
- **adaptive – responding to issues and realities**
- **participative – fully involving the public**
- **transparent – clear and easily understood**

Source: Sadler, 1996; IAIA/IEEMA 1999

EIA – guiding principles (continued)

- **rigorous – employing ‘best practicable’ methodology**
- **practical – establishing mitigation measures that work**
- **credible – carried out with objectivity and professionalism**
- **efficient – imposing least cost burden on proponents**

Source: Sadler, 1996; IAIA/IEMA 1999

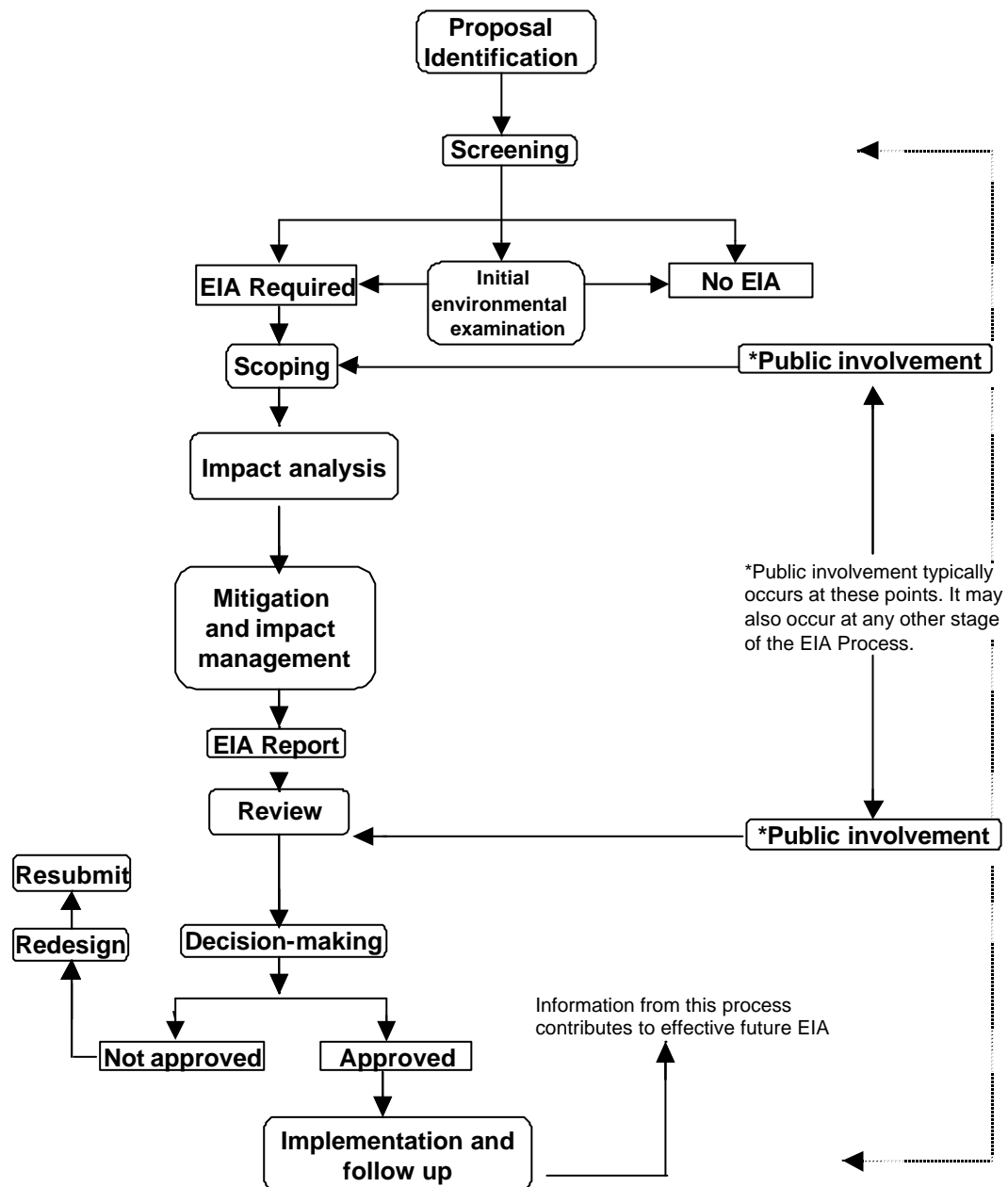
Key operating principles of good EIA practice

EIA should:

- **be applied to all proposals with significant impacts**
- **begin early in the project cycle**
- **address relevant environmental, social and health impacts**
- **identify and take account of public views**
- **result in a statement of impacts and mitigation measures**
- **facilitate informed decision making and condition setting**

Source: Sadler. 1996

Generalised EIA Process Flowchart



The EIA process

The EIA process comprises:

- screening - to decide if and at what level EIA should be applied
- scoping - to identify the important issues and prepare terms of reference
- impact analysis - to predict the effects of a proposal and evaluate their significance
- mitigation - to establish measures to prevent, reduce or compensate for impacts

The EIA process

(continued)

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- reporting - to prepare the information necessary for decision-making**
 - review - to check the quality of the EIA report**
 - decision-making - to approve or reject) the proposal and set conditions**
 - follow up - to monitor, manage and audit impacts of project implementation**
 - public involvement - to inform and consult with stakeholders**
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Benefits of EIA include:

- environmentally sound and sustainable design**
- better compliance with standards**
- savings in capital and operating costs**
- reduced time and costs for approvals**
- increased project acceptance**
- better protection of the environment and human health**

Delays are caused during EIA when:

- the EIA is commenced too late in the project cycle**
- the terms of reference are poorly drafted**
- the EIA is not managed to a schedule**
- the EIA report is inadequate and needs to be upgraded**
- there is a lack of technical data**

Ensuring fairness in the EIA process

- register consultants' names and terms of reference
- name consultants and their expertise in the EIA report
- publish the terms of reference in the EIA report
- make EIA reports available to the public
- publish lists of screening and final decisions along with conditions for approval