EIA Follow-Up
International Best Practice Principles

EIA FOLLOW-UP MAY BE DEFINED AS THE MONITORING, EVALUATION, MANAGEMENT AND COMMUNICATION OF THE ENVIRONMENTAL PERFORMANCE OF A PROJECT OR PLAN.

What Is EIA Follow-Up?

EIA follow-up can be simply defined as the monitoring and evaluation of the impacts of a project or plan (that has been subject to EIA) for management of, and communication about, the environmental performance of that project or plan (Morrison-Saunders and Arts 2004). Thus, EIA follow-up comprises four elements (Arts et al., 2001):

1. Monitoring – the collection of activity and environmental data both before (baseline monitoring) and after activity implementation (compliance and impact monitoring).
2. Evaluation – the appraisal of the conformance with standards, predictions or expectations as well as the environmental performance of the activity.
3. Management – making decisions and taking appropriate action in response to issues arising from monitoring and evaluation activities.
4. Communication – informing the stakeholders about the results of EIA follow-up in order to provide feedback on project/plan implementation as well as feedback on EIA processes.

Follow-up is essential for determining the outcomes of EIA. By incorporating feedback into the EIA process, follow-up enables learning from experience to occur. It can and should occur in any EIA system to prevent EIA being just a pro forma exercise.

Objectives of Follow-Up

Three conceptually different approaches to EIA follow-up based on the scale and level of analysis can be distinguished (Morrison-Saunders and Arts 2004):

1. Monitoring and evaluation of EIA activities (micro-scale). This is conducted on a project by project basis and relates directly to specific components of EIA (or SEA) such as impact prediction, impact monitoring, compliance auditing, and implementation of mitigation and environmental management actions. A key question: Were the project and the impacted environment managed in an acceptable way?
2. Evaluation of EIA systems (macro-scale). This examines the effectiveness of an EIA (or SEA) system as a whole in a certain jurisdiction (for instance, the influence of the EIA process on decision-making, efficiency of EIA procedures and utility of EIA products). A key question: How efficient and effective is a given EIA system overall?
3. Evaluation of the utility of EIA (meta-scale). This is closely related to the previous level, but going a step further to determine whether EIA (or SEA) is a worthwhile activity or concept overall. A key question: Does EIA work?

Follow-up can be applied to strategic policies, plans and programs as well as to operational projects. And follow-up is not necessarily restricted to singular activities at the local level. It can also be applied to multiple projects/plans and be undertaken at a local or regional scale.
Who Does Follow-Up?

EIA follow-up can take many forms, ranging from proponent-driven self-regulation to requirements imposed by EIA regulators or initiatives motivated by public pressure and community involvement (Morrison-Saunders et al. 2001). Monitoring and evaluation may be conducted by proponents and regulators alike depending on the scale of application. Ongoing management decisions may be made by both proponents (e.g., responding to unexpected impacts) and EIA regulators (e.g., reviewing consent conditions and management requirements). Similarly, both proponents and EIA regulators may engage in communication programs. Some follow-up programs extend beyond simple communication to specifically include direct stakeholder participation in the monitoring, evaluation and management steps as well.

Three principle groups of stakeholders are involved in EIA follow-up whether as initiator, conductor or participant (Morrison-Saunders et al., 2003). Follow-up programs driven by proponents (1st party follow-up) may also encompass voluntary, self-regulatory or industry-led initiatives such as environmental management systems. Follow-up carried out by regulators (2nd party follow-up) typically focuses on ensuring that proponents comply with EIA approval conditions as well as learning from experience to improve EIA processes in the future. Follow-up activities carried out or initiated by the community (3rd party follow-up) may range from formal committees or agencies established to oversee or sometimes conduct follow-up activities through to independent action by community members concerned about environmental effects in their neighborhood. Involvement of the community in EIA follow-up can be an important source of specialist or local knowledge.

Principles

The principles are divided into Guiding Principles and Operating Principles. Each is presented as a simple statement with supporting comments as put forward by Marshall et al. (2005). The principles start with statements of core values and progress towards more practical guidance to direct actual implementation of EIA follow-up. Specifically:

- Guiding Principles 1-3 present the core values (why?)
- Guiding Principles 4-6 address the nature of EIA follow-up (what?)
- Operating Principles 7-11 concern the roles and responsibilities of participants in EIA follow-up (who?)
- Operating Principles 12-17 address how EIA follow-up should be conducted (how?)

The principles are numbered consecutively and each is briefly explained or elaborated upon.

Guiding Principles

1. Follow-up is essential to determine EIA (or SEA) outcomes.

Follow-up has the same goal as EIA, namely to minimize the negative consequences of development and maximize the positive. The emphasis is on action taken to achieve this goal. EIA has little value unless follow-up is carried out because without it the process remains incomplete and the consequences of EIA planning and decision-making will be unknown. By minimizing the negative and maximizing the positive outcomes, EIA follow-up can safeguard environmental protection.

2. Transparency and openness in EIA follow-up is important.

All stakeholders have a right to feedback on the EIA process. Actions and decisions resulting from EIA follow-up should be fair, transparent and communicated directly to stakeholders. Beyond the informing role, active engagement of stakeholders in follow-up processes is preferable with genuine opportunities for involvement.

3. EIA should include a commitment to follow-up.

A clear commitment to undertake EIA follow-up is needed with all parties accountable for their actions. A follow-up program needs to be provided for in the pre-decision EIA process and carried out post-decision. Thus follow-up commitments relate to program preparation and implementation of monitoring, evaluation, management and communication as necessary.

4. Follow-up should be appropriate for the EIA culture and societal context.

There is no single formula for undertaking successful EIA follow-up. It should be custom-made for the legislative and administrative, socio-economic and cultural circumstances; and dovetail with existing planning, decision-making and project management activities. There may be no need to invent completely new procedures for EIA follow-up as other mechanisms may suffice; for example, environmental management systems (EMS) or state of environment reporting.

5. EIA follow-up should consider cumulative effects and sustainability.

Application of EIA follow-up at the individual project level is intrinsically limited in terms of dealing with cumulative effects of multiple developments and sustainability issues. This may necessitate application beyond the individual project level; for example, strategic level or area-oriented approaches.

6. EIA follow-up should be timely, adaptive and action oriented.

Adaptability and pro-activity are key to maximizing the benefits of EIA follow-up as environmental management issues are best tackled in this way. Monitoring data collection and evaluation activities should be
sufficiently frequent such that the information generated is useful to stakeholders, but not so frequent as to be a burden to those implementing the process. Actions must be efficacious to meet the defined goals of EIA follow-up programs.

Operating Principles

7. The proponent of change must accept accountability for implementing EIA follow-up.
As the polluter, proponents must pay careful consideration to the consequences of their actions and the necessity of EIA follow-up. They should be responsible for the mitigation of adverse effects and for the communication of follow-up results to stakeholders. Proponents should take advantage of the benefits of EIA follow-up as a project management instrument and to realize cost savings.

8. Regulators should ensure that EIA is followed up.
Regulators should determine the need for EIA follow-up and ensure that it is implemented well. This comprises meeting regulatory requirements, securing a balance between the interests of both proponent and community, ensuring proponent compliance and promoting learning from experience. Where the regulator is also the proponent, the competing roles of developer, funder, provider and decision-maker should be clearly distinguished to avoid conflicting interests.

9. The community should be involved in EIA follow-up.
At the very least, the community should be informed of EIA follow-up outcomes, but direct community participation in follow-up program design and implementation is desirable. Benefits may flow from active community involvement in EIA follow-up including sharing of special local knowledge, focussed program design, building trust and partnerships.

10. All parties should seek to co-operate openly and without prejudice in EIA follow-up.
Proponent, regulator and community interests are often intertwined, and their cumulative interest should initiate practicable and reasonable EIA follow-up programs. Despite individual interests, EIA follow-up will be successful where a shared sense of purpose to avoid, reduce, or remedy adverse environmental effects is acknowledged. Participants to the EIA follow-up process should seek consensus on procedural and methodological approaches. All parties must be committed to carrying out their required tasks and to respond constructively to the findings of EIA follow-up.

11. EIA follow-up should promote continuous learning from experience to improve future practice.
EIA follow-up should not be static; it should always strive to maximise learning from experience through active feedback. Thus good EIA follow-up requires good communication.

12. EIA follow-up should have a clear division of roles, tasks and responsibilities.
A clear division of roles, tasks and responsibilities is required. The roles in EIA follow-up should be identified in pre-decision EIA documentation and subsequent EIA approvals and management systems. This should be set down as a series of clearly defined steps outlining tasks and responsibilities within and between the different parties, and all practitioners involved must be competent to their tasks.

13. EIA follow-up should be objective-led and goal oriented.
To be most effective, EIA follow-up should seek to achieve defined objectives or goals, which may include:
(i) Controlling of projects and their environmental impacts
(ii) Maintaining decision-making flexibility and promoting an adaptive management approach to EIA and project management
(iii) Improving scientific and technical knowledge
(iv) Improving community awareness and acceptance of projects
(v) Integrating with other information (e.g., state of the environment reports or EMS).
This is an integral task of scoping in EIA follow-up.

14. EIA follow-up should be "fit-for-purpose."
EIA follow-up must be commensurate with the anticipated environmental effect. As each project is unique in terms of specific design, location and affected stakeholders, so too must EIA follow-up programs be tailored to the proposed activity, its stages and dynamic context. To maintain focus, ongoing scoping is needed in EIA follow-up. There is also a need to keep EIA follow-up practicable and feasible—to focus on the "art of the possible."

15. EIA follow-up should include the setting of clear performance criteria.
Performance criteria used in EIA follow-up actions or programs should be rigorous and reflect best practice. This should be enacted through well-defined methodologies or approaches to monitoring, evaluation, management and communication. Such actions should produce useful information and outcomes which can be easily measured, and unambiguously appraised against clear criteria.

16. EIA follow-up should be sustained over the entire life of the activity.
The need for and content of EIA follow-up should be determined early, for example, during screening and scoping during EIS preparation. EIA follow-up actions or programs should cover not only the design and construction of a development, but also the operation and where relevant the decommissioning phase. It should not be restricted to one specific life stage of development. EIA follow-up must also be responsive to long-term and short-term environmental changes.
17. Adequate resources should be provided for EIA follow-up.

EIA follow-up must be cost-effective, efficient and pragmatic. Time, staff and capacity needs must be appropriately provided for in advance. EIA follow-up should be done to best practice standards and should ensure that real actions are taken adequately when needed.

**Operationalizing EIA Follow-Up**

Few internationally accepted guidelines promote EIA follow-up. These principles provide a starting point for this. Similarly, there is a need for education in, and capacity building for, EIA follow-up across a range of international practice and individual practitioner competencies.

There is no single "right" way to conduct EIA follow-up; it can and should be adapted to suit the evolving needs of stakeholders, activity type and EIA system in question. Whatever approach is adopted, the management controls promoted through EIA follow-up should strengthen the overall structure and process for EIA, contributing to the disciplines involved and improving EIA practice and systems.

**References**


