ENFORCEMENT OF ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENTS

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SUMMARY

Environmental Impact Assessment (EIA) requirements are perhaps the most widely adopted environmental requirements by both individual countries and international organizations. In its simplest terms, for projects subject to EIA requirements, proponents must identify, assess, and publicly disclose project details, predicted impacts on physical, biological and socio-economic environments, alternatives for avoiding and mitigating adverse impacts, and plans for mitigating and monitoring impacts. This documented assessment is then subjected to independent review and public comment procedures, the outcome of which is either rejection or approval of the project and/or EIA document with a commitment to carry out the project, mitigation and monitoring as proposed and accepted. EIA procedures are intended to provide a unique opportunity to identify and then to avoid and mitigate potentially significant adverse environmental impacts and to better integrate long and short term environmental, economic, and social concerns. However, full realization of the environmental, social and economic benefits of Environmental Impact Assessment requirements cannot be achieved without significant improvements in environmental governance. There is widespread recognition that follow-up monitoring and enforcement of commitments to mitigate and monitor are weaknesses in both developed and developing countries. Furthermore, an unknown number of projects are constructed without having gone through EIA procedures resulting in damage to sensitive resources that might otherwise have been avoided if there were sufficient consequences to deter these practices.

This paper is intended to accomplish two things. The first is to identify common compliance challenges faced by countries and international organizations alike and recent advances in EIA program implementation, monitoring and enforcement. The second objective is to inspire a concerted effort to promote and exchange experiences for more effective approaches to achieve compliance with and enforcement of EIA requirements. It is hoped that progress can be advanced under the auspices of the International Network for Environmental Compliance and Enforcement and associated regional enforcement networks, in partnership with the International Association for Impact Assessment, and international organizations such as the World Bank and regional Development Banks.
1 EIA PROCEDURES AND REQUIREMENTS

The description of EIA procedures and requirements that follows focuses on EIA requirements applied to proposed projects, recognizing that EIA is increasingly applied to plans, programs and policies—often referred to as Strategic Environmental Assessment. Further, within the context of EIA, impacts can be both adverse and beneficial, but for purposes of exploring enforcement the paper focuses on those that may be adverse. Countries and institutions differ as to what they call categories of proposed projects or specific steps in the process, but in general any EIA requirements for the most significant projects have the following in common, depicted in Figure 1 and Table 1:

- Project initiation—Pre-EIA process.
- Screening: application/categorization.
- Scoping: terms of reference.
- Preparation of EIA documents.
- Independent EIA review and correction of deficiencies.
- Decision: EIA document, project, mitigation and monitoring.
- Incorporation of commitments into legally binding agreements.
- Project implementation.
- Auditing, monitoring and enforcement.

Figure 1: The Environmental Impact Assessment Process
### Table 1: Responsibility in the EIA Process

<table>
<thead>
<tr>
<th>Project Proponent</th>
<th>Government</th>
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<tbody>
<tr>
<td>1. Initiate Project</td>
<td>2. Screening: Review EIA Application and Categorization</td>
</tr>
<tr>
<td>2. Prepare EIA Application</td>
<td>3. Prepare Terms of Reference and Scope EIA issues</td>
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| 3. Scope EIA Issues | 5a. Prepare and Submit EIA Documents (Depends upon categorization), High Impact usually requires:  
- Executive Summary  
- Project and Alternatives Description  
- Environmental Setting  
- Assessment of Impacts  
- Mitigation and Monitoring  
- Environmental Management Plan  
Annexes: Technical detail and comments |
| 5b. Correct deficiencies and respond to comment | 6. Review EIA Document |
| 7. Decision on Project | 8. Incorporate commitments into legal agreements |
| 10. Auditing, compliance monitoring and enforcement | |


A brief discussion of each of these steps follows, identifying what might be most relevant for compliance and enforcement:

#### 1.1 Project Initiation: No Work may Begin without EIA Approval

No site clearing, site preparation or construction, may take place before the Environmental Impact Assessment (EIA) process is complete and government agencies or development banks either have approved or provided conditioned approval of a proposed project. Project proponents may take steps to initiate a
project such as arranging for a site, establishing technical and financial feasibility and, with foresight, acquiring environmental expertise to assist in selecting sites and project designs which will avoid or minimize adverse impacts.

### 1.2 Screening: Application/Categorization

All EIA programs categorize projects and their environmental setting in order to focus the most rigorous EIA analysis and documentation on those projects that have the potential for significant adverse impacts. This is usually accomplished in implementing regulations by a triage system which distinguishes those projects with high, medium and low impact, sometimes with the help of an initial EIA for screening purposes. Information on the project and site—including for example, identification of sensitive ecosystems, endangered species, indigenous peoples or other vulnerable populations that might be affected—are taken into account in making the decisions on categorization. Because many countries publish lists of project types and sizes that fall into specific categories, the process of screening or categorization is sometimes left to the project proponent to “self identify”, selecting on their own the form or analysis to prepare and submit. Some EIA programs require submittal of an application or some other form of formal registration or notification by the project proponent. This application is then used to screen and categorize projects or to confirm the project proponent’s self-characterization.

Violations that may be occur at this stage include submission of false information or mis-categorizing a proposed project so as to avoid requirements for more rigorous EIA analysis, or, in some instances, the failure to apply at all. In addition, many countries have requirements that prohibit a project proponent from “segmenting” projects so as to avoid categorizing a project as having potentially significant adverse impacts. Depending upon country rules, the prohibition on segmentation may apply to: a) segmenting project expansion so that only a first phase is presented, b) failing to include related projects essential to carrying out the proposed project such as transportation, mining, waste disposal, c) segmenting properties such that adjacent properties are used for different parts of an operation but which are, in reality, connected. The concept that “connected actions” must be assessed at a single point in time in an integrated EIA document is not universally recognized by countries implementing EIA requirements.

### 1.3 Scoping and/or Terms of Reference for Preparation of the EIA Document

Every EIA analysis involves some form of scoping to distinguish issues and concerns of relevance to decision making on the project, helping, albeit not always successfully, to avoid encyclopedic documents that can distract from real issues. Some countries and development banks issue a Terms of Reference or guideline to establish the scope and detail of EIA document preparation. Countries in North America and Europe, at least for high impact projects, require formal public scoping processes, including consultation with stakeholders and interested public,
to identify issues to be addressed in the EIA. Regardless of whether a formal step in
the process or not, any preparation of an EIA involves scoping but often without the
benefit of early public input. Many countries conduct a site visit prior to issuance
of Terms of Reference or categorization of the project.

The requirements for scoping and adherence to a Terms of Reference are not enforced
against a project proponent per se and are usually part of program implementation
affecting decisions to approve or disapprove a proposed project/EIA and whether
additional information is requested before a decision may be made. Requirements
to document scoping can be very helpful in identifying gaps and omissions when
the EIA is completed.

1.4 Preparation of the EIA Document

There is usually a format and required content for the EIA document. For the
highest impact categories this generally includes:

- Executive summary.
- General information on preparers, purpose, project ownership and title to the
  land.
- Project and alternatives description.
- Environmental setting—physical, biological, and socio-economic-cultural.
- Assessment of impacts to the including direct, indirect and cumulative impacts.
- Mitigation and monitoring to address the identified impacts.
- Technical annexes.
- Environmental management plan – mitigation and monitoring plan either as a
  separate document or as part of the EIA.

The EIA addresses the full life cycle of the project, from site preparation and
construction to operation and finally closure. Direct impacts are those directly
associated with the construction, operation and closure of the project. Indirect
impacts are those secondary to the project or induced by the project. Cumulative
impacts adopt the perspective of the affected resource to examine the past, present
and foreseeable future actions and threats that are affecting that resource. The
impacts on the physical, biological and socio-economic-cultural environments are
assessed off of a baseline projected into the future of what the world would look like
in the absence of the proposed project—the no action alternative.

For the preparation of the EIA document, there may be a requirement to utilize
consultants who are certified or registered by the country for this purpose. In
those instances enforcement would be required for use of non-certified consultants,
falsification of credentials or falsification of information used to obtain credentials.

1.5 Independent EIA Review and Augmentation of the EIA Documents

The government EIA review staff assesses the EIA document for completeness,
accuracy, significance of impacts, whether issues identified during scoping
were addressed or impacts addressed through mitigation and monitoring, and compliance with any Terms of Reference or other requirements. More often than not, the document is deficient in some manner and there is a formal request for additional information. There may be time limits for the government and/or project proponent which must be met.

Failure to provide complete information or to follow required elements of an EIA regulation or Terms of Reference issued by the government to guide the EIA preparation is not normally considered to be a “violation” per se. The consequence of course may be rejection of the EIA or official requests for additional information which would create delay. The failure to submit acceptable EIA documents at the outset often leads to a dance between the project proponent/consultants and the government officials, with information coming piecemeal leaving a fragmented picture of impacts and project details that are difficult for the public or other stakeholders to grasp.

The types of lapses in the adequacy of the EIA document that typically occur include failure to provide sufficient detail on the proposed project and design considerations to properly assess impacts; failure to consider alternatives\(^2\); failure to assess indirect or cumulative impacts; failure to assess impacts on particular communities or resources and failure to identify endangered or threatened species. More fundamentally there may be failure to utilize predictive tools or flaws in their use.

In most countries what is initially submitted is considered to be final except for additional information typically requested to fill in gaps or make corrections which may be submitted in the form of supplemental annexes or communications. In the U.S. context the initial submission is a draft which is to be altered based upon formal comment and government review before it is submitted as a final document, which results in greater integration of additional analysis within the EIA document.

1.6 Public Participation

The majority of country laws apply public participation requirements to EIA across a wide spectrum with differing laws and practices from country to country. All too often public participation is too late in the process to be either meaningful or influential, and the process does not allow sufficient time to resolve disputes or conflicts that might arise. Citizens have resorted to the courts to force public hearing and comment opportunities that were denied them in order to influence the outcome of the EIA process. In other words citizen suits are often the means for enforcement of public participation requirements. Public participation requirements may be directed at project proponents and/or government officials. Basically these requirements address:

- Public disclosure—the opportunity to hear.
- Public comment—the opportunity to be heard.
- Public response—the opportunity to be listened to.
1.6.1 Requirements for Public Disclosure

Countries differ as to the information and documents that are to be “disclosed” i.e. made accessible to the public, and what may be considered to be acceptable means of providing access. The complete EIA document may be offered in one jurisdiction and some of it held back as confidential in another with only the executive summary provided. In some jurisdictions, public access requirements may be viewed as having been fulfilled with the right to read a document in a particular location, without the right to make or have a copy. Web-based electronic access may be sufficient in one country but not in another. With the new developments in web-based tracking systems discussed in section 4, countries are able to provide immediate electronic access via the Internet to any and all documents from the application through decision, and at least two countries are taking full advantage of that opportunity.

1.6.2 Requirements to Solicit Public Comment (The Opportunity to be Heard)

It is most common for the opportunity to be heard to be relegated solely to the requirement for a formal public hearing with the requirement on the government or project proponent to hold one. A broader public participation or consultation requirement is difficult to prescribe in advance as to what may be needed in a given situation to adequately consult with the public. Some countries require project proponents to prepare and submit a Public Participation or Consultation Plan which may or may not be subject to government and public review, but once adopted is required to be implemented.

If there is a requirement for public scoping then there would be consultation with the public before an EIA is prepared to solicit issues to be addressed in the EIA very early in the process. There may also be a requirement for a formal period during which public written comments are solicited, sometimes in tandem with the government review of the EIA document submitted to them and sometimes following the process during which the government reviewers have already taken steps to ensure the documents are complete. As with disclosure, the new automated web-based systems are making it possible to share with the public the EIA document originally submitted, enabling the public to review and comment in parallel with the government review process.

1.6.3 Requirements for a Response to Comments (The Opportunity to be Listened to)

There is no requirement to respond positively to every comment received. In most circumstances there is an obligation at least to consider public and stakeholder comments, which is not a requirement to accept each and every comment. To ensure implementation of public participation requirements in terms of response to comments, either by regulation or practice some jurisdictions have expectations that the EIA document will include either some or all of the following:
• A summary of actions taken to engage the public and stakeholders.
• A summary of comments.
• A summary of response to comments.
• Copies of actual comments submitted.

1.7 Decision

The decision may take several forms. It may be an approval, conditional approval, or a rejection of the EIA document or of a proposed project based upon the information in the EIA or lack thereof. It may be a formal finding about the “environmental feasibility” of the proposed project. It may be acceptance of the environmental management plan, or whatever the terminology might be for mitigation and monitoring plan, and environmentally important aspects of project design, operation and closure.

These distinctions can be important to the outcome of the EIA process. Too much emphasis on the adequacy of the EIA document or a one-time determination of “environmental feasibility” reinforces the inadequate attention to ongoing compliance with commitments. All too often EIA requirements fail because they are perceived and implemented as a one-time event.

1.8 Incorporation of Commitments into Legally Binding Instruments

Some EIA programs rely on the submitted documents from the project proponents as the sole basis for legally binding commitments. To facilitate follow up and clarity of commitments being made, countries may require separate mitigation, monitoring and/or environmental management plans. Still other countries have the advantage of drafting their own conditions for approval in the decision document or in a separate permit or contract.

1.9 Implementation of the Project

The project should be built and operated as described in the EIA documentation as this is the basis for the impact assessment. Countries may or may not have mechanisms in place to entertain changes to the project and to determine whether a new or revised EIA document may be required.

1.10 Auditing, Monitoring, and Follow up Enforcement

The auditing, monitoring and follow up enforcement may be done by of the same unit responsible for EIA, or may be handled by a different unit or not at all. Somehow this responsibility should be clearly assigned and with accountability for results stemming from the EIA process. Some countries distinguish responsibilities by whether it involves the construction phase or operating phase and shift to other forms of environmental permitting when the construction phase is completed. However, EIA commitments run the life of the project through closure and these
commitments need to be carried over into other vehicles and provisions made for the smooth transfer of responsibility.

2 ENFORCING REQUIREMENTS AT THE FRONT END OF THE PROCESS: NO LAND DISTURBANCE OR OTHER PERMITS BEFORE EIA

A significant challenge to EIA programs is enforcement of the prohibition on site clearance and construction without the benefit of the EIA process and, in particular, illegal construction in protected areas, clearly undermining the fundamental purpose of EIA requirements. Consequences to deter these violations are needed in order to overcome the many pressures on project proponents to begin work on a site as soon as they have completed arrangements for site acquisition, financing, project design and technical feasibility studies. Time is money and once those processes are completed the project proponent wants to move ahead quickly.

2.1 Promoting Compliance

Failure to fulfill EIA requirements is either out of ignorance or deliberate avoidance. EIA programs need to be creative in enlisting the support of lending institutions and other permitting programs to ensure they reinforce EIA requirements as the first hurdle. They also can play a role in informing developers to understand and comply with their EIA obligations. Outreach explaining the underlying reasons for EIA, how to avoid pitfalls, how to comply and the consequences of failing to comply also may help particularly if linked with efforts to inform them of pollution prevention and cleaner production opportunities. A half-day program was developed for use in Central America and the Dominican Republic for industry leaders on EIA, environmental management systems and pollution prevention. Combining these three topics can draw industry leaders who may not be interested in an event solely on EIA. Another means of promoting compliance to avoid construction in protected areas, for example, is to make the mapping information on protected areas more readily available (see Chapter 4).

2.2 Detecting Violations

EIA programs are not usually out in the field looking to find more projects that should have been submitted EIAs. To identify the outliers it is best to develop “eyes and ears” on the ground and in the field much as the work of police, or local governments and citizens is carried out.

To relate construction or site clearance activities to EIA approval status requires readily available information. Panama and Costa Rica require that any site or construction work include clear posting of the required EIA approvals and permitting. Further, new tools described in Section 4 will greatly facilitate detection and access to information on the status of EIA approvals particularly since signage may not be visible for large sites.
2.3 Enforcement Response to Violations

Typically it is only the courts that can halt progress on a project that is moving forward without EIA approval i.e. injunctive relief. However this is a costly consequence and one which is understandably undertaken only with great reluctance. However, just last year, Thailand’s relatively new Administrative Court called a halt to 76 projects in the Ma Ta Phut industrial estate when a citizen group challenged their construction without having gone through the EIA process. This sent shock waves throughout the region, given the costly impact of stopping construction, particularly on this large a scale. In this instance after an adjustment of the list of toxic chemicals triggering the EIA process from 18 to 11, the number of halted projects was whittled down to 2, but this impact has been felt regardless.

A court’s willingness to impose injunctive relief to stop construction while the project proponent complies with EIA requirements may not offer sufficient disincentive for a project proponent to comply with EIA requirements. Although delay is a cost, some still may be willing to incur the risk of getting caught.

Illegal construction in protected areas or buffer zones has resulted in the cutting of mangroves, filling of wetlands and destruction of coral reef without regard to consequences. This damage may result from deliberate or inadvertent destructive actions because boundaries for protected areas are often imprecise and this weakness might be exploited by developers of sites which are more attractive because they are near or even in protected areas. In such instances it is difficult but possible to assess damages and to require restoration of the damaged areas, if the construction will not be allowed to continue. Certainly, this approach is not sufficient if in fact irreversible damage has been caused. Enforcement authorities are discussed further in Section 4.

3 ENFORCING COMMITMENTS TO PROJECT DESIGN, MITIGATION AND MONITORING AT THE BACK END OF THE PROCESS

3.1 Enforceable, Auditable Commitment Language

Through whatever vehicle is appropriate, commitments in or resulting from the EIA should be written in a manner which clearly provides the basis for follow up monitoring, auditing and enforcement. The Principles of Environmental Compliance and Enforcement describes enforceable commitments as those that make it clear who is responsible, for what, by when, and how compliance would be determined. The “what” would be sufficiently specific so as to establish clear expectations for performance. The EIA process often results in inadequate detail on the proposed project, mitigation, monitoring, and may even lack commitment language. Where there is such language, a lack of quantitative performance expectations and associated commitment to monitor for those measures also will impede enforcement.
Ensuring that commitments stemming from EIA requirements are enforceable and auditable is particularly challenging for countries which rely upon the EIA document itself or a supplemental Environmental Management Plan because the commitment language is typically written by consultants who heretofore have not been trained or experienced in drafting enforceable language. Where countries or institutions do independently draft documents describing the project assumptions and mitigation measures they are in a better position to ensure that they draft the language as requirements they are prepared to monitor and enforce, (e.g. in decision documents or in vehicles such as an environmental permit, concession and/or contract). Regardless, the commitments are often written in vague, difficult to audit language and potentially unenforceable terms.

Experts from both environment and sector ministries in Central America and the Dominican Republic countries and the United States have developed three EIA Technical Review Guidelines and Terms of Reference for mining, energy and tourism with the support of U.S. AID’s Environment and Labor Excellence Program and the Central America Commission on Environmental and Development. These guidelines attempt to address some of the challenges noted above, including:

- Sufficient detail on the proposed project and mitigation to support follow up.
- Auditable commitment language in an appropriate vehicle to capture EIA commitments.
- Emphasis on quantitative performance standards.
- Linking mitigation commitments to monitoring.
- Required contents of a monitoring plan.
- Contingency plans for actions that will be taken if monitoring results show that a quantitative limit has been exceeded.

Countries also might consider the adoption of boiler plate language (standard conditions) to elaborate on certain types of commitments in monitoring and mitigation measures that would provide the necessary auditable language. For example, what it means to commit to “revegetate” or “reforest” a disturbed area and other examples are provided within the mining, energy and tourism guidelines.

### 3.2 Compliance Monitoring

Monitoring can be undertaken for three different purposes: a) project monitoring: is the project built/operated/closed as described in the EIA documents; b) performance monitoring: does the level of performance of mitigation comply with applicable standards and other measures of performance committed to in the EIA documents; and c) impact monitoring: are the predicted impacts different or greater than those in the EIA document. The first two of these are directly related to compliance and enforcement issues. The third usually is not but may be a responsibility of a project proponent if prediction of impacts is too uncertain for the government officials to decide that proposed mitigation is adequate, a determination has been made by the environmental authority that an error in predicted impacts would not cause irreparable harm, and there is general agreement that the project can proceed with
commitments to monitoring and contingency plans for addressing impacts once they are better known. This process is often referred to as “adaptive management.” Several approaches are used to monitor compliance, all mutually reinforcing:

- Self-monitoring, reporting and record keeping by the project proponent.
- Citizen monitoring and reporting in the form of complaints.
- Government inspection.
- Third party auditing.

3.2.1 Self monitoring, Reporting and Record Keeping by Project Proponents

As noted in section 3.1, holding project proponents accountable for monitoring their own performance with quantitative levels of performance expectations implements the “polluter pays” principle. Other forms of monitoring only provide “snap shots” of performance at a single point in time. In order to assess compliance with EIA commitments, monitoring data is needed over an extended period of time. Moreover, auditing or government inspections will usually rely upon self monitoring and reporting carried out by the project proponent. As noted above, the recently developed EIA Technical Review Guidelines for mining, energy and tourism provide additional emphasis on monitoring and what constitutes an adequate monitoring plan.

3.2.2 Citizen Monitoring

Those close to a project are often in the best positions to identify problems and pursue redress. Citizen complaint processes are common to all environmental programs. However, information on the details of the project design or commitments made during the EIA process often is difficult to access, making citizen monitoring more difficult for holding project proponents accountable for EIA commitments, to identify lapses, to contribute information and views for EIA preparation as well as assuring follow up.

3.2.3 Government Inspections

Governments should preserve their unique role as protectors of the public interest, and carry out random and targeted government inspections-- even where the inspection function is augmented by independent third party auditors. Further, resources will need to be committed to enforcement follow up to deficiencies noted in the third party audit reports and for government inspections to corroborate issues raised by third party audits to support an enforcement response.

3.2.4 Third Party Auditing

To augment government capacity to inspect projects for compliance with EIA commitments one approach that is being put into place is the use of third party auditors paid for by the project proponent. 6
Implementing third party auditing requirements has raised several issues which are being addressed within Central America:

- Auditor competence.
- Augmentation—not replacement of government inspection.
- Auditor Independence – preventing conflict of interest.
- Mutual recognition of auditor certification.

To establish auditor competence, countries are shifting from mere “registries” of consultants, to auditor certification programs with requirements for training, experience, and personal competence. There are several international organizations that certify environmental auditors and are working together to ensure mutual recognition.

Rules also are needed to prevent conflict of interest between auditors and those being audited. Independence, ensured in part by an absence of any conflicts of interest, is essential to credibly audit for compliance. Auditors who also serve as consultants have a vested interest in being perceived as desirable for hire for either purpose, including being rehired to perform an audit. Defining conflict of interest can be challenging as the effort to isolate auditors with an interest must be balanced against the possibility of eliminating those most experienced with EIA for a particular type of business enterprise. Some governments are making random assignments, or approving the selection of an auditor by the project proponent to provide a counterweight to the pressures on auditors to accept the status quo and seek repeat business in addition to other measures to reward accuracy and completeness.

3.3 Enforcement Response to Violations

Failure to meet commitments should be followed by enforcement in order to compel actions needed to protect the environment, cultural and economic interests. One of the most significant challenges facing those who want to enforce EIA requirements is the lack of practical enforcement authorities, mechanisms and sanctions adequate to act as a deterrent for the types of EIA-related violations. These challenges include:

- Enforcement authorities limited to where there are damages or criminal conduct.
- Gaps in authorities to address the types of offenses involved in EIA procedures.
- Inadequate penalty levels to provide a deterrent to violations.
- Lack of enforcement response policies to define and direct institutional responses to violations of EIA requirements.

3.3.1 Enforcement Authorities Based on Damages and Criminal Conduct

Most countries rely on damage assessment to determine the primary sanction through criminal enforcement authorities. However, these enforcement authorities are poorly designed for requirements for information, situations in which there are
no discernable damages, or where those damages cannot be easily assessed in the absence of the EIA document itself which would provide a baseline and predicted impacts.

This leaves a significant gap in the ability of the countries to respond to failures to prepare an EIA or failures to meet commitments for which damages cannot be readily assessed. Damage assessment also is a difficult and uncertain process, greatly encumbering the ability of the government to respond effectively. Certainly there is widespread recognition that there is a need for training and models to facilitate this process. Violations which do not rise to the level of environmental damages require different authorities, methodologies and alternative means of winning an enforcement case. Examples include violations related to:

- Change in the project or additional activity at the site than described in the EIA.
- EIA consultant is not registered or has a conflict of interest.
- Falsifying information, e.g. wrong location coordinates for the project.
- Failure to pay the environmental guarantee, renew economic/financial information on the project or obtain required bonding.

3.3.2 Developing Enforcement Authorities Better Suited to EIA Enforcement

Countries in Central America and the Dominican Republic are considering ways to expand their repertoire of enforcement sanctions to enable government program officials to pursue sanctions and compliance schedules through administrative and civil judicial authorities for violations which fall short of criminal behavior, significant recovery of damages or repeat offenses. By building up civil administrative and civil judicial options, they are better able to address types of non-compliance with EIA requirements that are arising on a more regular basis. Table 3 summarizes the enforcement authorities of each of the Central America and the Dominican Republic countries to enforce EIA requirements and highlights provisions which are adopted for wider use in a “Model EIA Enforcement Regulation.”

3.3.3 Enforcement Response Policies

It is important for countries to develop explicit enforcement response policies to provide the kind of transparency, consistency and predictability that the program needs to build the expectations of consequence and trust that are needed. This allows countries to refocus enforcement and sanctions to underscore their environmental priorities. Many of the country enforcement responses are directed toward repeat violators, and, in the absence of close scrutiny, waiting for detection of repeat violations may not be a successful strategy if they are difficult to identify in the first instance or unlikely to be repeated. Instead of focusing enforcement sanctions on repeat offenders or offenses, countries can consider instead a focus on projects in environmentally sensitive areas, or other environmentally based prioritization schemes.
3.3.4 Citizen Access to Justice

Citizen suits against project proponents and/or government agencies have forced them to take action where EIA procedures are not followed or commitments are not met. Hurdles for citizen groups to gain access to the courts are well documented elsewhere.

4 WEB BASED AUTOMATED TOOLS PROMISE IMPROVED EIA COMPLIANCE

EIA programs are paper rich and information poor. Data needed to identify environmental, social and economic concerns and impacts are distributed among many different institutions within and outside government. The often lengthy narrative in EIA documents is difficult to access, distribute, distill and track for compliance with commitments and management purposes. Checking on whether new construction has received EIA approval can be daunting.

New advances in computer and web-based “tools” are allowing fundamental improvements in how the EIA process is carried out and helping to address some of the challenges to EIA compliance and enforcement. One example is in Central America and the Dominican Republic where cooperation with the United States has made two “tools” available:

- NEPAssist, developed by US EPA and deployed in six countries; and
- The web-based automated administrative EIA tracking system developed and deployed in five of the countries by USAID’s Environment and Labor Excellence consultants.

The two applications are being deployed together and, with significant investment of time and energy by the national EIA program managers and staff, it is changing the way they are implementing their programs.

The web-accessible tracking of EIA processing from receipt of applications through to auditing of commitments provides both transparency and accountability. Features include Internet access to all EIA documents which are scanned from the hard copies, tracking of commitments, results and frequency of both audits and inspections, and results of monitoring and reporting to help identify and target problems. The decision to make the systems public by the governments of the Dominican Republic and El Salvador makes it possible for local officials, police, those responsible for safeguarding protected areas and the public to check whether new construction has been approved.

Coupling the NEPAssist application with the administrative tracking system, allows the program to identify projects more easily through geospatial mapping and visualization of actual satellite imagery and to apply screening information to confirm the veracity and completeness of applications and EIA documents, and
to help set priorities for review, inspection and enforcement. The application’s report feature with analytical yes-no questions are designed to match questions on the EIA application forms for which data layer information is available. If the public or local officials observe construction at a site, they can check as to whether it has an EIA approval, helping to monitor compliance with EIA requirements. It also enables EIA review staff to quickly identify whether a project may raise issues with protected areas or boundaries and the features which provide information on environmental features at differing distances this is particularly helpful given boundary uncertainties with protected areas.

5 DECIDING WHO TO HOLD ACCOUNTABLE FOR EIA REQUIREMENTS

Project proponents clearly are accountable for adhering to EIA requirements to prepare EIA documents and carry out procedures appropriate to the categorization of their projects and site specific circumstances. They are also responsible for hiring qualified and independent consultants and to take responsibility for the description of the project, consideration of alternatives, engaging in stakeholders and the public and implementing the measures for mitigation and monitoring committed to in the EIA process.

However, that accountability can be blurred with enforcement provisions directed at consultants and government officials. The list of offenses and sanctions in effect in the countries of Central America and the Dominican Republic in Table 2 highlights some of those provisions. In regard to consultants, enforcement authorities have been designed to hold the consultants accountable for the quality of their work. It can be difficult to draw a distinct line between the project proponent and the consultant in that regard since the quality of EIA documents may be affected by the timing and manner in which environmental consultants are employed by a project proponent and the resources provided for them to complete their work. To enforce solely against consultants by-passes the responsibility of the project proponent and could serve to reinforce a system in which the project proponent can remain at arms length from the EIA process even to the point of not truly buying into the level of mitigation and monitoring committed to in the EIA documents. They should be held accountable to those commitments and forced to take the process more seriously.

According to the enforcement authorities highlighted in Table 2, government officials may be in violation for failure to make a timely approval of EIA documents, accurate prediction of impacts or project categorization. The potential for sending government reviewers to jail for these types of offences seems to overshadow the provisions that ensure project proponents are accountable for accurate disclosure, avoidance, prevention and mitigation of adverse impacts. Of course, many countries are concerned with both the competence and power of government authorities and the possibility they will overstep that authority or become corrupt. In that regard, one might think that it would be sufficient to create administrative mechanisms
for addressing competency and efficiency, and appeal procedures to ensure that government officials have not been biased, arbitrary, or negligent in carrying out EIA or other programs.

6 EIA ENFORCEMENT INITIATIVE FOR INECE AND PARTNERS

The author encourages INECE partners to embark on an initiative designed to focus attention on and enhance capacity internationally for enforcement of environmental impact assessment (EIA) requirements by building consensus on key principles for improving follow up and compliance in the EIA process, and by exchanging experiences, lessons learned and best practices. The Asian Environmental Compliance and Enforcement Network (AECEN), and the Central American Commission on Environment and Development (CCAD) have already broken new ground on the issue. The following new products provide a starting point for such an exchange:

- EIA Technical Review Guidelines and Terms of Reference for mining, energy and tourism.
- New “tools” such as the web-based administrative tracking systems and NEPAssist GIS based application.
- The proposed model “EIA Enforcement Regulation”.
- Auditor and consultant certification programs.

The International Association for Impact Assessment, World Bank, and regional development banks are essential partners in this endeavor. Fundamental changes in the EIA process are needed if the outputs from that process are to lend themselves to follow up auditing/monitoring/enforcement.

INECE should encourage each of the regional environmental compliance and enforcement networks to take up this project and for INECE, the International Association for Impact Assessment and the World Bank/regional development banks to work to support them on a global basis: 1) to identify common challenges and lessons learned from experience in addressing them, 2) to share training materials, procedures and tools, and 3) to work toward articulating principles for moving forward to address compliance with and enforcement of EIA Requirements within the existing framework of the Principles of Environmental Compliance and Enforcement.

7 CONCLUDING REMARKS

Attention to compliance and enforcement of EIA requirements is timely. However, to effectively achieve compliance with and enforcement of EIA requirements will require some fundamental changes in environmental governance, including:
### Table 2: EIA Enforcement Authorities, Sanctions, Incentives in CAFTA-DR countries

<table>
<thead>
<tr>
<th>Applies to</th>
<th>Authority</th>
<th>Costa Rica</th>
<th>Dominican Republic</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highlighted Authorities:</strong> Now in Model prepared by USAID/Environment and Labor Excellence Program</td>
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<tr>
<td><strong>INFRACTIONS</strong></td>
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</tr>
<tr>
<td><strong>Government</strong></td>
<td>Failure to meet review deadlines</td>
<td></td>
<td></td>
<td></td>
<td>Art. 33/100</td>
<td>Art. 32</td>
<td></td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>Administrative appeals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art. 32</td>
</tr>
<tr>
<td><strong>Proponent</strong></td>
<td>Initiate activities without environmental viability/permit</td>
<td>Art. 93</td>
<td>Art. 86</td>
<td>Art. 85/86</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proponent</strong></td>
<td>Failure to meet environmental commitments</td>
<td>Art. 93</td>
<td></td>
<td></td>
<td>Art. 48 Incomplete Resolution</td>
<td>Yes</td>
<td>Art. 31</td>
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<tr>
<td><strong>Government</strong></td>
<td>Provide environmental permit when proponent has not complied with the requirements</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>Refusing the licensee use or approval of natural resources</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proponent</strong></td>
<td>Failure to pay the fee/make a payment</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
<td>Art. 90</td>
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<tr>
<td><strong>Proponent</strong></td>
<td>Emit pollutants that violate the permissible levels set by regulation</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proponent</strong></td>
<td>Alter or falsify information</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
<td>Art. 93/42</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Proponent</strong></td>
<td>Failure to make restitution</td>
<td></td>
<td></td>
<td></td>
<td>Art. 90</td>
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<tr>
<td><strong>Proponent</strong></td>
<td>Prevent Inspection</td>
<td></td>
<td></td>
<td></td>
<td>Art. 86</td>
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<tr>
<td>Applies to</td>
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<td>Dominican Republic</td>
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<tr>
<td>Proponent</td>
<td>Limited to repeated offense</td>
<td>Yes</td>
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<tr>
<td>Proponent</td>
<td>Recovery of Environmental Damages</td>
<td>Art. 96</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Government</td>
<td>Failure of government to meet review deadlines—legal remedy</td>
<td>Art.101</td>
<td></td>
<td>Art.33/100</td>
<td></td>
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<td>Consultant</td>
<td>Suspension of Registration of consultant</td>
<td>Art.99</td>
<td></td>
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<tr>
<td>Government</td>
<td>Administrative sanctions against responsible parties removing authority</td>
<td>Art.102</td>
<td></td>
<td>Art.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proponent</td>
<td>Power to order closure/cease /suspend</td>
<td>Art.105</td>
<td></td>
<td>Art.85</td>
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<tr>
<td>Proponent</td>
<td>Public notice of failure</td>
<td>Yes</td>
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<tr>
<td>Proponent</td>
<td>Schedule to correct</td>
<td>Art.85</td>
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<tr>
<td>Proponent</td>
<td>Criminal Sanctions</td>
<td></td>
<td>Yes</td>
<td>Art.87</td>
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<td>Proponent</td>
<td>Economic fines</td>
<td>Art.88</td>
<td>Art. 89 severity</td>
<td></td>
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</tr>
</tbody>
</table>

**INCENTIVES**

- Awards
  - Art. 94
- Bond reduction
  - Yes
• Broadening of the institutions engaged and committed to the success of EIA.
• Ensuring commitments resulting from the process are in terms that can be readily complied with, monitored, audited and enforced.
• Developing ways for commitments and follow up actions to be accessible, and trackable.
• Enhancing public and government wide access to EIA documents and commitments.
• Acquiring new enforcement authorities, tools and sanctions better suited to EIA requirements.
• Augmenting compliance monitoring with third party auditing.

New web-based tools being introduced make monitoring of commitments and identification of those attempting to construct without the benefit of the EIA process more efficient and effective. Engaging local government and the public in the process through greater transparency will enhance the quality and timeliness of decisions and the robust oversight of the outcomes from the EIA commitments to project location, site configuration, design, infrastructure, mitigation and monitoring for the life of the project. New approaches to improve the quality of EIA documents and follow-up through consultant and auditor certification programs will provide a strong basis for making the kinds of changes to EIA documents and procedures necessary for supporting monitoring and enforcement.

8 REFERENCES

1 Much of the information in this paper is the outgrowth of work over the past three years with 5 countries in Central America and the Dominican Republic in the Program to Strengthen EIA Review under the environmental cooperation for the Dominican Republic-Central America Free Trade Agreement free trade agreement with the United States. The program includes training, collaborative development of EIA Technical Guidelines and Terms of Reference for mining, energy and tourism, tools for improved program implementation, consultations with a range of institutions in each country and many extended discussions among EIA Directors from the 6 countries culminating in a working paper with observations about current challenges and potential reforms that will be shared and discussed with each of the Ministers to develop their own reform agendas. In that process follow up monitoring and enforcement of EIA requirements consistently has been one of the key challenges. In Asia, the results of a Rapid Assessment for Identifying Capacity Challenges and Programming Opportunities September, 2009, carried out by the Asian Compliance and Enforcement Network (AECEN) Secretariat concluded that “the main challenges are inadequate mechanisms to enforce implementation of EIA requirements and that sanctions are too small to act as a disincentive.” In the United States, after 42 years of initiating and implementing EIA requirements, the Council on Environmental Quality, Executive Offices of the President, created by the National Environmental Policy Act to oversee U.S. EIA requirements just this past year issued new guidance on Monitoring and Mitigation responsibilities of Federal Agencies who are the focus of the U.S. EIA requirements.
Although most country EIA laws explicitly require consideration of alternatives, this is notoriously absent or poorly developed in submitted EIA documents and often officials find this requirement too difficult to “enforce”. Alternatives are different ways to achieve the same purpose and need that might be more environmentally benign, i.e. alternative sites, site configurations, size, staging, pollution control, and means of providing infrastructure to support the project. Officials responsible for implementing EIA laws sometimes view their authority as limited to what is contained in the Terms of Reference or submitted EIA document. Even in circumstances in which public comments identify better ways to address their concerns, the combination of time deadlines, comments taken late in the process, the lack of conflict resolution mechanisms or authority to accommodate them present high barriers which are likely to only be overcome in instances in which impacts are too large and pockets too deep to ignore.


In Central America, the regional entity, the Central American Commission on Environment and Development (CCAD), has been working to help all its member countries and the Dominican Republic to establish requirements for utilizing third party auditors to confirm EIA commitments are being met with certification programs for both auditors and consultants. Thailand is one country that has had a consultant certification program in operation for many years. An apocryphal story is that certified consultants made a fatal error in preparing an EIA for a thermal power plant only to discover that they neglected to include the impact on coral reefs, something that cost the Minister his position and underscores the importance of public participation, following internationally accepted EIA procedures and not just relying on technical know-how of individual consultants in the certification process.

Internal auditing pioneered by the Institute for Internal Auditing (IIA) developed the first standards and certification and are now recognized internationally as the foundation for auditing standards. ISO 14000 environmental management standards include standards for auditor certification. The Board of Environmental (Environment, Health and Safety) Auditor Certification which is a joint program of the IIA and Auditing Roundtable working internationally to assist in this process for environmental, health and safety audits.

Damage assessment models have been developed in the United States to address natural resource damages for a limited number of programs. See A Primer on Natural Resource Damages (NRD) available under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Oil Pollution Act (OPA). http://www.epa.gov/superfund/programs/nrd/primer.htm and The Natural Resource Assessment and Restoration Handbook prepared by the Bureau of Land Management, U.S. Department of the Interior, Rel. 1-1712, May 27, 2008.
There are several observations about common challenges citizens face as a force for compliance and enforcement of EIA requirements. First, courts defer to environmental agencies for decisions on substantive EIA review issues unless there is clear bias or arbitrary action. Since the expectations for the content of EIA analysis can be subject to case specific judgment, courts have shown reluctance to override agencies even if they miss glaring deficiencies in an EIA during their review. This forces challenges to decisions to approve an EIA to overcome a high hurdle. Second, it is easier to challenge actions which courts can identify as clearly illegal, in violation of specific requirements in law and as commitments to action that result from the EIA process. This puts even more importance on the Environmental Management Plan or its equivalent, that is clearly a set of requirements the project proponent must meet, following EIA approval.


EPA’s NEPAssist application is a GIS and web-based analytical tool using a non-proprietary software developed following 8 years of working with 10 EPA regional offices with diverse data needs. It enables EIA reviewers to: map a proposed project using a drawing tool, coordinates, or other locators; manipulate project boundaries and provide distance information to physical and land use features; accesses and instantaneously maps distributed data from many different sources selected by the user; visualize the project setting using satellite imagery on which other data is spatially displayed; generates a pre-programmed report on a series of yes-no questions on presence or proximity of key features where data layer information is available; enables the user to change parameters and assumptions; and enables the user to go behind the data to examine meta data—source and date of the data and also to identify the names and locations of particular features that may be identified by the analysis. Other countries adopt their own names and interface, use their own data sets, and develop their own analytical questions. They are trained to add and remove data layers in the future. The application and data reside elsewhere so with a password and internet access any EIA reviewer can use the tool on their desktop. Deployment of the tool has been accompanied by inter-ministerial workshops and arrangements for data sharing, some of which will be phased in over time.

9 BIBLIOGRAPHY


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