

PRINCIPLES AND BEST PRACTICES FOR ESIA COMPLIANCE AND ENFORCEMENT: requirements, commitments and related permits

“EsIA compliance and enforcement principles and best practices: requirements, commitments and related permits” is a joint project of the International Association for Impact Assessment (IAIA)’s Governance and Implementation Systems Section and the International Network for Environmental Compliance and Enforcement (INECE). These reflect professional consensus best practices identified in over seven webinar presentations and discussions hosted by these professional networks, workshops at four IAIA Conferences and regional workshops in Asia and the Americas along with opportunities for widespread review of drafts. It builds upon two internationally accepted frameworks: IAIA’s environmental and social impact assessment framework and INECE principles of environmental compliance and enforcement.

Full realization of the environmental, social and economic benefits of Environmental and Social Impact Assessment (EsIA) requirements cannot be achieved without significant improvements in environmental governance. Emphasis on the adequacy of the EsIA document or a one-time determination of “environmental feasibility” leads to a failed approach for EsIA to achieve intended results. In particular, there is widespread recognition that follow up compliance monitoring and enforcement of commitments to avoid, mitigate, compensate and/or monitor impacts are weaknesses in the implementation of EsIA in both developed and developing countries. To strengthen this and build greater public trust in the EsIA process, commitments need to be “enforceable” for successful compliance to be realized. Furthermore, an unknown number of projects are constructed without having gone through required EsIA procedures resulting in what might otherwise have been avoidable damage to sensitive resources, communities, and individuals without sufficient consequence to deter these practices. This best practices document aims at filling some of the important gaps and deficiencies in our implementation systems.

For simplification, EsIA refers to impact assessment for the full range of potential environmental, health, social and economic impacts, recognizing that some countries or institutions only focus on environmental impacts or use different vehicles or terminology. This best practice document also focuses only on EsIA requirements as applied to proposed projects, recognizing that EsIA also applies to decision-making on proposed policies, plans, and programs.

Professional best practice respects the differences among countries and organizations in their structure, institutions, relationships, instruments, procedures and practices. Examples from many different countries and institutions around the globe are identified in the document for reference, but many such efforts are relatively new and much more needs to be done.

OUTLINE

- A. Overview
- B. Principles
- C. Best Practices
 - 1- Institutional design and governance systems
 - 2- Legally binding instruments
 - 3- Drafting enforceable commitment language
 - 4- Expanding enforcement authorities to address potential EsIA violations
 - 5- Empowering stakeholders and the public
 - 6- Modernizing and investing in administrative, support and resources
- D. Conclusion
- E. References and Resources

A. OVERVIEW : WHY INTEGRATE EsIA AND COMPLIANCE/ENFORCEMENT FRAMEWORKS

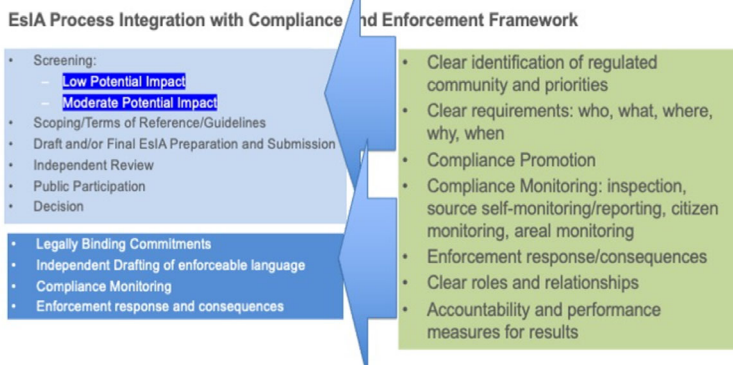
Viewing EsIA through the lens of compliance and enforcement assures that EsIA is not merely an analytical process i.e. an assessment of impacts and alternatives to inform sound decision-making, engaging stakeholders and the public in a transparent process. Integrating the two professional frameworks is the best way to realize positive outcomes from EsIA, that the proposed measures to avoid, mitigate, and/or compensate for adverse impacts, or enhance beneficial impacts, are made real, treated as commitments, with consequences for failure to live up to those commitments sufficient to motivate and/or compel their realization. It also ensures decisions on the level of environmental review a project requires has integrity.

Problems arise with the current understanding of the EsIA process when the EsIA and compliance and enforcement frameworks are not aligned, in particular activities BEFORE the assessment and decision-making to ensure that projects that should require a full EsIA process do so, that those that are not required to do so but are conditioned on a project description and proposed mitigation measures are accountable, that site preparation and construction do not begin before the EsIA decision is made, and that commitments to significant mitigation measures are complied with over the lifetime of the project.

Figure 1

Figure 2

Relating EsIA process to compliance and enforcement framework



- Steps in the EsIA process involve compliance and enforcement, for example:
- Screening requirements to ensure there is an appropriate level of environmental review
 - Official approval before commencing site preparation, construction and/or closure
 - Requirements to carry out the project as described, and to successfully implement promised mitigation measures for adverse and/or beneficial impacts
 - Requirements that information submitted to officials is truthful, not fraudulent or deliberately misleading. i.e.
 - Representations in applications, EsIA documentation
 - Representations of professional expertise or licenses

Figure 1 highlights elements in the EsIA process description important to integrate compliance and enforce that are not now universally recognized in depictions of the EsIA process. Figure 2 lists some of the key requirements that are subject to compliance and enforcement.

To be 'enforceable' the requirements must be clear as to who is accountable for what actions, they must be technically and financially feasible, clear as to how compliance will be determined and what the consequences are for a failure to comply. Programmatically, authority and resources and institutional responsibility is needed to promote compliance, to monitor compliance and to respond to violations. Through transparency and access to information and access to the courts citizens also may be empowered to contest failure to address significant impacts or alternatives.

B. PRINCIPLES

EsIA compliance and enforcement practitioners have identified 6 broad principles for filling important gaps in the EsIA process and achieve its desired results:

PRINCIPLE 1: EsIA design and implementation processes need to create a system of governance that engages institutions and stakeholders at all levels and throughout a project life cycle necessary to assure integrity, compliance and results by:

- a. assuring an appropriate level of graduated review, considering future modifications
- b. building on the work of institutions with relevant expertise, mandates, and resources
- c. engaging permitting and legal enforcement authorities

PRINCIPLE 2: EsIA process commitments must be integrated into legally binding instruments that:

- a. form the basis for follow-up monitoring/auditing/enforcement
- b. follow the life cycle of the project with adoption in successive phases, contracts, ownership and permits issued for the project.

PRINCIPLE 3. Enforceable commitment language must be drafted so that it is:

- a. realistic and feasible,
- b. amenable to follow up monitoring and the application of enforcement consequences,
- c. clear WHO is responsible, for WHAT, by WHEN, and HOW compliance will be determined and achieved, with clear quantifiable performance expectations.

PRINCIPLE 4: Tailored legal enforcement authorities and compliance strategies are needed to motivate compliance, and commitments to:

- a. impose consequences sufficient to deter violations and level the playing field for those who do comply,
- b. assure a swift return to compliance,
- c. restore damaged environments and prevent further damage caused by failure to comply with requirements.

PRINCIPLE 5: Stakeholders need to be empowered to advance EsIA compliance and enforcement through:

- a. early engagement,
- b. access to information,
- c. access to justice and/or operational grievance mechanisms to seek remedies, take in, respond to and resolve compliance concerns.

PRINCIPLE 6: Modernization of and investment in administrative support mechanisms critical to EsIA compliance and enforcement is needed for:

- a. human, financial, information, and technological resources and capacity
- b. document/data transparency and accountability including digitizing documents, assuring data integrity and support for geospatial mapping,
- c. web-based tracking of the EsIA process and commitments, compliance monitoring, and enforcement for individual projects.

C. BEST PRACTICES for each of the Principles

PRINCIPLE 1: EsIA design and implementation processes need to create a system of governance that engages institutions and stakeholders at all levels and throughout a project life cycle necessary to assure integrity, compliance and results by:

- a. assuring an appropriate level of graduated review, considering future modifications
- b. building on the work of institutions with relevant expertise, mandates, and resources
- c. engaging permitting and legal enforcement authorities

Challenges:

The scope of any environmental and social impact assessment will necessarily define a broad range of institutions with unique expertise, resources and authorities at multiple levels that must be informed and engaged both over the lifetime of the project and before and after the EsIA related decisions are made. Institutions responsible for EsIA implementation rarely if ever have follow up monitoring and enforcement authority and responsibility over the lifetime of the project, nor do they possess resources to ensure the integrity of policies defining an appropriate level of review for projects before site clearing and construction. EsIA institutional responsibilities for compliance monitoring and enforcement sometimes ends when a project is built and operating.

Further, institutions that are to engage at later stages to follow through on commitments made at the early stage during the EsIA process are disinclined to devote resources at the early planning stage when details they require might not be available nor adequate resources committed to this task. It is very important not only that commitments made during the EsIA process be aligned with specific institutions responsible for overseeing implementation of specific measures but also that these institutions be involved in the review process and formally accept this responsibility including incorporation in the instruments they use for their administration.

Finally, EsIA programs have more than enough work to do with the projects before them and are not out in the field looking to find more projects that should have been subjected to the legislation. It has proven difficult to identify in a timely manner site preparation and construction of projects that begins without permission, particularly for remote locations.

Best Practices

- 1.1 Promote compliance with EsIA requirements by engaging all levels of government and institutions with influence, responsibility and authority to issue permits and licenses to new and modifications of existing projects. To achieve this there must be a focus to educate project proponents about EsIA requirements. EsIA programs need to be creative in enlisting the support of lending institutions and other permitting programs to ensure they reinforce EsIA requirements as the first hurdle and inform those who come before them on other business to understand and comply with their EsIA obligations.
- 1.2 Develop “eyes and ears” on the ground and in the field to identify the outliers from a program requiring EsIA, those failing to comply by making arrangements and training local police, municipalities, the public (see Principle 5) and indigenous peoples to identify those individuals who might begin site work without a valid permit/environmental review.
- 1.3 Provide readily available information online and on-site to relate construction or site clearance activities to EsIA approval status.

- 1.3.1 Require posting of permits visibly at the site where construction is to take place. ⁱ
 - 1.3.2 Provide easy access to web based GIS mapping and web based tracking tools on the status of EIA approvals so that those in the field can check questionable work that is underway.
 - 1.3.3 Notify local community members of receipt of applications for construction approvals and likely timing of the process
 - 1.3.4 Create formal arrangements with other Ministries, governments issuing approvals and permits to require evidence of the environmental permit/EslA process completion prior to their approval
 - 1.3.5 Deploy drones for remote sensitive ecological areas to identify construction activity that might not be permitted
 - 1.3.6 Conduct Site inspections -- noting resource allocations might preclude this for outliers.
- 1.4 Piggy back authority and controls of other relevant institutions with sufficient compliance monitoring and enforcement capability to assume this responsibility, while centrally tracking results and performance for overall EslA compliance. ⁱⁱ
- 1.4.1 Identify and secure the involvement and commitment of resources of institutions with the requisite expertise, authority and resources to draft relevant avoidance/mitigation/compensation measures and performance requirements both as part of the EslA process and within their own succeeding processes for issuing permits, licenses etc.

The part of the program that involves auditing, monitoring and follow up enforcement may be part of the same unit responsible for EslA, or may be handled by a different unit(s) or not at all. This responsibility should be clearly assigned and accountable for results stemming from the EslA 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, EslA commitments run the life of the project through closure and unless these commitments are carried over into other vehicles, there needs to be provision for the smooth transfer of responsibility.

- 1.5 Put in place coordination mechanisms to better align resources and priorities of institutions responsible for enforcement with those responsible for monitoring compliance through inspection, self monitoring and reporting, monitoring and management of complaints.
- 1.6 Create a smooth and efficient process for institutions at all levels of government to “refer” instances of alleged non-compliance to other authorities which can take responsibility as well as coordinate budgets to enable them to follow up. Any such referrals require resource allocations and tracking to ensure that the issues are not relegated to black holes.
- 1.7 Create new institutions and mechanisms for follow up monitoring and enforcement where none exist when drafting commitments for critical measures that lack a clearly defined home to provide accountability and oversight at least for significant issues upon which a decision on a proposed project rests. ⁱⁱⁱ
- 1.8 Create a single application process for a continuum of environmental permits and levels of review ^{iv}

- 1.9 Identify a single institution responsible for establishing government wide protocols for data, spatial content, and meta data on the source, timing, quality and Q/A of the data and for sharing information across government information systems and platforms.
This best practice is the institutional counterpart of Principles... x and y

PRINCIPLE 2: EsIA process commitments must be integrated into legally binding instruments that:

- a. form the basis for follow-up monitoring/auditing/enforcement
- b. follow the life cycle of the project with adoption in successive phases, contracts, ownership and permits issued for the project.

Challenges:

Every EsIA system results in some form of legal approval, whether it be a letter that the EsIA and/or project has been approved, permit, or certificate, that specifies the conditions for approval. It is sometimes unclear what the document actually requires or approves. Some EsIA programs rely on the submitted documents from the project proponent as the sole basis for legally binding commitments; others require separate management, mitigation and/or monitoring plans, some with required formats in a matrix or tabular format. A simple letter of approval results in either approval of the analysis, acceptability of impacts identified in the assessment (environmental feasibility), and/or an approval of a project or environmental social and/or economic measures as the EsIA describes. In all of these instances the EsIA document is typically too unwieldy or non-specific about those commitments that they are not enforceable.

When countries or institutions rely upon the EsIA document and/or Environmental Management Plan submissions it falls short for several reasons:

- The project proponent might not provide the specifics of actions proposed to address potential impacts or even have them available at the time the EsIA is submitted. The EsIA process is a planning tool and it should be expected that they provide all the necessary information at the time of submission of their documentation.
- If a separate mitigation document is relied upon for subsequent enforcement, the scope of what are presumed to be “mitigation commitments” can fail to identify those aspects of the actual design and operation of a proposed facility that serve to avoid or minimize adverse impacts.
- Modifications made during financing and construction phases often are not linked to specific environmental and social outcomes that might require revisiting if, as a result of a modification, it is inadequate to address the problem.

Best practices:

- 2.1 Countries and institutions should draft their own conditions for approval in the decision document or in a separate permit(s) or contract(s) and not rely solely on the EsIA document as written and create a distinct step in the EsIA process to do this. ^v
- 2.2 Institutions with authority and responsibility for oversight of performance in later stages in time should incorporate related commitments into their own permits and licenses if they are going to serve as the principal institutions for follow up compliance monitoring and enforcement.
Tracking and administration across agencies to ensure accountability and follow up.

- 2.2 Boiler plate language used to ensure that any project or EsIA document includes commitment to incorporate commitments made during the EsIA process into construction and engineering specifications. And for passing along accountability and enforceability to subsequent owners or operators of the project.

PRINCIPLE 3. Enforceable commitment language must be drafted so that it is:

- a. realistic and feasible,
- b. amenable to follow up monitoring and the application of enforcement consequences,
- c. clear WHO is responsible, for WHAT, by WHEN, and HOW compliance will be determined and achieved, with clear quantifiable performance expectations.

Challenges: The EsIA process often results in inadequate detail on the proposal, mitigation and monitoring written in vague language as possibilities, and difficult to audit, even potentially unenforceable terms. It is possible that the process may result in a lack of commitment language or where there is such language, a lack of quantitative performance expectations and associated commitment to monitoring for those measures. Further,

- project proponent and/or their consultants preparing the EsIA document are not experts in the business of drafting enforceable requirements,
- time and resources allocated to consultants are often too limited to allow for this level of specificity,
- if the EsIA is developed early in the process of site selection and planning the detailed information required to make mitigation “enforceable” might not be available.

Best practices

- 3.1 Use mandatory language like “shall” or “must” and not “should” or “may”.
- 3.2 Include a requirement for companies to provide and maintain a Commitments Tracking Table or its equivalent. This puts the onus on the proponent to do this tracking but gives a tool for the regulator and stakeholders to monitor how commitments are being met . vi vii
- 3.3 Create a format that makes it easier for digitizing commitments for management of follow up monitoring e.g. inspection, report receipt, transparency and public accountability.
- 3.4 Require commitments to be:
 - 3.4.1 Quantified to the extent possible both in terms of the expected results and actions.
 - 3.4.2 Realistic, achievable and measurable
 - 3.4.3 Inclusive of both a commitment to compliance and how it will be demonstrated
 - 3.4.4 Technically and economically feasible taking into account the financial position of the operator. -- it is important to find a mitigation measure that is achievable for the proponent, while still maintaining the desired or expected environmental effect.
 - 3.4.5 Identified for specific temporal and geographic phases of the proposed project and so identify as site selection, site design, site preparation, construction, operation and closure.
- 3.5 Align performance expectations that are quantitative to the extent possible with specific actions that will be undertaken to meet performance requirements, with specific self-monitoring and record-keeping on compliance and reporting to specifically identified authorities with the relevant authority that has the resources and legal authority to take action if commitments are not being met.
- 3.6 Utilize one or more of the following approaches to address the balance between flexibility and accountability:
 - 3.6.1 Set forth performance requirements that must be achieved through proposed actions that will be defined at a later stage.

Make EsIA “approval” conditional on demonstration and submission of specific plans for achieving required levels of performance at a later stage.

- 3.6.2 Align commitments with a responsible institution/entity empowered to monitoring compliance and pursue action forcing and consequences if commitments are not met.
- 3.7 Identify the most important commitments with real consequences and focus on those. “Focus” does not necessarily mean that less significant commitments or mitigation measures that are not included in this official document prepared at the close of the EsIA process are ignored or not enforced. It is usual that there is a general provision that the project is to be constructed in accordance with the description in the EIA --assessment.^{viii}
- 3.8 Adopt 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. ix x
- 3.9 Draw upon sector specific guidelines for well-defined and specific requirements that can form the basis for crafting enforceable requirements. xi
- 3.10 Draft requirements and commitment language should clearly identify action forcing events throughout all stages of a project and as a whole should be clear as to:
- which issues are of primary concern;
 - at what stage the commitments apply e.g. site preparation, construction, operation, closure;
 - the types and significance of changes that might trigger the need to review mitigation commitments or approval of the design change.
 - alignment of project design specifications with key environmental/social concerns and inclusion of parameters for when a targeted revised or new EsIA might be required. xii

PRINCIPLE 4: Tailored legal enforcement authorities and compliance strategies are needed to motivate compliance, and commitments to:

- a. impose consequences sufficient to deter violations and level the playing field for those who do comply,
- b. assure a swift return to compliance,
- c. restore damaged environments and prevent further damage caused by failure to comply with requirements.

Challenges:

Most existing EsIA programs focus on the development and review of the EsIA assessment and its documentation and may or may not address both pre-decision and post-decision aspects of EsIA programs. Little attention is paid to those projects that: a) escape an appropriate level of review; b) modify the proposed project to the extent that its projected impacts have become significantly more adverse or less beneficial; and c) fail to implement promised measures to avoid/mitigate/compensate for adverse or enhance beneficial impacts. The use of enforcement authorities is of course predicated on commitments being legally-binding and drafted to be enforceable (principles 3 and 4).

Further, many countries environmental enforcement authorities are tied to actual damages and/or address adverse environmental and social impacts after the fact in tort, nuisance, or other forms of liability and are not suited to address the preventive nature of EsIA requirements. By its very nature,

EsIA is applied to actions/projects before they are built or operating, plans that are not yet formulated, policies that are not yet adopted. Finally, economic concerns predominate when needed investment is proposed. This can lead to uneven and unfair enforcement and sanctions which are too low to force behavior change.

Best Practices

- 4.1 Expand enforcement authorities to match the preventive nature of the EsIA process i.e. decoupled from proof of actual damage or harm, and introduce consequences for harm to the regulatory scheme or consideration of the potential damage/harm to be prevented by the required actions based upon their significance. So, for example, an unauthorized disturbance that threatens an endangered species might have a higher penalty than disturbance which does not.
- 4.2 Create a range of consequences that address different types of potential violations of EsIA requirements. ^{xiii}For example, authority to:
 - 4.2.1 Halt site preparation, construction and/or operation for failure to obtain a permit/EsIA approval prior to commencement until an EsIA is completed and approved
 - 4.2.2 Halt site preparation, construction and/or operation for failure to comply with commitments made from the EsIA process
 - 4.2.3 Order a demolition or decommission and reclaim or restore the site
 - 4.2.4 Recover costs of clean up carried out by the government. Seek restitution for damages/compel payment of reparations for damages incurred during construction or operation that could have been prevented through the EsIA process or compliance with commitments^{xiv}
 - 4.2.5 Impose monetary penalties and fines for non-compliance with requirements
 - 4.2.6 Order remediation and correct non-compliance
 - 4.2.7 Acquire and release performance bonds
 - 4.2.8 Review or cancel a permit if there is harm caused to prevent further harm to people and the environment. It is particularly useful for imminent endangerment or potential for harm.
 - 4.2.9 Impose penalties for commencing work prior to required EsIA/other permits.
 - 4.2.10 Require restitution for damage to habitat, sensitive ecosystems, endangered species.
 - 4.2.11 Deny applicant future permit, government contracts, or probation for the owner/developer/construction company
 - 4.2.12 Higher penalties for subsequent violations
- 4.3 Create operational grievance mechanisms and performance bonds to ensure that the day-to-day operations do not create adverse pollution or community impacts including mechanisms for direct grievance from people to the project holder for deviations in order to provide a quick answer of the situations (i.e. a phone hot line for environmental deviations).
- 4.4 Use financial instruments to ensure compliance by contractors and sub-contractors as additions to construction and other specification documents used by development banks and for all projects. These instruments include performance bonds, contracts with provisions to withhold payment, financial guarantees and insurance. However, market pressures may change over time as prices rise and fall.^{xv}

- 4.5 Develop transparent policies for imposition of enforcement consequences: needed to overcome the many economic 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 and political pressures of realizing opportunities from new investments. Consequences must be sufficiently strong to deter violators from violating in the first instance and timely to ensure prompt compliance when violations are detected to prevent uneven and unfair enforcement and sanctions which are too low to force behavior change. It is therefore essential that countries make penalty policies and their implementation transparent and that citizens have access to systems for holding public officials accountable for firm and fair implementation. Transparent policies are an important complement to ensuring enforcement bodies are at arm's length from political influence and that there is independent enforcement decision-making to provide credibility to these institutions.
- 4.6 Escrow requirements for monies to be held by the government to cover the cost of the proposed mitigation should the project proponent fail to implement it AND, having in place additional systems for fees and fines for failure to meet commitments during operation or closure if the escrow is released based upon compliance at the end of construction and prior to operation. Note also that The use of performance bonds and financial guarantees and insurance can also provide appropriate financial incentives for project proponents to ensure compliance by contractors and sub-contractors. Clauses for contractors and subcontractors to comply with EsIA requirements could be included in contracts and somehow reflected in the EsIA process. Small and Medium contractor and subcontractors frequently have problems to implement EsIA commitments thus mechanisms to promote capacity building or compliance strengthen mechanism could be included in the EsIA process. ^{xvi}
- 4.7 Prohibit Site Clearing or Construction before completion of the EsIA process. Several authorities identified in Best Practice 4.2 are critical to prevent site clearing or construction before completion of the EsIA process, depending upon the consequences. In particular, ability to halt site preparation, construction, or operation through court order. Whether the authorities available and consequences provided are sufficient to deter future violations of this kind, is a question. Cost might be delay, or potentially loss of financing and project viability if consequences are imposed.
- 4.7 Authority to independently determine the appropriate level of environmental review. ^{xvii} Many countries rely upon a project proponent to “self-categorize” and only apply for a permit and make their intentions known to authorities if they believe they meet threshold considerations for requiring a full EsIA document or defined form of environmental assessment. 14 countries in the Americas strongly recommended avoiding having project proponents self-categorize an appropriate level of environmental review and to retain independent oversight. If activities proceed without any opportunity for government and the public to confirm that they meet such criteria or are not segmenting proposed projects to avoid environmental review or permit obligations, it is likely there would be more non-compliance than if all such activity is captured in the system. This can be especially significant in efforts to protect sensitive ecosystems such as wetlands and mangroves especially when boundaries might be uncertain or endangered or threatened species data may be uncertain or indigenous peoples interests may be impacted.^{xviii}

- 4.9 Accountability for the project proponent if an appropriate level of review is avoided or circumvented based upon fraudulent information upon which the decision is based and assurances are provided the accuracy and reliability of a formal submission of information on which the decision is based.

Requirements that may be violated at this stage include submission of false information or mis-categorizing a proposed project so as to avoid requirements for more rigorous EsIA analysis, or the failure to apply at all. ^{xix} In addition, many countries have requirements that prohibit a project proponent from “segmenting” projects so as to avoid categorization as potentially having a significant adverse impact. Depending upon country rules the prohibition on segmentation applies 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 in reality connected. The concept of reviewing ‘connected actions’ at a single point in time in an integrated EIA document is not universally recognized by countries implementing EsIA requirements.

- 4.10 Penalties for illegal construction in protected areas.

Illegal construction in protected areas has resulted in the cutting of mangroves, filling of wetlands and destruction of coral reefs in protected areas or buffer zones around them without regard to consequences. This damage may result from deliberate or possibly even inadvertent destructive actions because boundaries for protected areas are often imprecise and this weakness might be exploited by developers of sites which are all the 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 but certainly insufficient if in fact damage has been caused that is irreversible. The economic benefit of being located in and around protected areas can also work as a disincentive to comply. ^{xx}

- 4.11 Authorities and resources to assure compliance and detect violations.

4.11.1 Site Inspection: The most likely circumstance for detecting violations is during an independent site inspection or audit prior to, during or following site preparation, project construction and/or operation/closure. However, this is often too late to provide for an easy resolution, and difficulty distinguishing minor from major infractions. Projects should be inspected based on need and circumstances more frequently depending on the stage of construction, operation or decommissioning. It is important to provide training for inspectors or third party auditors. ^{xxi}

4.11.2 Monitoring of environmental quality and relevant parameters such as air, water flora and fauna.

4.11.2 Facility owners self-monitoring is important to augment inspections and audits. However, self-monitoring must also be guaranteed by fines or suspension of permits and licences in the event of failure to report breaches or the falsification of reporting.

4.11.3 Independent monitors that are able to report back to the government on the requirements being met by the proponent.

4.11.4 Citizen’s rights to pursue action in the courts

- 4.11.5 Provide citizens' with knowledge about environmental regulations in order to identify and address eventual environmental problems. This could later translate in eventual grievance mechanisms to the authority and also communications with the project holder.
- 4.11.6 Remote inspections activities
- 4.11.7 On-line monitoring^{xxii}

Experience in India suggests that independent environmental audits were more effective (in identifying breaches) if the auditor was paid by the Government or Ministry a standard fee that was collected from the facility by the Ministry.

- 4.11.8 Whistle blower protections for workers and communities from reprisals if they are able to report breaches of environmental and social obligations.
- 4.11.9 Authority to use drones, aerial surveillance, especially important in remote areas.^{xxiii}

4.12 Enforcement of Domestic laws implementing International Treaties: Endangered Species, Indigenous Peoples, and Complex Ecosystems

International treaties and agreements are not generally directly enforceable. Enforcement is usually based only on the domestic laws and institutional policies and practices that adopt the terms of the treaties and agreements. However, it also has been argued by some that some can be considered a customary international law norm and thus universally applicable. The focus on compliance and enforcement would apply some of the same principles to these issues as would apply to other concerns of the EsIA process, that is the crafting of commitments and conditions for approval, follow up monitoring and enforcement, and diligence in providing accurate and truthful information and engaging indigenous peoples earlier in the EsIA process to include decisions on required level of review.

PRINCIPLE 5: Stakeholders need to be empowered to advance EsIA compliance and enforcement through:

- a. early engagement,
- b. access to information,
- c. access to justice and/or operational grievance mechanisms to seek remedies, take in, respond to and resolve compliance concerns.

Challenges:

Many aspects of the EsIA process are invisible to the public and stakeholders and opportunities to engage are often late in the process and limited to only when full EsIA is required. If EsIA requirements and commitments (i.e. commitments to measures to avoid, mitigate or compensate for adverse impacts or enhance beneficial impacts) are to be taken seriously it requires accountability, transparency and consequences including transparency for the general public, other stakeholders, governmental and non-governmental institutions.

Numerous challenges impede the ability of EsIA programs to leverage the knowledge, concerns, eyes and ears of the general public to enhance monitoring of compliance, enforcement of commitments, or provide compliance information at the early stages of the process.

- lack of transparency for projects with low or moderate impact and decisions on the level of environmental review required
- opportunities to engage limited in time and influence, late in the process
- opportunities to engage only when a full EsIA is required.
- limited access to full EsIA documents
- limited access to key environmental, social, health and economic information including key infrastructure capacity and plans making against which to compare proposed project, its location and setting
- EsIA documents too voluminous to share or complex to understand
- EsIA documents from which it is difficult to extract key assumptions and commitments
- key boundaries for environmental resources unclear or uncertain
- lack of means to protect sensitive environmental and/or cultural resources while providing potential impact information

These gaps are important to the success of the EsIA process because:

- Local citizens are on the ground and can offer information about, or to identify misinformation on, boundaries and resources in applications and identify if and when EsIAs that might be fraudulent and even correct official data.
- The public are the eyes and ears on actions on the ground and can identify projects that are initiated without proper review, permits, or developed in a manner which is inconsistent with submissions and commitments.
- The public can augment official resources and be empowered to formally engage in follow up monitoring to ensure commitments are met.
- With access to justice the public can augment government enforcement efforts.

Best practices

5.1. Five generic best public participation practices widely recognized by professional organizations and can be applied to participation in the EsIA process:

- Early: Engage early in the process
- Throughout: Engage the public throughout the process of scoping, designing, assessing and disclosing the results of the assessment
- Tailored: Engagement should be tailored to the audience, including the level of technical understanding, language and availability to engage.
- Often: one time hearings or meetings at the beginning and end of project planning is insufficient.
- Responsive: Project proponents and governments need not respond positively to each and every concern or point of information, but they do need to seriously consider them, be open to them, and provide a sound rationale if they are not being pursued.

The practices most relevant to compliance and enforcement of EsIA commitments are early involvement, involvement throughout and responsiveness to concerns.

5.2 Use the public complaint process to identify those that might rise to the level of non-compliance and violations, clarifying with clear procedures and information collection on complaints when the unit responsible for compliance and enforcement should be involved.

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- 5.3 Provide public access as early as when applications are received in order to make the screening process transparent, provide additional time to decide whether and how to engage and to add accountability for an appropriate level of review. This also empowers stakeholders to get engaged during scoping and public comment periods which are often limited and too late to have an impact.

Ideally, provide public access to submitted EsIA documents when submitted simultaneously with the process of independent review of the EsIA so that both the project proponent has an incentive to do a better job at the outset and independent reviewer is augmented by public scrutiny.

- 5.4 Where appropriate, formally engage citizen or community monitoring: Enable citizen participation through the creation of monitoring committees.
- 5.5 Workers and communities must be protected from reprisals if they are able to report breaches of environmental and social obligations. ^{xxv}
- 5.6 To overcome the lack of resources or expertise of the public and other stakeholders, countries and institutions have provided resources for that purpose including technical support and funding for independent analysis.
- 5.7 Improve access to EsIA documents often impeded by challenges of length of documents, reaching persons without access to the internet or reliable mail service, and the sheer number of persons who might have an interest and stake in the outcome, including:
- 5.7.1 Having contact information with interested parties available even before a project might be proposed that is of interest, including preferred means of contact.
 - 5.7.2 Alerts about document availability through text messages.
 - 5.7.3 Access to all documents including not only assessments but also applications, government comments, other public comments, scoping documents, public participation plans and decision documents and finally related permits.
 - 5.7.4 Distributing and making available both the executive summary and all supporting documents.

PRINCIPLE 6: Modernization of and investment in administrative support mechanisms critical to EsIA compliance and enforcement is needed for:

- a. human, financial, information, and technological resources and capacity
- b. document/data transparency and accountability including digitizing documents, assuring data integrity and support for geospatial mapping,
- c. web-based tracking of the EsIA process and commitments, compliance monitoring, and enforcement for individual projects.

Challenges:

Unless and until support and resources are available these challenges will persist in undermining efforts to realize the beneficial outcomes from EsIA processes:

- Management of voluminous, unwieldy EsIA documents for
 - sharing across institutions and levels of government
 - providing access
 - tracking status
 - tracking commitments

- Timely communications
- The sheer number of players and interested parties in the process with whom to communicate
- Lack of resources allocated for cooperation and collaboration and engagement for key institutions that are not formally charged with implementing aspects of EsIA.
- Missed opportunities to reform administrative procedures by making simultaneous versus sequential actions.

The challenges to administrative and support systems for EsIA are enormous and multiplied when you add compliance and enforcement considerations to that process and almost impossible without the support of digital and web based systems that can address the challenges with multiple institutions being responsible for follow up, links to citizen or local government complaints, and tracking of project modifications.

Best Practices:

- 6.1 Provide budget and human resources for collaboration and cooperation from key institutions with unique expertise and authority related to EsIA for engaging in the process and follow up monitoring and enforcement.
- 6.2 Digitize EsIA documents including mitigation plans and create a management system and an archive that is accessible to those that need to refer to EsIA documents. Digital access to EsIA documents including mitigation plans enable programs to share them across institutions and with the public and for purposes of follow up monitoring and enforcement and engagement of a wide range of institutions.
- 6.3 Create a web based tracking system to provide status and track proposed projects through the environmental review system.
 - Access archives over a long period of elapsed time between when a project's EsIA document or project itself is approved for construction and when construction, operation and/or closure commences.
 - Make every official document submitted as a formal application, public participation plan, scoping plan, terms of reference, analysis and receipt of public comment, impact assessment, review of the sufficiency and adequacy of submitted impact assessments, decision documents and related permits are available and accessible.
 - Ensure that commitments in permits, conditions for approval of an EsIA process are clear and accessible to the public, public institutions and the project proponent.
 - Ensure that for each commitment to action that the responsible entities are identified and that they have the responsibility and resources to follow up.
- 6.4 Provide digital access for key data and information across institutions using web services for:
 - Official identification information for owners and/or operators
 - Environmental data (physical, biological)
 - Social and economic data (demographic, industrial and business)
 - Status of infrastructure capacity current and future plans (e.g. sewage treatment and collection; drinking water; solid and hazardous waste collection, treatment and disposal; transportation; educational facilities, energy, health care, fire and police etc.)
 - Information on land use and resource management restrictions applicable to the site
 - Sensitive information on sacred sites and cultural resources
 - Sensitive information on endangered species
 - Sensitive personal information requiring privacy protections

- Sensitive business information requiring privacy protections

6.6 Provide Geographic Information System support with geospatial-ready environmental, social, economic and infrastructure status data available to all in the form with the possibility of flexible analysis and search functions. This benefits both investors, government officials and the public in both making and influencing decisions. Include important meta data so that appropriate use, quality control can be established. This includes the need for institutional design of common management directives for GIS information.

6.5 Digital platform: A digital application platform makes it easier for project proponents to comply and for responsible institutions to manage and ensure compliance. Recent advances in information technology and systems design hold great promise for accomplishing both.

Web based digital platforms and tracking systems best practices include the following capabilities to:

- Isolate requirements for which different institutions are responsible while maintaining some accountability for the commitments of a project as a whole.
- Track and align changes and modifications to a project and to ownership and those responsible for operations.
- Provide public status of key milestones and opportunities for review, comment, access and engagement opportunities e.g submissions and approvals, inspections,
- Support internal management and movement of communications and paperwork, approvals, drafts and finals, notices, hearings, comments, responses
- Align citizen complaints with project performance, institutions responsible for follow up and responsiveness
- Manage, analyze and respond to self-monitoring and reporting data
- Develop essential information for performance measures for different functions and institutions
- Support calculation e.g. penalty assessments, soil and erosion risks
- Support enforcement response to potential violations
- Support scheduling of inspections and report preparation and distribution
- Accept and make changes to correct official environmental and social data sets used to develop and review EsIA and identify fraudulent and false information

6.7 Forms and formats to make critical information easy to:

- digitize,
- share, access and sort
- force inclusion of key pieces of information.
- complete online applications for screening purposes and permits
- Autofill applications with information the government already has

6.8 Build capacity for institutions implementing both EsIA and compliance and enforcement functions in organized and sustainable programs. This can take many forms:

- Training using train the trainer/existing institutions
 - Knowledge and skills through academic or professional organizations, certifications and related programs
 - Skills training in peer to peer mentoring programs
- Policies, procedures and guidance documents
- Equipment for monitoring, transportation, personal protective gear

- Computer support and systems
- Foster networking within and outside organizations across institutions and expertise
- Acquire, budget and dispense resources-- There is really nothing “free”. Capacity building takes time and resources and a commitment to follow through to actually use the capacity that is presumably built. All too often countries either lack the resources or reach for opportunities for training without a strategic approach to meet what might be needed or plan to follow up on the training or other form of capacity building to make the time spent productive.

6.9 Create and preserve the confidentiality of specific types of information while providing some mechanisms to identify potential impacts that might need to be addressed in a broader geographic area.

- Indigenous peoples knowledge and information
- Endangered and threatened species
- Sensitive ecological areas
- Sensitive cultural and historical artifacts, buildings and locations

6.10 Administrative support to secure the quality and integrity of Data and information

Quality and integrity of data and information is integral to a science based and objective assessment of environmental and social impacts and relies upon several elements that should be in place:

- Protocols for collection, transport and analysis and proper handling of samples
- Documentation of location, methods and instrumentation, timing and source of data and monitoring
- Accurate and complete labeling of data and samples
- Institutional relationships that provide assurance of independence and lack of bias
- Institutions and individual experts with credibility such as:
 - laboratories certified and checked by independent third parties
 - independent academic institutions
 - professionals with relevant certifications
 - NGO’s focused on particular resources, flora, fauna etc.

By making this information public, proponents are then more inclined to provide greater quality of information and will ensure that the information has been properly verified and groundtruthed before being submitted and shared with the government.

D. CONCLUSION
E. REFERENCES AND RESOURCES
APPENDIX

ⁱ Panama and Costa Rica following their lead, requires that any site or construction work include clear posting of the required EsIA approvals and permitting.

ⁱⁱ In Canada, for example, the Follow-Up team will work with other units within the Impact Assessment Agency and also with other federal authorities to ensure that the mitigation measures being proposed are able to help to successfully meet the predictions of the assessments. This includes working with the Impact Assessment Agency Compliance Promotion and Enforcement Unit to understand what they are finding in their inspections. It is solely the responsibility of the Agency to monitor for compliance with the Minister's decision statement, except where a life-cycle regulator may take on that role.

ⁱⁱⁱ Examples Thailand.....
Example of US of Los Angeles Airport
World Bank?

^{iv} El Salvador example

^v Dominican Republic Example

^{vi} see for example conditions developed by NSW Erica van den Honert)
<https://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Planning-Approval-Pathways/State-Significant-Development>

^{vii} example Canada Energy Regulator. ((Laura Randall)

^{viii} Canada: add certification of project description used in British Columbia

Australia?

^{ix} See for example the EIA Technical Review Guidelines for Mining, Energy Generation and Transmission and Tourism projects produced for international use, all of which include mitigation for construction and advice on how to ensure they are enforceable. The scope of these guidelines covers the full range of environmental and social impacts. More can be done and an international collaboration would go a long way to assist. The NSW Department of Planning, Industry and Environment has released its Social Impact Assessment guideline for resource projects, and is working on developing a guideline for other types of projects. This is available here: <https://www.planning.nsw.gov.au/Policy-and-Legislation/Under-review-and-new-Policy-and-Legislation/Social-Impact-Assessment>

See also See Canada's standard conditions around consultation, follow-up, reporting, etc. which are defined early in the conditions. CITE

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^{xi} Experts from both environment and sector ministries in CAFTA-DR countries and the United States have developed three EIA Technical Review Guidelines and Terms of Reference with the support of U.S. AID's Environment and Labor Excellence Program and the Central America Commission on Environmental and

Development (CCAD) for mining, energy and tourism respectively. 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
- Contingency Plans for actions that will be taken if monitoring results show that a quantitative limit has been exceeded.

^{xii} Some countries limit the project approval to five years and require an environmental audit prior to renewing the approval. This can ensure that actual impacts can be addressed during operations.

See also See Canada's Amendment process

^{xiii} Typically, it is only the courts that can halt progress on a project that is moving forward without ESIa approval i.e. offer injunctive relief. However, some countries enable local police or inspectors to order such halts to construction, at least temporarily. This is a costly consequence one which is understandably reluctantly undertaken.

^{xiv} In the U.S. context this is considered to be a criminal offense and can lead to both fines and jail time, in addition to the potential for halting the project, or correction of damages. The question is whether penalties alone can deter this behavior without these other consequences.

^{xv} Add examples of use of insurance policies or escrow mechanisms to the ESIa assessment as a way to address eventual damages caused by project activities.

^{xvi} A complement can be the US example of the Superfund to support government action when parties fail to comply and government action is needed to address damages.

^{xvii} This was a recommendation by officials to 14 Ministers in Central and South America and one of the attributes of a new platform in El Salvador.

^{xviii} El Salvador provides an example of having developed a continuum of environmental permits and levels of review such that the system for environmental protection is not solely focused on projects with the potential for significant impact and there is an enforceable record. CITE

In many countries, however,, not only the nature (kind) of projects must be considered but also the magnitude of the impacts associated on the environment. As an example, In Chile, Law of Urban Wetlands (N°21202/2020) established that any project that affect a wetland, independently of its nature must follow a ESIa.

Regarding segmenting Law N° 20.417 established that projects that segment to avoid the instrument to the ESIa, are sanctioned, halt and must submit the adequate instrument.

^{xix} A combination of GIS and automated applications which can validate the information submitted on an application both the in environmental setting and project description and can be readily referenced in the future to ensure accountability.

In the US NEPA implementing regulations prohibit segmentation of projects to avoid an appropriate level of review and also includes connected actions in the project description. In Canada project splitting is illegal under a court decision: Red Chris decision. In Chile, regarding segmenting, Law N° 20.417 established that projects that segment to avoid the instrument to the ESIa, are sanctioned, halt and must submit the adequate instrument.

^{xx} Example: In Chile, under the Organic Law of the Superintendence, an infraction within a protected area constitutes an aggravating condition of the penalty.

^{xxi} Note certification programs for auditors, inspectors, ISO, consultants

^{xxii} See examples for Chile, where data of compliance with norms are reported in real time including on water resources and air quality.

In Canada the legislation is being amended to allow for inspections by telecommunications. See others

^{xxiii} In Chile salmon farming sea cages located in zones of difficult access are monitored through remote sensing processes.

^{xxiv} All major projects are required to establish and maintain operational grievance mechanisms (OGM) in compliance with the UN Guiding Principles on Business and Human Rights.

^{xxv} See Whistleblower protection under Canada's IAA law 156 (2).