

PURPOSE

These international best practice principles on Environmental/Social Impact Assessment Compliance and Enforcement are intended to guide development and capacity building among practitioners for improving IA processes, practices, and outcomes.

BACKGROUND

See Acknowledgements, page 17.

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International Best Practice Principles

Environmental/Social Impact Assessment Compliance and Enforcement: Requirements, Commitments, and Related Permits*

I. Introduction

There is widespread recognition that compliance monitoring and enforcement is a major weakness in the implementation of Environmental and Social Impact Assessment (EsIA) in both developed and developing countries.¹ Exclusive focus on the adequacy of an EsIA document, or a one-time determination of “environmental feasibility,” leads to a failed approach to EsIA implementation. To realize positive outcomes from EsIA, it must be more than a one-time assessment of impacts and alternatives to inform sound decision making, engaging the public and other stakeholders in a transparent process. Integrating compliance and enforcement into the traditional framework for EsIA assures that EsIA delivers essential protections and benefits.

Significant improvements in environmental governance are needed to achieve the environmental, social, and economic benefits of EsIA requirements. Proposed measures, i.e., to avoid, mitigate, and/or compensate for significant adverse impacts and to enhance beneficial impacts identified through the EsIA process, are more successfully implemented when treated as legally binding commitments. Consequences for failure to live up to those commitments must be sufficient to motivate and/or compel their realization. Further, when commitments are met and enforced, this builds public trust in the EsIA process, essential for new investment proposals to succeed.

Less attention has been paid to the integrity of schemes used to screen for and apply an appropriate level of environmental (impact) review. Viewing EsIA through the lens of compliance and enforcement means expanded attention to both the front and back end of the EsIA process. In too many circumstances, projects meeting criteria for full/rigorous environmental review are constructed without having gone through the required rigorous EsIA procedures. Further, if “screened out” of the full EsIA assessment process, there may be little to hold project proponents accountable for carrying out measures and plans offered to reduce adverse impacts below threshold levels. To secure the integrity of the entire process of graduated environmental (impact) review and prevent avoidable damage to sensitive resources, communities, and individuals, commitments made to avoid triggering requirements need to be enforceable and enforced just as they must be for those subject to the full EsIA process.

The five principles identified in this document aim to fill these important gaps and deficiencies in our EsIA governance and implementation systems. EsIA is envisioned here as a full player in the environmental governance and regulatory scheme.² This approach to EsIA implementation engages institutions at all levels of government to deliver the results expected after investing in EsIA. It includes a seamless handover to other institutions with the resources and authority needed to secure integrity and accountability for the desired results of the process over time, as well as their engagement early in the process.

In many respects, the five principles are not new to practitioners. They integrate two frameworks that are already internationally accepted: the International Association for Impact Assessment (IAIA) environmental and social impact assessment framework, and the International Network for Environmental Compliance and Enforcement (INECE) principles of environmental compliance and

* For simplification, EsIA in this document 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.

Related permits encompass any mechanism countries or institutions might use to translate the basis for EsIA approval into legally binding instruments. This might include licenses and contracts as well as permits and might involve multiple mechanisms to cover the broad scope of EsIA concerns.

enforcement. As a joint project of IAIA's Governance and Implementation Systems Section and INECE, this document reflects professional consensus on best practices identified in webinars, conferences, and regional workshops hosted by these professional networks. When implemented, best practice for compliance and enforcement of EsIA complements important work done by IAIA on public engagement and general follow up for EsIA processes. In many respects, the compliance and enforcement focus of this paper is a subset of that work focused on their governance aspects.³

The five principles can be thought of as goals or elements of the EsIA process that require additional attention. The best practices are relatively new and evolving, and much more still needs to be done. However, there are sufficient examples of best practice for a range of contexts, that all countries and institutions with EsIA programs can find practical ways to make significant advances to get a return on the investment in environmental review. Implementing these reforms also can make EsIA more efficient, as well as more effective, although many require new investment and funding.

Adequate funding and capacity for authorities with a role in this process is of course essential. In practice, budgetary limitations often hamper their work and the level of required cooperation and coordination. Ensuring adequate resources starts with a comprehensive review of the governmental bodies that have a role in the EsIA process, to understand the funds needed to fulfill these tasks. The authority tasked with review, for example, may not have the resources to mobilize the expertise needed across government agencies and levels of government to distinguish between good and deficient EsIAs and to monitor and secure compliance with commitments emanating from project-related decisions. It is essential to establish suitable mechanisms to raise and allocate funds

that keep funding stable (i.e., rather than subject to political volatilities) and guard against vulnerability to corruption.⁴

A few caveats apply. This best practice document focuses on proposed projects, recognizing that EsIA also applies to decision making on proposed policies, plans, and programs. It also focuses on the types of commitments conducive to terms that are enforceable for compliance, for results to then be realized. It also does not address issues related to corruption, which of course undermine the entire EsIA regulatory scheme.

Professional best practice respects differences among countries and organizations in their structure, institutions, relationships, instruments, procedures, and practices. Wherever possible, examples from different countries and institutions are identified in the document for reference. At one extreme, some countries and institutions treat the EsIA process as merely an information gathering exercise; at the other extreme, it might be the sole basis for the issuance of an environmental permit or business license.

Finally, a note about the concept of compliance and enforcement. As introduced earlier in this document, compliance entails the full range of efforts to change behavior to achieve conformity with a legally binding "requirement." Compliance concerns itself far more broadly than legal enforcement procedures and the imposition of sanctions. It includes both "carrots and sticks," the full range of efforts to motivate compliance to change behavior, institutional relationships, and incentives and disincentives that stem from both transparency and consequences. It includes the development and access to compliance monitoring information, and empowering the public and other stakeholders to pursue accountability for the failure to meet legally binding commitments that flow from the EsIA process.

II. Contents

I.	Introduction.....	1
II.	Contents.....	3
III.	EslA governance model: Integrating EslA and compliance and enforcement frameworks.....	4
IV.	The five principles: EslA compliance and enforcement.....	6
V.	Best practices for principle 1: Governance systems and regulatory frameworks.....	6
VI.	Best practices for principle 2: Legally binding instruments with enforceable commitment language.....	7
VII.	Best practices for principle 3: Enforcement authorities and compliance strategies.....	10
VIII.	Best practices for principle 4: Empowering the public and other stakeholders.....	13
IX.	Best practices for principle 5: Modernizing and investing in administrative support and resources.....	14
X.	Conclusion.....	16
XI.	Acknowledgements.....	17
XII.	References, examples and resources.....	19

Figures

Figure 1	EslA Governance Model.....	5
Figure 2	Best practices for drafting enforceable EslA commitment language.....	9
Figure 3	Enforcement authorities.....	10
Figure 4	Compliance monitoring mechanisms and authorities.....	12
Figure 5	Web-based digital platforms and electronic tracking system capabilities.....	15

III. EsIA governance model

Integrating EsIA and compliance and enforcement frameworks

The basic EsIA process and implementation framework is universally accepted, although with varied terminology and degrees of implementation.

Projects are initiated based upon a purpose and need by a project proponent. Although it is best practice to engage environmental consultants sufficiently early to influence location, process, infrastructure, site design, and overall structures, this is not necessarily what occurs in practice.

Screening for the application of an appropriate level of graduated environmental review usually involves a system to triage projects into at least three buckets of potential impacts: Low, Moderate and Significant, considering potential adverse impacts (even though the EsIA process considers beneficial impacts as well). This step can be implemented with “rapid risk assessment,” a list of project types and locations, and/or an initial environmental assessment to determine whether full EsIA is required, or merely submission of an environmental management plan for medium impact projects. This step might be implemented with a formal application, or left to the project proponent to decide which category applies to them.

EsIA development required for projects with potentially significant impacts includes:

- **Scoping** defines the focus, scope, and level of detail for an assessment based upon a process to identify potential impacts, their significance, and what is needed to support decision making, project alternatives, and mitigation measures. Some countries and institutions issue guidelines for the scoping process and/or prepare or require a Terms of Reference to describe the required scope and content of the analysis for a specific project or project type. Implementation of scoping varies greatly in the level of formality as a step in the implementation process, and in roles and responsibilities for carrying out scoping activities. These differences include the degree of reliance on project proponents and their consultants and the degree of involvement of the public and other stakeholders including transparency, responsiveness, and access to comments.
- **Proposed project description and alternatives** describes the purpose and need for the proposed project, as well as its design and location, in as much detail as possible given the early stage of the process. Details might be altered because of the EsIA analysis. Decisions require choices, and in all cases, project impacts are assessed against a baseline projected without the project. However, the process itself seeks to identify a broader range of alternatives, particularly those that better avoid, mitigate, or compensate for adverse and/or enhance beneficial impacts identified by the project proponent and/or public and other stakeholders, while meeting a given purpose and need.

- **Assessment of potential impacts** from alternatives, including a no-build alternative.
 - Baseline setting: environmental, social, and economic conditions in the area of potential impact, projected into the future in the absence of the proposed project.
 - Projection of impacts of the proposed action and alternatives.
 - Proposals for mitigation and monitoring with hierarchy of measures to avoid, prevent, mitigate, and/or lastly compensate.
- **Public participation and stakeholder engagement throughout.**
- **Independent review.**
- **Decision making, decision with basis for decision and conditions for approval.**

The framework for environmental compliance and enforcement includes:

- **Clear requirements:** for compliance that are enforceable. Only requirements that are legally binding are subject to enforcement as the means of securing accountability.
- **Understanding the regulated community, establishing priorities:** this includes measures taken to identify who is regulated, the status of compliance, the impact of the cost of compliance, their level of technical capacity to comply as the basis for developing strategies for deploying resources, and targeting compliance monitoring and enforcement consequences.
- **Compliance promotion:** this can include information dissemination, technical assistance, incentives for compliance, and disincentives for non-compliance.
- **Compliance monitoring:** this can include self-monitoring and reporting, inspection, auditing by third parties, citizen monitoring, ambient environmental monitoring, aerial surveillance, and remote monitoring in mobile units.
- **Enforcement response to violations:** this includes implementation of relevant enforcement authorities used to compel compliance and impose appropriate consequences, policies for graduated responses, steps to ensure timeliness and appropriateness of consequences imposed, procedures, conflict resolution, and tracking of the history of non-compliance.
- **Clear roles and relationships:** this includes clarifying who is responsible for defining requirements so they are enforceable, who is responsible for monitoring compliance, for responding to violations, for managing public complaints, and for setting priorities.
- **Program evaluation and accountability:** this includes determining and reporting on what steps work to gain results, what is not working, where improvements are needed, and general accountability to the public and decision makers.

When the EsIA and compliance and enforcement frameworks are aligned, screening activities BEFORE the EsIA assessment and FOLLOWING the decision-making process take on more importance than in the traditional EsIA model. In the EsIA governance model, actions are undertaken to ensure that projects that should require a full EsIA process do so. Further, those projects that are below the threshold for a full EsIA process are still accountable for a project description and proposed mitigation measures that are the basis for that determination, with enforceable commitments that are actually enforced.

Following completion of the EsIA process, application of a compliance and enforcement framework ensures that site preparation and construction do not begin before the EsIA decision is made, and that commitments to significant mitigation measures, monitoring, and reporting requirements are complied with over the lifetime of the project.

During the EsIA process, there is an additional step to ensure that commitments to address significant impacts are incorporated into legally binding instruments with enforceable language.

The result of integrating the two frameworks introduces additional steps in the EsIA process to include screening in a broader regulatory process, to ensure commitments are legally binding, to either independently draft or revise commitment language to ensure enforceability, and to monitor and enforce compliance with commitments over time.

Figure 1 illustrates how the universally recognized elements in the EsIA process description are affected by integrating compliance and enforcement considerations in a new EsIA Governance Model.

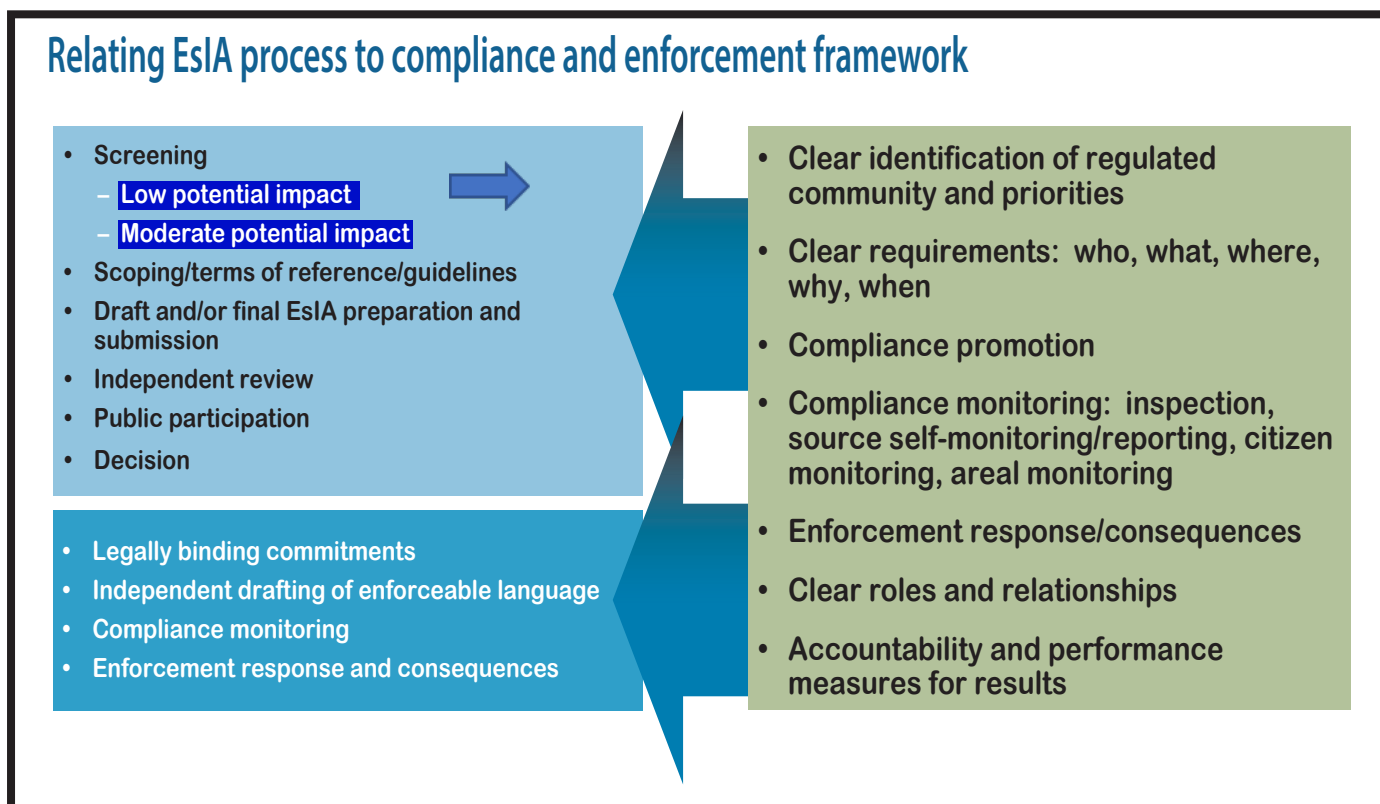


Figure 1. EsIA Governance Model

IV. The five principles

Five principles reflect the consensus of EsIA and compliance and enforcement professions to fill important gaps in the EsIA process necessary to achieve desired results. The five principles can be viewed as essential attributes of a successful EsIA program that should guide reforms and improvements to the EsIA process under consideration. The five principles are used in this document to structure descriptions of best practices in the following sections.

PRINCIPLE 1: Implement EsIA programs within a broad system of governance and regulatory framework, graduated for all levels of impact and future modifications. This will improve results and integrity throughout the project life cycle, through compliance promotion, compliance monitoring, and enforcement outcomes, and secure seamless engagement among institutions.

PRINCIPLE 2: Integrate significant commitments into legally binding instruments that follow the life cycle of the project; adopt these in successive phases, contracts, ownership and permits; and ensure they are independently drafted, or revised as necessary, to be enforceable by governments and institutions. Measures to avoid, mitigate, compensate, or enhance impacts must be drafted to be enforceable.[†]

PRINCIPLE 3: Ensure legal enforcement authorities and compliance strategies are effective for both the preventive and remedial aspects of EsIA, sufficient to deter violations, level the playing field, encourage a swift return to compliance, restore resources, and prevent further damage.

PRINCIPLE 4: Empower the public and other stakeholders to advance EsIA compliance through early and continuing engagement, a well-defined role in compliance monitoring, access to information, justice, and operational grievance mechanisms to seek remedies; and resolve compliance concerns.

PRINCIPLE 5: Modernize and invest in administrative and IT support to facilitate:

- a. Transparency and access to project-related documents, processing status, location-specific geospatial data, and tracking of commitments, compliance monitoring, and enforcement.
- b. Managing enforcement processes and citizen engagement and securing essential human, financial, information and technological resources for institutions responsible for EsIA and related permits.

[†] Measures to avoid, mitigate, compensate, or enhance impacts must be drafted to be enforceable: a. realistic and feasible (technically and financially); b. effectively monitored for compliance and enforced; c. clear as to WHO is responsible, for WHAT, by WHEN, HOW compliance will be determined and achieved, with clear quantifiable performance expectations to the extent possible and what the consequences are for a failure to comply, and WHY compliance is important in order to motivate compliance behavior; and d. adaptive to new legal requirements, modifications, or triggers.

V. Best practices for principle 1

A broad system of governance in a regulatory framework

PRINCIPLE 1: Implement environmental and social impact assessment (EsIA) programs within a broad system of governance and regulatory framework graduated for all levels of impact and future modifications. This will improve results and integrity throughout the project life cycle through compliance promotion, compliance monitoring and enforcement outcomes, and secure a more seamless engagement among institutions.

Challenges

The scope of any EsIA necessarily reaches the interests of a broad range of institutions with unique expertise, resources, and authorities at multiple levels that must be informed and engaged.

The scope also extends over the lifetime of the project. Institutions responsible for EsIA implementation rarely if ever have compliance monitoring and enforcement authority and responsibility over the project lifetime. Indeed, EsIA institutional responsibilities for compliance monitoring and enforcement sometimes ends when a project is built.

Nor do institutions responsible for EsIA possess resources to ensure an appropriate level of review for projects before site clearing and construction. EsIA programs have more than enough work to do with the projects before them, and they are not out in the field looking to find more projects that should have been subjected to the EsIA process. It is a challenge to identify, in a timely manner, site preparation and construction of projects that begin without permission, particularly for remote locations.

It also is very challenging to involve institutions responsible for overseeing implementation, compliance, and enforcement for specific measures committed to during the EsIA process early during the review process, and ensuring that these institutions formally accept this responsibility. In the absence of ownership of an issue raised during the EsIA process, there will be a lack of political will to act to follow up to ensure it is implemented. Institutions that are to engage at later stages to incorporate commitments into legally binding vehicles and secure compliance with commitments made during the EsIA process often are disinclined to devote resources to engage at an early stage during the EsIA process, when project detail might not be available and/or they may lack adequate resources committed to this task.

The part of the EsIA program that involves auditing, compliance monitoring, and enforcement may be part of the same unit responsible for EsIA, handled by a different unit(s), or not at all. This responsibility should be clearly assigned and accountable for results stemming from the EsIA pro-

cess. 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, EsIA commitments run the life of the project through to closure, and these commitments must be carried over into other vehicles. There needs to be provision for the smooth transfer of responsibility.

Best practices

- 1.1 **Establish national legislation, policy, and procedures** to inform institutional interactions and engage all levels of government and institutions with influence, responsibility, and authority to promote compliance with EsIA requirements. This includes institutions responsible for issuing permits and licenses to new—and modifications of existing—projects. Related tasks include creating legally binding commitments from the EsIA process, monitor compliance, and enforcing EsIA related requirements and commitments. Possibilities include the creation of:
 - 1.1.1 Interministerial bodies to liaise and complement the role of individual institutions, especially for capital projects.
 - 1.1.2 Multi-sectoral arrangements to define institutional roles.
 - 1.1.3 Law, framework legislation, the constitution, or other legal vehicles which define jurisdictions, to clarify responsibilities and avoid duplication or confusion as to what needs to be complied with.
 - 1.1.4 Public prosecutors with authority and responsibility for enforcement of EsIA requirements and commitments.
 - 1.1.5 A well-structured process to define the engagement process, resources, transparency, and accountability to create a single system which is responsive to the range of EsIA issues over time.
 - 1.1.6 Policies and procedures to ensure the independence of those carrying out and reviewing the EsIA assessments.
- 1.2 **Piggyback authority and controls of other relevant institutions** with compliance monitoring and enforcement capability to assume this responsibility, while centrally tracking results and performance for overall EsIA compliance.⁵ Identify and secure the involvement and commitment of resources of institutions with the requisite expertise, authority, and resources to draft avoidance/mitigation/compensation measures and performance requirements both as part of the EsIA process and within their own succeeding processes for issuing permits, licenses, etc.
- 1.3 **Put in place coordination mechanisms** to better align resources and priorities of institutions responsible for environmental review, permit writing and enforcement with those responsible for monitoring compliance through inspection, self-monitoring and reporting, monitoring, and management of complaints.⁶
- 1.4 **Create a smooth and efficient process for institutions at all levels of government** to “refer” instances of alleged non-compliance

to other authorities with 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 and information vacuums.

- 1.5 **Create institutions and mechanisms** for compliance monitoring and enforcement where none exist, to provide accountability and oversight, at least for significant issues.⁷
- 1.6 **Create a single application process for a continuum of environmental permits for all levels of review.**⁸
- 1.7 **Identify a single institution responsible for establishing government-wide protocols** for data, spatial content, and meta data on the source, timing, quality, and quality assurance of the data, and sharing information across government information systems and platforms. This best practice is the institutional counterpart of principles 4 and 5.

VI. Best practices for principle 2

Legally binding instruments and enforceable commitment language

PRINCIPLE 2: Integrate significant commitments into legally binding instruments that follow the life cycle of the project; adopt these in successive phases, contracts, ownership and permits;* ensure they are independently drafted or revised as necessary to be enforceable by governments and institutions. Measures to avoid, mitigate, compensate, or enhance impacts must be drafted to be enforceable:

- a. Realistic and feasible (technically and financially).
- b. Effectively monitored for compliance and enforced.
- c. Clear as to WHO is responsible, for WHAT, by WHEN, HOW compliance will be determined and achieved, with clear quantifiable performance expectations to the extent possible, WHAT consequences are for a failure to comply, WHY compliance is necessary.
- d. Adaptive to new legal requirements, modifications, or triggers.

Challenges

Every EsIA system results in some form of decision document, either approving or disapproving a proposed project. This can take many different forms, for example, a letter (i.e., that the EsIA and/or project has been approved), permit, license, or certificate. It often is unclear what the decision document requires or approves. A simple letter of approval might in some instances result in approval of the EsIA analysis, in other instances acceptability of impacts identified in the assessment (environmental feasibility), or approval of a project and/or approval of the environmental, social and/or economic measures proposed to avoid, mitigate, or compensate as the EsIA describes. Ultimately, the form(s)

that individual EsIA commitments take is important. Unless they are in vehicles that make them legally binding, it is difficult to secure compliance and intended results.

The actual drafting of commitment language within those legally binding documents is critical so that commitments are enforceable.⁹ EsIA programs are heavily reliant on the EsIA documents submitted by project proponents and their consultants, but they are not experts in the business of drafting enforceable requirements. The time and resources allocated to consultants are often too limited to allow for this level of specificity. Submitted EsIA documents might only offer potential measures, might not provide the specifics of actions proposed to address potential impacts, or not have specific mitigation plans available at the time the EsIA is submitted.

EsIA documents are typically so unwieldy or non-specific about commitments that they are not enforceable. Many countries and institutions require separate management, mitigation and/or monitoring plans, some with required formats in a matrix or tabular format that can be helpful but also poses similar challenges with important gaps that make compliance monitoring and enforcement difficult. Because these plans are separate from the description of the proposed project, they also might fail to include important elements of the project design that were developed specifically to avoid adverse impacts.

Countries that independently draft language in permit and other vehicles —especially for impacts that are significant to the decision on the project— are in a better position to secure enforceable commitment language. However, many countries only accept language if it is proposed or drafted by the project proponent or their consultants. These limitations reflect not only a lack of resources, procedures and/or expertise in agencies to independently draft commitment language, but also a concern about giving reviewers too much power to potentially suggest or impose additional “burdens” on potential investors. In the extreme, when this limitation extends to recommendations to revise and fix flawed commitment language to make it enforceable, it becomes even more difficult to monitor and enforce compliance.

Good drafting can make use of quantitative performance measures to the extent possible. The absence of quantitative measures can complicate consideration of modifications made during financing and construction phases. With quantitative performance measures, a project proponent can more easily demonstrate that a proposed modification to a project and/or its environmental measures still fall within the approved range of impacts that existing mitigation and projected outcomes and tolerances allow. Use of quantitative measures also facilitates adjustments that might be needed when new environmental regulations are approved, and must be incorporated after the approval of the EsIA if that is the only vehicle available for establishing enforceable commitments.

Best practices

Figure 2 summarizes best practices identified in IAIA and INECE conferences and webinars.¹⁰

- 2.1 For significant impacts, countries and institutions should either draft their own conditions for approval (i.e., in the decision document, in separate permit(s), licenses, or contract(s)), or be empowered to modify language proposed by the project proponent to the extent necessary to make it enforceable. EsIA procedures should create a distinct step in the EsIA process to do this.¹¹ It improves subsequent compliance if the project proponent agrees with the altered language and commitment.
- 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 or other legally binding vehicles if they are going to serve as the principal institutions for compliance monitoring and enforcement. Tracking administration across agencies is important to ensure accountability and compliance as there may be multiple institutions involved given the breadth of issues covered by the EsIA process.¹²
- 2.3 Introduce boiler plate language to ensure that commitments made during the EsIA process are incorporated into construction and engineering specifications and passed along to subsequent owners or operators of the project to support accountability and enforcement.¹³
- 2.4 Establish mechanisms to incorporate new environmental regulations, such as reviews of environmental licenses every certain number of years.
- 2.5 Enforceable measures should be:
 - a. Realistic and feasible (technically and financially).
 - b. Effectively monitored for compliance and enforced.
 - c. Clear as to WHO is responsible, for WHAT, by WHEN, and HOW compliance will be determined and achieved, with clear quantifiable performance expectations to the extent possible and WHY compliance is necessary.
 - d. Adaptive to new legal requirements, modifications, or triggers.

Drafting enforceable EsIA commitment language

1. Use mandatory language like “shall” or “must” and not “should” or “may.”
2. Include a requirement for projects 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.
3. Create a format that makes it easier for digitizing commitments for management of compliance monitoring, e.g., inspection, report receipt, transparency, and public accountability.
4. Require commitments to be:
 - Quantified to the extent possible both in terms of the expected results and actions.
 - Realistic, achievable, and measurable.
 - Inclusive of both a commitment to compliance and how it will be demonstrated.
 - 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.
 - 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.
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.
6. Utilize one or more of the following approaches to address the balance between flexibility and accountability:
 - Set forth performance requirements that must be achieved through proposed actions that will be defined at a later stage, i.e. adaptive management, but add specific timeframes and actions that will be triggered based upon results. Make EsIA “approval” conditional on demonstration and submission of specific plans for achieving required levels of performance at a later stage.
 - Align commitments with a responsible institution/entity empowered to monitoring compliance and pursue action forcing and consequences if commitments are not met.
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 special 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 EsIA assessment.
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, e.g., what it means to commit to “revegetate” or “reforest” a disturbed area.
9. Draw upon sector specific guidelines for well-defined and specific requirements that can form the basis for crafting enforceable requirements.
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.
11. To the extent possible, link conditions for approval to federal/national or local standards.

Figure 2. Best practices for drafting enforceable EsIA commitment language

VII. Best practices for principle 3

Relevant enforcement authorities and compliance strategies

PRINCIPLE 3: Ensure legal enforcement authorities and compliance strategies are effective for both the preventive and remedial aspects of EsIA, sufficient to deter violations, level the playing field, encourage a swift return to compliance, restore resources, and prevent further damage.

Challenges

EsIA programs face several challenges in realizing its benefits because of failures in enforcement. Most existing EsIA programs focus on the development and review of the EsIA assessment and its documentation and may or may not address the integrity and accountability during both pre- and post-decision aspects of EsIA programs.

Little attention is paid to projects that:

- Escape an appropriate level of review because they fail to self-identify, complete required applications, or provide incorrect or misleading information.
- Modify the proposed project to the extent that its projected impacts have become significantly more adverse and/or less beneficial.
- Fail to implement promised measures to avoid/mitigate/compensate for adverse or enhanced beneficial impacts.

The use of enforcement authorities is of course predicated on commitments being legally binding and drafted to be enforceable (Principle 2).

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. These authorities 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, and/or policies that are not yet adopted.

Finally, when a proposed new project provides needed investment economic considerations may influence decision making and/or lead to uneven and unfair enforcement and sanctions which are too low to force behavior change.

Best practices

- 3.1 **Expand the range of enforcement authorities** to better match the preventive nature of the EsIA process, i.e., introduce enforcement authorities to impose 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. It also is helpful to create both administrative and judicial enforcement authorities. See Figure 3.

Examples of authority to:

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.
2. Halt site preparation, construction, and/or operation for failure to comply with commitments made from the EsIA process.
3. Order a demolition or decommission and reclaim or restore the site.
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.
5. Impose monetary penalties and fines for non-compliance with requirements.
6. Order remediation and correct non-compliance.
7. Acquire and release performance bonds.
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.
9. Impose penalties for commencing work prior to required EsIA/other permits.
10. Require restitution for damage to habitat, sensitive ecosystems, endangered species.
11. Deny applicant future permits, government contracts, or probation for the owner/developer/construction company.
12. Impose higher monetary penalties for subsequent violations.

Figure 3. Enforcement authorities and consequences

- 3.2 **Create a range of consequences** that addresses different types of potential violations of EslA requirements.¹⁴
- 3.3 **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 to the situations (i.e., a phone hotline to denounce/inform environmental deviations).
- 3.4 **Use financial instruments to ensure compliance by contractors and sub-contractors.** These instruments include performance bonds, contracts with provisions to withhold payment, financial guarantees, and insurance. Note, however, market pressures may change the effectiveness of financial instruments over time as prices rise and fall and this should be considered by including adjustments related to inflation.¹⁵
- 3.5 **Develop transparent policies for imposition of enforcement consequences:** Enforcement needs 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. Policies and practices are needed to strengthen the will to enforce, to overcome 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 ensure enforcement bodies are at arm's length from political influence and that there is independent enforcement of decision making to provide credibility for these institutions.
- 3.6 **Introduce 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. Also, have in place systems for fees and fines for failure to meet commitments during operation or closure. This is especially important 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 also can provide appropriate financial incentives for project proponents to ensure compliance by contractors and sub-contractors. Clauses for contractors and sub-contractors to comply with EslA requirements could be included as a requirement to be included in contracts and addressed in other ways during the EslA process. For example, small and medium sized contractors and subcontractors frequently encounter problems to implement EslA commitments; thus mechanisms to promote capacity building for compliance and other means to strengthen compliance mechanisms should be included in the EslA process.¹⁶
- 3.7 **Prohibit site clearing or construction before completion of the EslA process.** Several authorities identified in Figure 3 are critical to prevent site clearing or construction before completion of the EslA process. Consequences should be aligned with the potential impact and severity of non-compliance. In particular, authority and resources to halt site preparation, construction, or operation through court order is important. Whether the authorities available and consequences provided are sufficient to deter future violations of this kind is a question. The costs include potential for project delay, or loss of financing and project viability if the project is halted or fines are imposed.
- 3.8 **Develop authority to independently determine the appropriate level of environmental review.**¹⁷ Many countries rely solely upon a project proponent to "self-categorize" for an appropriate level of review, based upon threshold criteria issued by the government or institution. Fourteen countries and international organizations in the Americas strongly recommended as a best practice that the process shift the ultimate responsibility for determining an appropriate level of environmental review to the independent review of the appropriate government or other institution, along with transparency and an opportunity for the public and other stakeholders to raise concerns. This is a critical means of assuring compliance with requirements that proposed projects not be segmented to avoid environmental review or permit obligations. This can be especially significant in efforts to protect sensitive ecosystems, such as wetlands and mangroves, especially when boundaries might be unclear, endangered or threatened species data may be uncertain, or Indigenous peoples' interests may be impacted.¹⁸
- 3.9 **Ensure project proponent accountability if an appropriate level of review is avoided or circumvented.** Requirements that may be violated at this stage include submission of false information or mis-categorizing a proposed project to avoid requirements for more rigorous EslA analysis, or the failure to apply at all.¹⁹ In addition, many countries have requirements that prohibit a project proponent from "segmenting" projects 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 EslA requirements.
- 3.10 **Develop and impose 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. This weakness can be exploited by developers of sites which are more attractive because they are near or even in protected areas. In such instances, it is diffi-

cult but possible to halt such activities, assess damages, and require restoration of the damaged areas. This is certainly insufficient if damage has in fact been caused that is irreversible. The economic benefit of being in and around protected areas can also work as a disincentive to comply and can be addressed by enforcement penalties that seek to recover this potential economic benefit.²⁰

- 3.11 Create and employ authorities and resources to **assure compliance through compliance monitoring and detection of violations.** See Figure 4.
- 3.12 **Support citizens' rights to pursue action in the courts.** Provide citizens with knowledge about EslA related requirements and procedures and relevant environmental requirements generally,

to garner assistance to identify and address potential compliance problems. This also can support their role in grievance mechanisms and communications with both the relevant authorities and with the project proponent.

- 3.13 **Utilize enforcement of domestic laws implementing international treaties.** 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, e.g., those addressing endangered or threatened species, rights of Indigenous peoples, and complex ecosystems. However, it also has been argued that some international agreements and treaties can be considered a customary international law norm and thus universally applicable.

Compliance monitoring mechanisms and authorities

Site Inspection: Violations are most likely detected through independent site inspection or audit prior to, during, or following site preparation, project construction, and/or operation/closure/care and maintenance with authority to carry out; based on need and circumstances more frequently depending on the stage of construction, operation, or decommissioning. Training for inspectors or third-party auditors is important. Resource allocations might preclude isolated site inspections.

Ambient monitoring of environmental quality and relevant parameters such as air, water, soil, flora, and fauna or use of target representative pollutants or species.

Facility owners self-monitoring and/or self auditing and reporting is important to augment inspections and audits. However, self-monitoring must also be guaranteed by fines or suspension of permits and licenses in the event of failure to report breaches or the falsification of reporting. On-line monitoring and reporting directly to responsible institutions is now available for real time compliance monitoring

Independent monitors and third party auditors that are able to report back to the government on the requirements being met by the proponent. Experience in India suggests that independent environmental audits were more effective (in identifying breaches) if the auditor was paid by the government or ministry and randomly selected.

Remote monitoring such as authority to use drones and aerial surveillance is especially important in remote areas and for remote sensitive ecological areas to identify construction activity that might not be permitted or illegal logging activities.

Develop “eyes and ears” on the ground and in the field to identify potential violators from a program requiring EslA, those failing to comply including making arrangements with and training local police, municipalities, the public (see principle 4), and Indigenous peoples to identify those individuals who might begin site work without a valid permit/environmental review. Support:

- **Provide readily available information online and on-site** to relate construction or site clearance activities to EslA approval status.
- **Require posting of permits** visibly at the site where construction is to take place.
- **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.
- **Create formal arrangements with other ministries and governments** issuing approvals and permits to require evidence of the environmental permit/EslA process completion prior to their approval

Whistle blower protections for workers and communities from reprisals if they are able to report breaches of environmental and social obligations.

Citizen monitoring/citizen science and citizen complaint processes (see principle 4).

Figure 4. Compliance monitoring mechanisms and authorities

The focus on compliance and enforcement would apply some of the same principles to these issues as they would apply to other concerns of the EsIA process; i.e., the crafting of commitments and conditions for approval, compliance monitoring and enforcement, diligence in providing accurate and truthful information, and engaging Indigenous peoples earlier in the EsIA process to include decisions on required level of review.

- 3.14 **Develop a judicial court system that can support and understand environmental compliance and liability issues.** Although there is no consensus as to what is best practice, some countries have created independent environmental courts and tribunals to build judicial capacity to hear these kinds of cases.²¹
- 3.15 **Establish a strategy for compliance monitoring and promoting compliance that differentiates** between the public sector, large companies and small and medium sized enterprises (SMEs), territories, and economic sectors among others.
- 3.16 **Enlist the support of lending institutions and other institutions with authority to approve new projects such as licensing and permitting programs** to ensure they reinforce EsIA requirements and understand and comply with their EsIA obligations.
- 3.17 **Protect workers and communities from reprisals** if they can report breaches of environmental and social obligations.²²

- Lack of transparency for projects with low or moderate impact and transparency of decisions on the level of environmental review required.
- Opportunities to engage are only late in the process, limiting the time to prepare comments and potential influence.
- 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 against which to compare proposed project, its location, and its setting.
- EsIA documents are too voluminous to share or too complex to understand.
- EsIA documents from which it is difficult to extract key assumptions and commitments.
- Unclear or uncertain boundaries for sensitive and critical environmental resources.
- Lack of means to protect sensitive environmental and/or cultural resources despite potential impact information.

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

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

VIII. Best practices for principle 4

Empower the public and other stakeholders

PRINCIPLE 4: Empower the public and other stakeholders to advance EsIA compliance through early and continuing engagement, a well-defined role in compliance monitoring, and access to information, justice, and operational grievance mechanisms to seek remedies, and resolve compliance concerns.

Challenges

The public and other stakeholders can and should play an important role in securing the integrity of the EsIA process, compliance with requirements, commitments, and related permits. However, many aspects of the EsIA process are invisible to the public and other stakeholders or lack opportunities for meaningful engagement. Opportunities to engage are often late in the process and limited only to when a 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 and realized, 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 public to enhance monitoring of compliance, enforcement of commitments, or provide compliance information at the early stages of the process. These challenges include:

Best practices

- 4.1 **Use the public complaint process** to identify potential non-compliance and violations related to EsIA requirements and commitments made through the EsIA process. Clarify procedures and institutional responsibilities for the unit responsible for receiving and responding to complaints and the unit responsible for compliance and enforcement of EsIA. Make the complaint process as easy as possible to understand and use.²³
- 4.2 **Formally engage citizens or communities in compliance monitoring:** For example, enable citizen participation through the creation of monitoring committees with clear procedures for reporting to and response by government authorities. In other situations, community committees have been formed for more general purposes to keep communities and stakeholders engaged, which is broader than the focus here on compliance and enforcement but likely to assist in that process as well.²⁴
- 4.3 **Provide resources, technical support, and funding** for citizens to carry out independent analysis and access expertise to overcome the lack of resources or expertise of the public and other stakeholders.²⁵
- 4.4 **Apply the five best public participation practices** widely recognized by professional organizations for participation in the

EslA process to enhance compliance monitoring, promotion and enforcement. Practices most relevant to compliance and enforcement of EslA are early involvement, involvement throughout, and responsiveness to concerns.²⁶

- 4.4.1 Early notification: Notify local community members of receipt of applications for construction approvals and likely timing of the process.
- 4.4.2 Public access: Provide access to submitted EslA documents as early as possible, ideally when submitted and simultaneously with the process of independent institutional review of the EslA. This might incentivize the project proponent to do a better job of preparing the EslA analysis at the outset and independent reviewers can benefit from the information gained through public scrutiny.
- 4.4.3 Tailored to the audience: Make special efforts to reach persons who might have an interest and stake in the outcome but who lack access to the internet or reliable mail service, including:
 - Develop contact information with potentially interested parties even before a project might be proposed, including preferred means of contact.
 - Create a system of text message alerts about document availability.
 - Write in simple language and with less technical and legal emphasis.
- 4.4.4 Provide the full range of documents through distribution or on request, e.g., applications, public participation plans and scoping documents, EslA executive summary and all supporting documents, government and public comments, decision documents, and related permits (draft and final with opportunity to comment).
- 4.4.5 Responsiveness to comments: It is not enough to provide the public and other stakeholders with access to information and opportunities to make comments. Best practice is to seriously consider these comments and recommended actions and to provide an explanation of the response to comments. There must be an attitude in which to the extent feasible from a technical and economic point of view, comments should be considered and addressed in earnest.

IX. Best practices for principle 5

Modernizing and investing in administrative and IT support

PRINCIPLE 5: Modernize and invest in administrative and IT support to facilitate transparency and access to project-related documents, processing status, location-specific geospatial data and tracking of commitments, compliance monitoring, and enforcement; manage enforcement processes and citizen engagement and secure essential human, financial, information, and technological resources for institutions responsible for EslA and related permits.

Challenges

The challenges to administrative and support systems for EslA are enormous, 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 project modifications.

Unless and until support and resources are available, these challenges will persist and undermine efforts to realize the beneficial outcomes from EslA processes:

- Management of voluminous, unwieldy EslA documents for:
 - Sharing across institutions and levels of government
 - Providing access
 - Tracking status
 - Tracking commitments
- Timely communications.
- Reaching the large 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 EslA.
- Missed opportunities to reform administrative procedures by making simultaneous versus sequential actions.

Best practices

- 5.1 **Provide budget and human resources for collaboration and cooperation** from key institutions with unique expertise and authority related to EslA for engaging in the process and compliance monitoring and enforcement.
- 5.2 **Digitize EslA documents** including mitigation plans and create a management system and an archive that is accessible to those that need to refer to EslA documents. Digital access to EslA documents including mitigation plans enables programs to share them across institutions and with the public and for purposes of compliance monitoring and enforcement and engagement of a wide range of institutions.
- 5.3 **Create a web-based tracking system** to provide status and track proposed projects through the environmental review system, including to:

- Access archives over a long period of elapsed time between when a project's EslA document or project itself is approved for construction and when construction, operation, and/or closure commences.
- Make every official document and related permit accessible, e.g., 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, or decision documents.
- Ensure that commitments in permits and conditions for approval of an EslA process are clear and accessible to the public, public institutions, and the project proponent.
- Ensure that for each commitment to action the responsible entities are identified and that they have the responsibility and resources to follow up.

5.4 Provide digital access for key data and information across institutions using web services:

- 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.

And, with mechanisms to protect sensitive information:

- 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.

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

5.6 **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. See Figure 5.

5.7 Forms and formats to make critical information easy to:

- Digitize.
- Share, access and sort.
- Identify when key pieces of information are still needed, to avoid delays.
- Complete online applications for screening purposes and permits.
- Autofill applications with information in the government's possession.

Web-based digital platforms and tracking systems capabilities

- **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 EslA and identify fraudulent and false information.

Figure 5. Web-based digital platforms and tracking systems capabilities

5.8 **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.
- Fostering networking within and outside organizations across institutions and expertise.
- Acquiring, budgeting, and dispensing 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.

5.9 **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. This can include:

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

5.10 **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.
 - NGOs focused on particular resources, flora, fauna etc.

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

5.11 **Advance online monitoring of environmental variables such as the quality of water, air, target species of fish or fowl, etc.**

X. Conclusion

Much progress needs to be made in coming years to shore up the environmental governance aspects of environmental and social impact assessment (EsIA). Implementing EsIA within a broader environmental governance and regulatory framework is critical to achieving the intended results of EsIA when actions concern compliance with EsIA requirements and commitments made as the basis for project decision making.

The five principles and best practices should help to guide further steps forward to realize the full benefits of EsIA, to avoid, mitigate, and/or compensate for potential adverse impacts and enhance beneficial impacts of project development. Without these steps to integrate compliance and enforcement into the EsIA process, we will continue to invest in a process that fails to deliver the outcomes we expect from EsIA. These outcomes are important to protect public health, secure resources for the future, enhance our resilience in the face of climate change, secure environmental justice, and develop in ways that will sustain us.

Investment and funding of these best practices will advance governance and implementation in ways that also offer opportunities for greater efficiency, ultimately saving time and resources for all parties.

We welcome ongoing discussion, additions to best practices, and exchange of lessons learned through the IAIA and INECE networks and encourage further contributions to this process directed to www.iaia.org and www.INECE.org.

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- Bobbi Schijf,* Netherlands Commission for Environmental Assessment
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The drafting group grew organically, starting with participants attending the inaugural meeting of the newly formed IAIA Governance and Implementation Systems Section at the 2018 IAIA conference in Durban, South Africa,* where there was a clear consensus that compliance and enforcement should be a first priority of the Section. An initial draft discussion paper did not gain momentum until presenters for the 24 June 2020 webinar** (co-sponsored by the IAIA Section and INECE, attended by over 500 participants globally) worked collaboratively on the written webinar report. Co-facilitators and reporters for small group discussions at workshops at the 2022 IAIA conference in Vancouver, Canada, and the 2023 IAIA conference in Kuching, Malaysia, rounded out the core group. *** Certainly inspiration also was drawn from early webinars featuring Bryony Walmsley and Jorge Castaneda and those organized by INECE.

The first complete draft of 25 March 2023 followed a series of Zoom sessions and review drafts. It took time to agree on how best to integrate the EsIA and compliance and enforcement frameworks. It was through a collaborative process that we structured best practices around core principles, refining them from an initial list of 10 down to the five in the final paper.

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References, resources, and examples

¹ **Recognition that compliance and enforcement are significant weaknesses in EsIA systems:**

Asia: "[Environmental Impact Assessment Regulations and Strategic Environmental Assessment Requirements: Practices and Lessons Learned in East and Southeast Asia](#)." Safeguard Dissemination Note No. 2, April 2006, The World Bank, East Asia and Pacific Region, Environmental and Social Development Department.

See also proceedings of a subsequent regional workshop on "[Environmental Impact Assessment: Good Practices and Capacity Needs](#)" (9-10 June 2010). A previously held workshop on Building Capacity for Effective Implementation of Environmental Impact Assessments in Asia: Rapid Assessment for Identifying Capacity Challenges and Programming Opportunities" in September 2009 was carried out by the Asian Compliance and Enforcement Network Secretariat and 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."

Americas: Memorandum to Ministers of Environment of 14 countries in Latin America: "[DR Forum on Best Practices for Environmental Impact Assessment and Related Permitting and Enforcement](#)."

USA: After 42 years of initiating and implementing EsIA requirements in the US, the Council on Environmental Quality issued guidance on mitigation and monitoring responsibilities of federal agencies promised in both findings of no significant impact and records of decision. See Council on Environmental Quality, "[Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact](#)." 21 January 2011.

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² **Frameworks:** See Wasserman, Cheryl E. (principal author) (1992b). [Principles of Environmental Enforcement proceedings of INECE conference](#). Budapest, Hungary. International Network for Environmental Compliance and Enforcement, Washington, D.C.

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[IAIA training courses](#)

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³ **IAIA-related initiatives on follow up and public participation:**

IAIA [FasTips](#) on follow up and effective stakeholder engagement.

Morrison-Saunders, A., J. Arts & U. Jha Thakur (forthcoming). Impact Assessment Follow-up entry for: T. Fischer, S. Bice, U. Jha Thakur, M. Montaña, B. Noble & F. Retief (eds.): *Impact Assessment Encyclopedia*. Edward Elgar, Cheltenham. (accepted for publication 11 July 2022).

Arts, J. & C. Faith-Ell (2012). "[New Governance Approaches For Sustainable Project Delivery](#)." Paper, 4th Transport Research Arena Conference (TRA, 23-26 April 2012 Athens), published in *Procedia - Social and Behavioral Sciences*, Vol.48, pp. 3239-3250. DOI: 10.1016/j.sbspro.2012.06.1290.

⁴ Information on financing EsIA programs can be found here: Netherlands Commission for Environmental Assessment, "[Funding Government Tasks in Environmental and Social Impact Assessment and Environmental Approval](#)." NCEA/ISBN 978-90-421-4099-8.

INECE (1996a). "[Financing environmental permit, compliance and enforcement programs](#)." United States Environmental Protection Agency Capacity support document (April). International Network for Environmental Compliance and Enforcement, Washington, D.C.

Principle 1: Governance Systems and Coordination

⁵ **Coordination among multiple institutions involved in EsIA and permitting:**

In Canada, for example, the Compliance Promotion and 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 proposed by proponents and included as conditions in their approval documents are effective and to verify that the predictions of the assessments are accurate. This includes working with the Impact Assessment Agency Enforcement Operations team 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. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/follow-programs-under-canadian-environmental-assessment-act.html>.

In the Netherlands, the EsIA procedure can be linked to different permitting decisions. Depending on the types of impact it can have, a project may need approval to effluent discharge, or to establish industrial installations, or for land use. The competent authority will determine to which permitting procedure the EsIA should be linked. This will be the so-called "mother procedure." Authorities also have the possibility to integrate the different approvals into one integrated permitting procedure. Either way, the permitting

References, resources, and examples

procedure determines when the EsIA process is initiated and when disclosure and public participation takes place. This flexible approach ensures that EsIA can serve a broader range of decisions, and that relevant information on impacts is available to both decision makers and affected stakeholders at an early stage.

In the United States, the National Environmental Policy Act (NEPA) law governing EsIA is considered to serve as an umbrella process feeding information and decision making to multiple federal agencies and their relevant decision and permit authorities. <https://ceq.doe.gov>

Arts, J. & C. Faith-Ell (2012). See note 3.

- 6 **Coordination Mechanisms:** For efforts to modernize NEPA implementation, see "[The NEPA Task Force Report to the Council on Environmental Quality: Modernizing NEPA Implementation](#)" September 2003 and "[Recommended Best Practices for Environmental Reviews and Authorizations for Infrastructure Projects](#)." Federal Permitting Improvement Steering Council (FPISC). 18 January 18 2017.

In New South Wales, Australia, a specific organization is responsible for compliance by state infrastructure projects with conditions for their approval. See <https://www.planning.nsw.gov.au/Assess-and-Regulate/About-compliance>, and for their specific activities in compliance and enforcement, see <https://www.planning.nsw.gov.au/Assess-and-Regulate/About-compliance/Inspections-and-enforcements>.

The Government of Chile goes even further and has created a single institution for monitoring compliance, inspection, and enforcement across all of government for environmental matters. See Superintendencia <https://portal.sma.gob.cl/index.php/ques-la-sma>.

The Office of Management and Budget (OMB) and Council on Environmental Quality (CEQ): "Guidance for Federal Agencies Regarding the Environmental Review and Authorization Process for Infrastructure Projects" (<https://www.permits.performance.gov>) addresses the relationship between permitting agencies and the environmental review process as well as general coordination among agencies of government. Title 41, Fixing America's Surface Transportation System Act of 2015 (FAST-41) 41, U.S.C. Sec. 4370m-1©(2)(8) Federal Permitting Improvement Steering Council (FPISC).

The US State of Alaska provides an example of a system to coordinate schedules and actions across multiple institutions responsible for issuing permits for new construction, which is mandatory for mining and optional for other projects to employ the services of a special unit which does the coordination, funded by a fee system. https://uaf.edu/cfos/files/research/Salmon_Society/Megan/1-Bruno-Permitting-Process---Salmon-and-Society-Presentation.pdf.

- 7 **Creating new institutional mechanisms where none exist:** See, e.g., the creation of a separate mechanism, an enforceable contract between the Los Angeles International Airport and surrounding community for job training and noise control called the Community Benefits Agreement (CBA) that was adopted as part of the EsIA

process given the cumulative adverse impacts on the community which shared none of the benefits from airport operations (<https://www.lawa.org/lawa-our-lax/settlement-agreements/cooperation-agreement>). The agreement was with the LAX Coalition for Environmental and Educational Justice, created for this purpose. <https://www.lawa.org/lawa-our-lax/community-benefits-agreement>.

- 8 **Creating a single application process for a continuum of environmental permits for all levels of review:** El Salvador's Ministry of Natural Resources and the Environment developed an online application form that applied to all new development at all levels of impact. The application supports categorization for an appropriate level of review with high impact development requiring an EsIA, medium impact development requiring submission of an environmental management plan, and low impact development obtaining an immediate permit. The system allows the Ministry to hold project proponents accountable for the information in the application including location specific environmental criteria to identify potential natural hazards; protect sensitive environments and endangered species; and manage wastewater, drinking water, waste, and erosion and sedimentation. The application form is auto-filled with environmental, socioeconomic, and infrastructure information accessible to the Ministry and other institutions, but the project proponent is responsible for correcting erroneous information. See Cheryl Wasserman and Salvador Nieto, "Next Generation EIA, Permitting and Enforcement in El Salvador," page 21 of [Special Report on Next Generation Compliance](#), published by INECE.

Principle 2: Legally binding Instruments with enforceable commitment language

- 9 **Enforceability and drafting commitment language:** See note 1. Also:

Fulton, S. and E. Gilberg (1992). "[Developing Enforceable Regulations and Permits](#)." Proceedings of INECE conference, Budapest, Hungary. International Network for Environmental Compliance and Enforcement, Washington, D.C.

Principles of Environmental Enforcement. See note 2.

See in particular 24 June 2021 [IAIA/INECE webinar on Compliance and Enforcement of EsIA](#) and IAIA/INECE webinar report "[Compliance and Enforcement of Environmental and Social Impact Assessment Requirements, Commitments and Related Permits](#)" (2020).

[The Guideline for Drafting Conditions for State Significant Projects](#) has now been published online to provide greater clarity and transparency to applicants, proponents, regulatory agencies and communities about how the Department prepares conditions for State significant projects.

- 10 **Independent Drafting for Enforceability:** The Dominican Republic independently drafts decision documents on projects requiring an EsIA to ensure enforceability. In the United States, federal agencies draft their own record of decision which includes the most significant conditions for approval of a project.

References, resources, and examples

¹¹ **Engaging institutions with permit authority in the EsIA process and incorporating conditions from EsIA:** See note 5, especially in regard to environmental review and permitting.

¹² **Incorporating commitments at all stages and through to contractors, and ownership changes:** See, e.g., Bergamini, K. & C. Pérez. 2022. "[Environmental impact assessment follow-up institutional and regulatory frameworks: lights and shadows of the Chilean experience.](#)" *Impact Assessment and Project Appraisal* 40:5, 423-436. DOI: 10.1080/14615517.2022.2102884. See "This stage ends with a decision by the political authority, in a resolution called RCA that corresponds to the environmental license, which details the conditions that a project must fulfil during the construction, operation, and closure."

See IAIA webinar by Bryony Walmsley, 1 March 2018, "[Lost in Time: The Black Hole between EsIA Completion and Project Implementation.](#)"

¹³ Council on Environmental Quality, "[Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact.](#)" 21 January 2011. "This guidance also outlines principles agencies should apply to provide for public participation and accountability in the development and implementation of mitigation and monitoring efforts that are described in their NEPA documentation. Mitigation commitments should be explicitly described as ongoing commitments and should specify measurable performance standards and adequate mechanisms for implementation, monitoring, and reporting....As explained in this guidance, an agency does not have to prepare an EIS when the environmental impacts of a proposed action can be mitigated to a level where the agency can make a FONSI determination, provided that the agency or a project applicant commits to carry out the mitigation, and establishes a mechanism for ensuring the mitigation is carried out. When a FONSI depends on successful mitigation, the requisite mitigation commitments should be made public." Also see https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Mitigation_and_Monitoring_Guidance_14Jan2011.pdf.

Principle 3: Enforcement authorities and compliance strategies to address potential EsIA violations

¹⁵ **Range of legal authorities and consequences:** See note 1. 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 and one which is understandably reluctantly undertaken.

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

See "[Incentive Framework to comply with regulations.](#)" Van de Schraaf, Angelique A.A. Paper for the OECD conference on Eco-

nomic Aspects of Environmental Compliance Assurance. Paris 2-3 December 2-3.

A further example is the work of the Department for Infrastructure (Northern Ireland) to create advice for consenting authorities and developers on undertaking a compliant EIA process where an unauthorized development applies for retrospective consent. The European Union's EIA Directive (2011/92/EU as amended by 2014/52/EU), upon which Northern Ireland's Regulations were originally based, has no provision for the retrospective application of EIA. As a result, the outcome of legal challenges has led to the courts (European and UK) defining a series of principles to be applied in practice when handling such complex cases. [Development Management Practice Note 9A: Unauthorised EIA Development](#) helps all parties identify and understand these principles, to help ensure retrospective EIA and consenting processes are compliantly delivered in Northern Ireland.

¹⁵ **Financial instruments:** 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.

¹⁶ **Small- and medium-sized contractors and subcontractors capacity building:** 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.

¹⁷ **Independent categorization:** 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. See note 1.

¹⁸ **Avoiding an appropriate level of review:** 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. See Cheryl Wasserman and Salvador Nieto, "Next Generation EIA, Permitting and Enforcement in El Salvador," in [Special Report on Next Generation Compliance](#), published by INECE.

In the US, a mitigation policy was formulated to prevent projects from escaping accountability when they proposed mitigation that would contribute to a finding that there was no significant impact requiring an EsIA analysis but no clear accountability or compliance and enforcement mechanism to ensure that the mitigation was implemented and successful. See note 13.

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

Regarding segmenting: Chile's Law N° 20.417 established that projects that segment to avoid the instrument to the EsIA are sanctioned, halted, and must submit the adequate instrument. In the US, NEPA implementing regulations prohibit segmentation of projects to avoid an appropriate level of review and also include

References, resources, and examples

connected actions in the project description. In Canada, project splitting is illegal under a court decision: Red Chris decision.

A combination of GIS coupled with automated applications can help both to validate the information submitted on an application in regard to the environmental setting and to identify the potential areas to be addressed. Automation can facilitate future access to the project description and its setting to ensure accountability.

¹⁹ **Environmental tribunals and the courts:** See United Nations Environment Programme *Environmental Courts and Tribunals – 2021: A Guide for Policy Makers*. 2002.

²⁰ **Whistleblower protections and rewards:** Another means of detecting violations is through employees of companies reporting wrongdoing or illegal activities. Those reporting on these activities are often in positions which jeopardize their employment or other forms of reprisal and protections are needed to support their actions, often the only means of detecting criminal activity.

Whistleblower protection provisions are written into six environmental statutes in the US: Clean Water Act (CWA); Clean Air Act (CAA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA); Solid Waste Disposal Act (SWDA); and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Employers subject to the provisions of the above statutes may not discriminate against any employee who engages in whistleblowing activities. Federal employees may be covered by these protections, but their complaints are filed with the Department of Labor's Occupational Safety and Health Administration (OSHA).

Further, with the coming into force in 2019 of the Impact Assessment Act in Canada, Section 141, there are provisions that protect individuals from recourse when a person makes a report relating to an offense or likely offense to an enforcement officer or the Impact Assessment Agency.

Principle 4: Empowering the public and other stakeholders

²¹ **Important role of public participation in compliance and enforcement:** Aarhus Convention. "[Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters](#)." United Nations Economic Commission for Europe.

Casey-Lefkowitz, S. et al. 1996. "[The Evolving Role of Citizens in Environmental Enforcement](#)." Proceedings of INECE conference, Chiang Mai, Thailand. INECE, Washington, D.C.

"[Citizen Enforcement: Tools for Effective Participation: Capacity Building Support Document for Environmental Compliance and Enforcement Programs](#)." Published by USEPA with INECE partners. EPA/315/B-98/010

Irwin, F. et al. 1992. "[From public disclosure to public accountability: What impact will it have on compliance?](#)" Proceedings of INECE conference, Budapest, Hungary. INECE, Washington DC.

Keogh, P. 1994. "[Changing environmental behavior in the United States through the use of public disclosure of information](#)." Proceedings of INECE conference, Oaxaca, Mexico. INECE, Washington, D.C.

Roberts, E. and J. Dobbins. "[The Role of the Citizen in Environmental Enforcement](#)." 2016. Environmental Law Institute. 1616 P Street. N.W.. Washington. DC 20036, USA.

Citizen engagement and public accountability: <https://www.worldbank.org/en/topic/citizen-engagement#3>

²² Public complaint and grievance mechanisms

See note 20 on whistleblower protection. See also innovations in Costa Rica for managing citizen complaints: <https://www.sitada.go.cr/denunciaspublico/> and https://www.contraloriaambiental.go.cr/doc/doc_1675347061.pdf.

Operational grievance mechanisms (OGM): All major projects are required to establish and maintain OGM in compliance with the UN [Guiding Principles on Business and Human Rights](#).

²³ **Resources for public participation:** Countries and institutions have provided resources including technical support and funding for independent analysis. See US Superfund program which funds support for citizen participation and independent technical assistance: <https://www.epa.gov/superfund/superfund-technical-assistance-communities>.

²⁴ **Community Committees for long term project engagement:** See use of Citizen Consultative Committees in Australia's New South Wales (<https://www.planning.nsw.gov.au/assess-and-regulate/development-assessment/community-consultative-committees>). Purposes are to ensure the community and stakeholders are engaged in projects after they have been approved for State significant projects to 1) keep them informed of the status of projects, any new initiatives, and the performance of proponents, 2) consult on the development of projects, management plans and proposed changes to approved projects and 3) provide feedback on key issues that may arise during the development or implementation of projects.

²⁵ Best practices and lessons on public participation

See International Association for Public Participation (IAP2), Public Participation Toolbox: <https://www.iap2.org/page/resources>.

See [EPA public participation guide](#).

References, resources, and examples

Principle 5: Modernizing and investing in administrative support and resources

²⁶ Next generation administrative and IT support systems

Wasserman, C., and S. Nieto. "Next Generation EIA, Permitting and Enforcement in El Salvador," [Special Report on Next Generation Compliance](#), published by INECE.

Chen Aizhong, Lui Li, Yang Ye, Lisa Li Shibe, Zhao Xiaohong, Ding Feng, "[Theory and practice of the EIA consultation information platform](#)." IAIA15 conference proceedings. 20-23 April 2015.

The US EPA's [NEPAssist application](#) is a web-based analytical tool that uses a nonproprietary software to facilitate the EIA review process and project planning as they relate to environmental considerations. NEPAssist accesses environmental data from the EPA's geographic information system databases and web-based services and provides immediate screening of environmental assessment indicators for geographic areas of interest, parameters, and assumptions defined by the user.

Other countries adapt and customize NEPAssist using their own names, interface, and data set.

GIS is an acronym for "geographic information system," a technology-driven system for capturing and analyzing spatial and geographical data.

ECHO. (n.d.) Enforcement and compliance data. [Enforcement and Compliance History Online](#). United States Environmental Protection Agency. Washington, D.C.

Galloway, Carol R. 1994. "[Information Systems to Support Compliance and Enforcement](#)." Proceedings of INECE conference, Oaxaca, Mexico. INECE, Washington, D.C.



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