SUCCESSFUL ESIA COMPLIANCE – DETAILING E&S MEASURES FROM BID TO COMPLETION

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Familiarizing Contractors and Consultants with the environmental legal and policy frameworks for the development partners has been used in several developing countries to drive environmental requirements. However in order that the Contractor can understand the environmental management requirements they must be simplified so they can see the need to manage the ESIA requirements throughout the project construction.
This session WILL draw on some of the themes and principles characterized by our colleagues but more specifically identifies some typical reasons that Contractors do not implement ESIA Requirements thoroughly and some actions that can be taken to make improvements.

Environmental principles and best practices are included in the legal requirements of Timor Leste. Experience over a number of years suggests that the policies of development partners can be woven into international Contracts with gradual success but it is important to recognize several limitations to implementation. It is a work in progress but as more Contracts are developed there has been a gradual increase in inclusion of the ESIA requirements and modest success has been achieved with accomplishment.

WHAT DRIVES SUCCESS ? – TELL CONTRACTORS & CONSULTANTS WHAT TO DO !
Timor-Leste is located between Indonesia, Papua New Guinea and Australia to the South. The land area is 14,900sq.km. There are 46 Protected Areas. More than 20 projects co-financed by development partners have been completed since 2014 with gradual improvements in the implementation of ESIA requirements by Contractors.

Instrumented monitoring was not possible in 2014 and there are no national environmental standards yet, therefore development partners standards are referred to and international best practice has been the target. Monitoring has had to focus on observational methods. There are no accredited commercially available laboratories that can perform instrumented monitoring. In the face of weak enforcement mechanisms we have focused on frequent, consistent monitoring and simplified reporting that is harmonized across numerous projects.

Since 2014 the Project Management Unit has conducted about 3500 site inspections, completed over 13,000 checklists and supervised presentation of about 700 monthly Environmental Monitoring Reports (mEMR). Semi Annual Environmental Monitoring Reports are presented to the development partners.
The road network has undergone significant improvement (Figure 2). However, frequent landslides and road closures caused by intense rainfall and geotechnical instability in mountainous areas continue to create significant challenges to both road improvements and road maintenance. By including ESIA requirements in the Contract and wherever possible in the BoQ significant progress has been made when combined with legal obligations and Loan covenants. Ensuring implementation of ESIA requirements has been a great challenge especially as several projects in different geographical areas were implemented simultaneously, and resources for monitoring and reporting were limited. Results over time have generally been encouraging.
Whereas Contractor is key to implementing the ESIA requirements, the Contractor capability to recognize and implement ESIA requirements is usually limited.

We also need to consider the capability of the Supervising Consultants. The Consultants must have experience and willingness to drive the Contractors to implement ESIA Requirements, identify where training is required and plan a way forward to complete the necessary monitoring and reporting as required by Government & development partner in the Contract. Proficiency with Contractor management is improving. We will describe when, why, where and how we have integrated the ESIA requirements in the Contracts. Some practical methods that we have found useful in improving the implementation of ESIA requirements and some recent experience with monitoring is described.
Trying to ensure capacity of contractors to deliver is not an easy process. TASK. The process from Tender, EOI, Pre-Qualification, Pre-Bid Meeting, Bidding, Bid Evaluation, Negotiation and Contract. But Tender and Pre-Bid Meeting are the two key stages for recognizing and costing ESIA.

Start as early as possible with both Contractors and Consultants. Explain in the Expression of Interest (EOI) and at Pre-Bid meeting that allowances (costing) must be made for all activities and that contractor must produce a site specific CEMP (Pre-Construction stage) that must describe these in detail.

Although the ESIA requirements are generally included in the legal requirements (e.g. through environmental licensing) of most countries - the ESIA requirements are not necessarily easy for the contractor to identify clearly or understand in terms of what they must do in practice. Therefore it is important to expose the Contractor to the ESIA requirements at the earliest stages so they allocate necessary funds in bids.

The expression of interest can be the first step. The bid documents should be prepared in a way that the contractor / consultant has a clear picture of what is required and how often certain tasks are and actions needed. Only if the documents state clearly tasks that must be performed and how often; then the contractor can make allowances in their bids. THE CONTRACTOR / CONSULTANT MUST BE LED TOWARDS THE ESIA REQUIREMENTS IN THE CONTRACT. Starting at the EOI and Pre-Bid meeting and drawing attention to the ESIA requirements is the first step. Strong efforts will be needed to try ensure the procurement agency is open to including the ESIA Req. in the bid. If there is a published ESIA refer to it in the Bid Documents.
There are several key REASONS.

REMEMBER THE CONTRACTOR WILL DO WHAT THEY ARE PAID TO DO.

Contractors may be limited by genuine lack of experience with environmental principles. Contractors may not see the need for ESIA requirements or may just not care.

The Construction team will almost surely not have been involved with the bidding process and even if ESIA Requirements are in the Bid Docs the implementing Contractor teams and Sub-contractors do not know these requirements exist.

Alternatively they do not see any problem with not complying as there is no reward if they comply and no penalty if they do not. This is very common where there is poor or lax enforcement or lack of regulations (e.g. developing countries).
Therefore it is critically important to include all the necessary mitigation measures and actions in the Tender.

This may be achieved by adding the Environmental Mitigation and Monitoring Plan (matrix) to the Tender.
By example EMMP for Spoil Disposal: The environmental mitigation measures are listed (Particular Specification) based on different activities and not by impacts. Therefore Contractors can relate their construction Activity to the Mitigation Measures needed and identify Monitoring needed to support and thus Adjust Resources and Commitment in the Bid. It is critical to explain this to the Contractor at the Pre-Bid meeting.

Link the Activity to Impact the Mitigation Measures and Responsibilities and Cost

Define Parameter(s) to be monitored, Verification Frequency and Monitoring Responsibilities

Contractors can then relate the Activity to the Mitigation Measures needed and identify the Monitoring activity needed to support and Adjust Resources and Commitment.
Add a dedicated Environmental and Social Performance Security in the Contract to draw the attention of the Contractor to the ESIA Requirements. Contractor may not see the need for ESIA Requirements therefore draw their attention using a dedicated Environmental and Social Performance Security.

Include an Environmental and Social Performance Security (as a deterrent) in the Contract.

Require full time Environmental and Safety Officer on the Contractor staff – point of contact for the Supervision Consultants Environmental and Safety Consultant.

Requirements for daily, weekly and monthly monitoring & reporting on Environmental and Safety issues across all activities.
The Contractor may be limited by genuine lack of experience with environmental principles', may not see the need for ESIA requirements or may just not care. It will be helpful to:

Simplify Contractor reporting by use of joint inspections and checklists. Include all CHECKLISTS in monthly Environmental Monitoring Reports.

Ensure Employer has access to all sites and installations for inspections at any time.

Require full time supervision by National EHS Consultant staff – day to day work site supervision, toolbox talks, check-lists with Contractor.

Require intermittent training and supervision by International EHS Consultant – 3 times per year – check quality of supervision and mitigation, prepare corrective actions, monitoring reports.

Require EHS training for Contractor, regular, checking environmental mitigation, progress with licenses, permits to work & community liaison.

EHS training for Contractor, checking environmental mitigation, progress with licenses, permits to work, liaison with community.
The Contractor may be blind to the environmental principles, may not see the need for ESIA requirements or may just not care.

The Construction team will almost surely not have been involved with the bidding process and even if ESI requirements are in the Bid Docs the implementing contractors and sub contractors do not know these requirements exist.

Contractor (including managers) must be trained in ESIA Require in Pre-Construction stages: Can be responsibility of the Supervising Consultant (guided by Employer). Harmonized training, Project by Project, will facilitate consistent interpretation of ESIA Requirements.

Contractor construction team must have a dedicated experienced environmental officer (EO) to conduct monitoring and be instructed in the Pre-Construction Phase. Include potential deductions / non-payment in Contract if EO key staff are not engaged or replaced quickly.
Repeated Training and Reinforcement is necessary: what we have called Saturation Monitoring with training taking place several times every month at all levels.

Monitoring of ESIA Requirements should be regular and frequent depending on construction activities.

Triggered by Request for Work (RFW) / Request for Inspection (RFI) that should include EHS – ESIA Requirements that apply.

Daily checks are made jointly by the Consultant and Contractor. The Employer makes on the spot checks as warranted with programmed inspections twice per quarter.
To make site inspections and reporting easier we developed a series of Environmental Monitoring Checklists (since 2015 – available on the IAIA24 App,) that provide consistency across all projects, and they are used to feed into the monthly environmental monitoring reports. The general checklist is completed on each monitoring occasion to identify the location and type of impacts that are not being controlled sufficiently well. Other checklists are designed to provide guidelines for specific construction activities bringing together all the required mitigation measures for a particular activity identified in the EMMP - MATRIX.
The checklists are completed on site during the joint inspections and are signed-off by the participating Consultant and Contractor officers.

This can assist in making timely and effective responses to implementation challenges. Checklists are presented monthly in the standalone monthly environmental monitoring reports (mEMR).

Checklists (Figure 7) are appended to the mEMR and instructions for the month are summarized in the mEMR to help improve implementation of ESIA requirements.

We have also prepared a glossary of Environmental terms in six languages to help overcome communication challenges.
Our Bills of Quantities have also been amended with SPECIFIC PAYMENTS for some of the ESIA Requirements in Tenders and Contracts.

i. Contractors (site specific) Environmental Management Plan (CEMP)

ii. Health & Safety Plan

iii. Traffic Management Plan.

iv. Gender Based Violence Prevention Plan & Awareness Training

v. STI / HIV-Aids / COVID-19 Prevention Programme Implementation

vi. Tree Cutting and Replacement

vii. Bioengineering for Slope Control
Specific payments (Figure 5) are now made for environmental and socially related tasks:

Consideration is being given to how to include:

a) First Aid training, Nurses Sick Bay, Accident Book
b) Dust Control - water spraying quantified
c) Waste Disposal
d) Employment and Skills Training Report (including women)
f) Monthly Environmental Monitoring Report / Site Diaries
g) Communicable Disease Control Planning & Management
h) Public Consultation meetings and Tara Bandu ceremonies
i) Timely receipt of Mineral Permit, Environmental Permits (within 3 months)
The way forward for us is to continue with saturation monitoring at the working level. As soon as the Contractor request for work to commence he must include the ESIA Requirements (EHS MM) in the request for Work (RFW) / Request for Inspection (RFI). Inspect and close out non-conformances.
Initially the tender and bid documents only covered the Environmental Requirements in Timor-Leste’s Specification and Special Provisions of Contract “to protect environment - general wording with some more detail added c2016.

FIDIC Red Book 2017 required compliance with ESIA and to limit environmental damage. Earlier this was another small step forward.
Later much more detail has been presented and more success with Env Req has been achieved. However we learned early on that to establish some level of progress has required sustained effort and much repeated training of Contractors and Consultants to implement, monitor and report accurately on the ESIA requirements.

The Employers Tender documents should have specific requirements for the Contractor to include in their Bid. As more detailed requirements have been presented in the Tender, we think more attention has been paid in the Bids and more success with implementing ESIA Requirements has been possible with much proactive attention to training and enforcement.
SUCCESSFUL ESIA COMPLIANCE
DETAILING E&S REQUIREMENTS FROM
BID TO COMPLETION
If you have been?
Thank you for listening.
From David Green and Andrew Taylor

Thank you from David W J Green and Andrew J Taylor
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.

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Supplementary Slides to Support Q & A (follows)
### Way Forward – Inform Environmental Requirements for Contractors

<table>
<thead>
<tr>
<th>Bid Stage</th>
<th>Environmental Management Plan (EMP)</th>
<th>Required in ADB/WB/JICA policies POM &amp; PAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCP (WB)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Tender and Pre-bid meeting draw bidders attention to full SEIS/EIS, EMP requirements, GoTL Legal Requirements, Donors' Safeguards Policies, and need for CEMP/ESIP updates & possible changes at the pre-Construction stage so can cost.
- Also include need for separate environmental licenses for ancillary facilities (Basecamp, Cement Batching plant, Asphalt Mixing Plant, Sand washing) and Mineral License with Environmental Clearance if contractor sets up own quarry.

<table>
<thead>
<tr>
<th>Draft EMP matrix in Tender (summary)</th>
<th>LICENSE for SSEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements for Consultants</td>
<td>ESCP for Consultants also</td>
</tr>
</tbody>
</table>

- RFPS and Pre-tender meeting must draw consultants attention to need to update SEIS/EIS, EMP requirements, GoTL Legal Requirements, Donors' Safeguards Policies, and need to assist and train Contractor's to accomplish CEMP/ESIP updates & possible changes at the pre-Construction stage.
- Arrange to mobilized IEC-NEC after Notice to Commence issued ASAP.
- Include separate Mineral License with Environmental Clearance if contractor sets up own quarry.

**SPMU to be allowed to view potential consultants Key Staff CVs at bid stage**

- Identify qualifications, experience & capacity; request upgrading of proposed staff at bid stage.

Before signing, consulting contract confirm consultants capability and capacity to efficiently assist Contractor with updates & possible changes at all stages as requested by ANLA or ADB/WB.
<table>
<thead>
<tr>
<th>English</th>
<th>Tetum</th>
<th>Indonesian (Bahasa)</th>
<th>Chinese</th>
<th>Tagalog (Filipino)</th>
<th>DEFINITION (World Bank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abatement</td>
<td>Haines/Hutan</td>
<td>Pengurangan</td>
<td>消除</td>
<td>Paghusaw</td>
<td>Reducing the degree or intensity of, or eliminating, pollution.</td>
</tr>
<tr>
<td>Accident site</td>
<td>Fatihi asidente</td>
<td>Lokasi</td>
<td>事故</td>
<td>Lugar</td>
<td>The location of an unexpected occurrence, failure, or loss, either of a plant or along a transportation route, resulting in a release of hazardous materials.</td>
</tr>
<tr>
<td>Air pollutant</td>
<td>Polusaun Anin</td>
<td>Polutan udara</td>
<td>空气污染物</td>
<td>Himpapawat karunan</td>
<td>Any substance in air that could, in high enough concentration, harm human beings, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of matter capable of being airborne in the form of solid particles, liquid droplets, gases, or combinations of these states. Generally, falling into two main groups: (a) those emitted directly from identifiable sources and (b) those produced in the air by interaction between two or more primary pollutants or by reaction with normal atmospheric constituents.</td>
</tr>
<tr>
<td>Air pollution</td>
<td>Polusaun ari</td>
<td>Polusi udara</td>
<td>空氣污染</td>
<td>Polusyon sa hangin</td>
<td>The presence of contaminant or pollutant substances in the air that do not disperse properly and interfere with human health or welfare or produce other harmful environmental effects.</td>
</tr>
<tr>
<td>Ambient air</td>
<td>Anin ambiente</td>
<td>Udara ambient</td>
<td>环境空气</td>
<td>Panumpalat tempanawd</td>
<td>Any unconfined portion of the atmosphere: open air, surrounding air.</td>
</tr>
<tr>
<td>Attenuation</td>
<td>Alemusaun</td>
<td>Redaman</td>
<td>衰减</td>
<td>Pagpapakambing</td>
<td>The process by which a compound is reduced in concentration over time, through adsorption, degradation, dilution, or transformation.</td>
</tr>
<tr>
<td>Biodegradable</td>
<td>Biodiversidade</td>
<td>Biodegradable</td>
<td>可生物降解</td>
<td>Biodegradable</td>
<td>The ability to break down or decompose rapidly under natural conditions and processes.</td>
</tr>
</tbody>
</table>