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TA 7566-REG: Strengthening and Use of Country Safeguard Systems

Subproject: Improving Legal and Regulatory Framework and Enforcement for Environmental Impact Assessment (Mongolia)

FINAL REPORT
Prepared by ADB Consultant Team

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Asian Development Bank

TA 7566-REG: Strengthening and Use of Country Safeguard Systems

MON: Improving Legal and Regulatory Framework for Environmental Impact Assessment Sub-Project

Final Report

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1. Introduction

This is the Final Report of the Improving Legal and Regulatory Framework for Environmental Impact Assessment Sub-Project of TA 7566-REG: Strengthening and Use of Country Safeguard Systems.

The Report consists of three additional sections and two Appendices. Section 2 outlines the original background and proposed outputs from the project. Section 3 presents the final outputs achieved, and Section 4 presents final conclusions and recommendations. The Appendices consist of the key activities originally proposed, along with the initial diagnostic review.

2. Original Background and Proposed Outputs

At the time that the Sub-Project was conceived¹, Mongolia had a Law on Environmental Impact Assessment (EIA) in place. This law was promulgated in 1998, and then amended in 2001 and 2009. Its purpose was to regulate environmental protection practices, to prevent ecological disturbance through unwise use of natural resources, and to assess environmental impacts and decision-making before project approval. At that time, four subsidiary regulations were in place to implement the Law on EIA. These regulations dealt with EIA implementation; EIA evaluation; formulation of environmental management plans and environmental monitoring programmes; and, EIA Committees.

Although the EIA Law was in place, there was a perceived gap between the law and its implementation. Existing regulations were thought to lack clarity, in particular with respect to procedures for implementing some of the key provisions of the EIA Law. These weak regulations resulted in an inefficient enforcement mechanism and poor environmental management practices. Projects were often considered to not comply with environmental management plans, and mitigation measures were not being taken by project implements to reduce adverse environmental impacts.

It was also recommended that strategic environmental assessments should be conducted to protect habitat and biodiversity at landscape and regional scales. The Government had experimented with the adoption of SEA, but expansion of the approach had been hampered by the lack of a guiding regulation, and by weak technical knowledge. It was agreed that a new regulation on public participation should be developed to regulate issues concerning public participation in EIA processes. In addition, even though an environmental restoration bond clause existed in the minerals law, public concerns about the environmental impacts of mining projects led the Government to recommend that a specific regulation covering environmental restoration bonds should be developed.

The Ministry of Nature, Environment and Tourism (MNET) requested ADB's assistance to revise regulations under the Law on EIA. The following outputs were expected from the Sub-Project:

- Output 1. Recommendations for Regulation on Strategic Environmental Assessment.
- Output 2. Recommendations for Regulation on Public Participation in EIA processes.
- Output 3. Recommendations for Regulation on Making a Deposit for Environmental Restoration.
- Output 4. Recommendations for Revised Regulation on EIA procedures.

Output 5. Recommendations for Revised Regulation on Formulating Environmental Management Plan.

The key activities expected under each of these outputs are presented in Appendix 1.

¹ The Sub-Project was approved in August 2011.

3. Final Outputs Achieved

3.1 Introduction

Work began in earnest on the Sub-Project in November 2011, after the recruitment of the Team Leader and three National Consultants, one of whom was designated as the National Project Coordinator/Environment Policy Specialist.

All of the outputs set for the project have been achieved². In fact, the project's influence has extended beyond what was originally envisaged. The five outputs presented in the Project Document focused on the development of "recommendations" for new and amended regulations. As of January 2014, the following regulations and guidelines have been approved by the Government, and all originated in the preparatory work undertaken by the Sub-Project:

- Draft of regulations on "Ensuring Public Participation in EIA", and "Monitoring the designated Accounts of Environmental Restoration Bonds" were approved by Minister's order Nr. A-3 and A-4 on January 6th, 2014.
- The Guideline for Conducting SEA and Cumulative Impact Assessment (Annex 1 of the order) and Guideline for Conducting EIA (Annex 2 of the order) were approved by Minister's order Nr. A-11 on January 10th, 2014.

Section 3.2 outlines milestones met and outputs produced during the course of the Sub-Project. Significant outputs are listed and attached as Appendices. Section 3.3 consists of a brief analysis of the Sub-Project as a whole.

3.2 Sub-Project Outputs

The Sub-Project produced a number of outputs, as required by the Project Document, and outlined in Section 2. The first produced output, produced on January 31, 2012 was an extensive Diagnostic Review. This is attached as Appendix 2. It provided a basis for the construction of the regulations and guidelines.

The following regulations and guidelines were produced during the sub-project:

- Guideline for Conducting EIA (Annex 2 of Minister's Order Nr. A-11: January 10th, 2014);
- Regulation on EIA (Government Resolution No.374: November 16, 2013);
- Regulation on Strategic and Cumulative EIA (Government Resolution No.374: November 16, 2013);
- Regulation on Environmental Management Plan Preparation, Verification and Reporting (MEGD's order No. A-5: January 6, 2014);
- Guideline for Conducting SEA and Cumulative Impact Assessment (Annex 1 of Minister's Order Nr. A-11: January 10th, 2014);

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² It should be noted that Output 5 was folded into Output 4 at the request of MNET. It was agreed that there was no need for a separate regulation on Environmental Management Plans, and that the issue could be most effectively and efficiently dealt with by incorporating into the Environmental Procedures regulation.

- Regulation on Ensuring Public Participation in EIA (Minister's Order Nr. A-3: January 6th, 2014); and,
- Regulation on Monitoring the Designated Accounts of Environmental Restoration Bonds (Minister's Order Nr. A-4: January 6th, 2014).

These products meet all of the requirements of the sub-project. At the time of writing, none of the regulations/guidelines had been translated into English. Translation was not part of the sub-project tasks, but should be considered in any follow-on project.

Other outputs/initiatives undertaken as part of the sub-project include:

- A joint workshop on Strategic Environmental and Social Assessment (SESA) of the Mining Sector and Environmental Impact Assessment Regulations under the new Law on Environmental Impact Assessment, was organized by the Sub-Project and the World Bank. It was held on October 10th -12th, 2012. The objectives of the workshop were to build capacity of key stakeholders on the use of environmental and social assessment processes and methods to inform high-level policy and planning processes; consult stakeholders on the design of a strategic environmental and social assessment (SESA) of Mongolia's mining sector policy; and obtain stakeholder inputs into the draft regulations on environmental impact assessment.
- An outcome of the stakeholder workshop held on October 10th -12th was an agreement to form a small Working Group that would incorporate comments from the workshop, and so redraft the three regulations. The Working Group consisted of eight key people from MNET, NGOs and the private sector. It met on two days (November 22nd 23rd, 2012), and submitted a final draft of all three regulations to MNET on December 5th, 2012. The Ministry then agreed to circulate the drafts among other Ministries for further comments.
- ADB signed a separate contract with WWF Mongolia to update the existing Guideline for Conducting EIA on July 8th, 2013. The contract was subsequently extended until December 20th, 2013. The purpose of this contract was to complete the hierarchy of "law ... regulation ... guideline". In other words, the Guideline provided step-by-step guidance for proponents on what should be included in EIA studies. The final version of the Guideline was delivered to the Ministry of Environment and Green Development (MNEGD) on November 5, 2013. It should be noted that this contract with WWF was not part of the initial TA7566-REG Sub-Project. It should also be noted that the work undertaken during this WWF contract was requested by MNEGD, and replaced an earlier component of the original Sub-Project, which focused on an assessment of institutional capacity development under each output.
- The draft regulations on SEA, cumulative impact assessment, and the Guideline for Conducting EIA were discussed by the Cabinet during its session on November 16th, 2013 and draft of regulations approved. The MNEGD was authorized to approve the draft guidelines by an Order by the Minister of MNEGD.
- Draft of regulations on "Ensuring Public Participation in EIA", and "Monitoring the designated Accounts of Environmental Restoration Bonds" were submitted for approval in December 2013 and received a Minister's Order in January 2014.
- The Guideline for Conducting SEA and Cumulative Impact Assessment and Guideline for Conducting EIA were submitted for approval in December 2013 and received a Minister's Order in January 2014.

4. Conclusions and Recommendations

4.1 Analysis of Project Outputs

As indicated in Section 3.2, the sub-project resulted in the development and approval of two guidelines and five regulations. These outputs were a considerable step beyond the "recommendations" that were envisaged in the initial Project Document.

While all of the projected outputs were achieved, the Sub-Project nonetheless faced some difficult challenges. First, at the time of the approval of the Sub-Project, the Government of Mongolia indicated that it would be promulgating an entirely new Law on EIA in 2011. This had not occurred when the project started in November and, in fact, the new law was not passed by Parliament until May 17th, 2012. To a considerable extent, this slowed the progress of the project, as MNET found it difficult to engage with regulation writing before the law had been passed, and during a time of political uncertainty prior to an election in early 2012.

Second, the National Project Coordinator/Environment Policy Specialist, who was originally responsible for the production of an important regulation (EIA Procedures) was unable to complete the task. This slowed the Sub-Project down somewhat, and required that the Team Leader take on this task.

Finally, the lack of a strong counterpart in the Government meant that the Sub-Project consulting team, and ADB staff, were often uncertain of the "state of play" with regard to the progress of the regulations. On the other hand, MNEGD eventually took ownership of the regulation-writing process, and the final result indicates the level of their engagement. As a result of MNEGD's request, the minor change of scope mentioned in Section 2.2 required an extension of the project's duration.

4.2 Continued Weaknesses and Recommendations

With the enactment of the new Law on EIA in 2012, and the approval of the two guidelines and five regulations that were a direct result of the ADB TA, Mongolia now has a strong regulatory basis for environmental protection. However, as is the case in many other developing countries, the capacity to implement regulations is constrained by lack of human resources, and the difficulties associated with servicing very remote aimags.

Combined outcomes from consultations undertaken during the sub-project, and recent reviews of the environmental governance system indicate that there are a number of issues associated with the regulation of environmental and social issues that could impede sustainable development into the long term. These issues include: roles and responsibilities of different levels of government; MEGD's role in enforcement; the positioning of environmental inspectors; a lack of codes of practice; uncertainty over responsibility for social impacts; and, lack of an environmental information database.

As is the case in most countries, environmental management is spread across different levels of government. Stakeholders indicate, however, that responsibilities across soums, aimags, and at the national level are unclear and that there is a need to make these arrangements transparent.

A similar concern exists with regard to the role of the MEGD in enforcement. While it is clear that this Ministry can legitimately issue rules relating to environmental management, it has no independent means of ensuring that rules are being followed. For example, the EIA process requires that proponents develop environmental management plans. These will invariably

include certain performance commitments associated with issues such as waste management, pollution control, and rehabilitation. The MEGD, however, does not have staff to follow up on these commitments. Instead, it relies on a combination of the Generalized Agency for Specialized Inspections (GASI), soums, and aimags to provide environmental reports. Given that GASI has relatively few staff, and that aimag and soum staff may not be technically trained or qualified, this would appear to be a significant "gap".

An extension of this issue relates to the positioning of environmental inspectors. At present, GASI is the obvious focal point for professional inspection. However, over the last few years there has been recurrent discussion about moving the responsibility for inspection to sector-specific agencies, such as the Mineral Resources Authority of Mongolia (MRAM) for mining issues. Should that transfer take place, there would be potential for duplication between the efforts of MRAM inspectors and the GASI efforts of the MEGD.

Another issue that leads to some confusion about regulatory responsibilities is the lack of "codes of practice" for health, safety and environment. In addition, there do not appear to be any common criteria that could guide inspectors in how to undertake their work. The absence of codes of practice and cross-agency work guidelines inhibits recording, investigation and prosecution. There is no method to ensure that inspection teams are properly trained or have common operating methods and principles. Similarly, line Ministries and MEGD have expertise in how environmental issues should be dealt with, but there is no apparent feedback mechanism that would alert these Ministries to enforcement violations.

Finally, there is a need for a common environmental and social information database upon which to base regulatory decisions and activities. Currently, there is a fragmentary mixture of manual systems, some updated regularly and others intermittently. Unless all regulatory agencies have access to a continuously updated database of all regulatory, production and revenue information, the regulatory system will not achieve the necessary results.

This analysis of project outputs and continued weaknesses leads to the following recommendations for follow-up beyond the sub-project:

<u>Recommendation 1</u>: Both guidelines, and the five regulations produced under the sub-project should be translated into English as soon as possible.

Recommendation 2: The assessment of institutional capacity development needs for the implementation of the regulations was not undertaken in the sub-project, on request from the MEGD. Capacity problems are a fundamental reason why implementation and enforcement continues to be weak. A capacity development needs assessment should be undertaken in the near future.

Recommendation 3: Roles and responsibilities of different levels of government are unclear and that there is a need to make these arrangements transparent. This could be achieved through brief study, and then through the development of a Ministerial Order.

Recommendation 4: The MEGD and GASI roles in enforcement need to be clarified.

<u>Recommendation 5:</u> Health, safety, and environmental Codes of Practice need to be developed to guide the work of inspectors.

<u>Recommendation 6</u>: An environmental and social information database should be designed and implemented.

These six recommendations could be combined into a new ADB TA that would extend the outcomes achieved in the TA-7566 sub-project.

Appendix 1: Key Activities as Proposed in the Project Document

Output 1 - Recommendations for Regulation on Strategic Environmental Assessment

- (i) A review of the relevant provision in the new EIA Law to arrive at a common understanding of the meaning and intent of the provision relevant to SEA.
- (ii) A review of other relevant existing environmental legislation and regulations, and the results of previous donor assistance (e.g. UNDP, WB, and Netherlands) and NGO studies on strategic environmental assessment;
- (iii) Study of international experiences in implementing strategic environmental assessment to identify key constraints and the enabling environment for its effective implementation;
- (iv) Preparation of recommendations for the draft Regulation on Strategic Environmental Assessment;
- (v) A comparative analysis of the draft regulation and international best practices, and recommended changes to ensure consistency with the new EIA law while taking into account applicable international best practices;
- (vi) Multi-stakeholder consultations and workshops to discuss the implications of the new regulation and identify potential issues;
- (vii) Assessment of the institutional capacity development needs for the implementation of the regulation; and,
- (viii) Finalization of recommendations for the draft Regulation on SEA, incorporating stakeholders' comments and recommendations.

Output 2 - Recommendations for Regulation on Public Participation in EIA processes

- i. A review of the relevant provision in the new EIA Law to arrive at a common understanding of the meaning and intent of the provision relevant to public participation.
- ii. A review of other relevant existing environmental legislation and regulations, and the results of previous donor assistance (e.g. UNDP, WB, and Netherlands) and NGO studies on public participation in EIA processes;
- iii. Study of international experiences in implementing Public Participation in EIA processes to identify the constraints and the enabling environment for its effective implementation;
- iv. Preparation of recommendations for the draft Regulation on Public Participation in EIA processes;
- v. A comparative analysis of the draft regulation and international best practices, and recommended changes to ensure consistency with the new EIA law while taking into account applicable international best practices;
- vi. Multi-stakeholder consultations and workshops to discuss the implications of new regulations and identify potential issues;
- vii. Assessment of the institutional capacity development needs for the implementation

- of the regulation; and,
- (ix) Finalization of recommendations for the draft Public Participation in EIA processes, incorporating stakeholders' comments and recommendations.

Output 3 - Recommendations for Regulation on Making a Deposit for Environmental Restoration

- i. A review of the relevant provision in the new EIA Law to arrive at a common understanding of the meaning and intent of the provision relevant to making a deposit for environmental restoration.
- ii. A review of other relevant existing environmental legislation and regulations, and international experiences on making a deposit of funds to pay for environmental restoration; to identify the constraints and the enabling environment for its effective implementation;
- iii. Preparation of recommendations for the draft Regulation on Making a Deposit for Environmental Restoration;
- iv. A comparative analysis of the draft regulation and international best practices, and recommended changes to ensure consistency with the new EIA law while taking into account applicable international best practices;
- v. Multi-stakeholder consultations and workshops to discuss the implications of new regulations and identify potential issues;
- vi. Assessment of the institutional capacity development needs for the implementation of the regulation; and,
- vii. Finalization of recommendations for the draft Regulation on Making a Deposit for Environmental Restoration, incorporating stakeholders' comments and recommendations.

Output 4 - Recommendations for Revised Regulation on EIA procedures

- i. A review of the relevant provision in the new EIA Law to arrive at a common understanding of the meaning and intent of the provision relevant to the regulation on EIA procedures.
- ii. A review of the strengths and weaknesses of relevant existing environmental laws and regulations, in particular, environmental protection and environmental impact assessment;
- iii. A review of international experiences on EIA procedural requirements, monitoring of implementation, EIA evaluation, and committee for EIA evaluation;
- iv. Preparation of recommendations for the draft Regulation on EIA procedures;
- v. A comparative analysis of the draft regulation and international best practices, and recommended changes to ensure consistency with the new EIA law while taking into account applicable international best practices;
- vi. Multi-stakeholder consultations and workshops to discuss the implications of new regulations and identify potential issues;
- vii. Assessment of the institutional capacity development needs for the implementation of the regulation; and,
- viii. Finalization of recommendations for the draft Regulation on EIA procedures, incorporating stakeholders' comments and recommendations.

Output 5 - Recommendations for Revised Regulation on Formulating Environmental Management Plan

- i. A review of the relevant provision in the new EIA Law to, among others, arrive at a common understanding of the meaning and intent of the provision relevant to the formulation of an EMP;
- ii. A review of other relevant existing environmental legislation and regulations, and international experiences on formulating environmental management plan and environmental monitoring programs
- iii. Preparation of recommendations for the draft Regulation on Formulating Environmental Management Plan;
- iv. A comparative analysis of the draft regulation and international best practices, and recommended changes to ensure consistency with the new EIA law while taking into account applicable international best practices;
- v. Multi-stakeholder consultations and workshops to discuss the implications of new regulations and identify potential issues;
- vi. Assessment of the institutional capacity development needs for the implementation of the regulation; and,
- vii. Finalization of recommendations for the draft Regulation on Formulating Environmental Management Plan, incorporating stakeholders' comments and recommendations.

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1 Introduction

As of the end of January 2012, a new EIA Law has been submitted to the State Great Hural (SGH) of Mongolia, after approval by Cabinet on 26 December 2011. The new law will require the development of regulations to enable its effective implementation. The Ministry of Nature, Environment and Tourism (MNET) has indicated that the new regulations would cover the following issues:

- * EIA procedures, including environmental management planning;
- * strategic environmental assessment (SEA);
- * public participation in EIA processes; and,
- * environmental restoration bonds.

Consultant Terms of Reference, and an agreed workplan dated November 12, 2011, require the production of a Diagnostic Work report as an initial output for this Country Safeguard Systems (CSS) sub-project in Mongolia. The ToRs described the diagnostic work requirements as:

"a comparative analysis of the draft regulations and international best practices, and recommended changes to ensure consistency with the new EIA law, while taking into account international best practices".

Given that no draft regulations existed at the initiation of the ADB project, the consulting team has used the diagnostic work process to better understand the draft EIA Law and the Mongolian regulatory framework in general, and to investigate current international best practice. The main objective of the diagnostic work has therefore been to provide a strong background to enable design of the most up-to-date and locally-appropriate set of supporting regulations.

To meet the requirements of the diagnostic task section of the workplan, each consulting team member has produced an individual report, relevant to his or her specific area of regulatory responsibility. It was agree that each consultant's report would be produced according to the following format:

- * Introduction:
- * Summary of the relevant provision in the new EIA Law;
- * The relevant provision in other Mongolian legislation and regulation;
- * Previous donor assistance and other relevant studies:
- * International experience: Practices and lessons learned; and,
- * Implications for the development of the Mongolian regulations.

What follows here is a synthesis of all four consultant's reports. Readers interested in a summary of this synthesis report should scan Section 6 ("implication for the development of the Mongolian regulations").

2 Summary of the Relevant Provisions in the new EIA Law

2.1 Summary of EIA Procedure Provisions in the Draft EIA Law

2.1.1 The Structure of the Draft EIA Law

The "General direction of legal reform until 2012", approved by Resolution No. 38 of the State Great Hural and the Action Plan of the Government of Mongolia, both require reform of the existing Law on EIA to improve EIA procedures, to legalize strategic environmental assessment (SEA) and cumulative impact assessment (CIA), and to ensure transparency and public consultation, as well as to clarify the rights and responsibilities of stakeholders.

Despite the extent of existing environmental legislation and regulations for EIA and environmental protection, procedures and capacity for implementation and enforcement remains weak. Furthermore, there is limited appreciation of the need to mainstream environmental impact assessment considerations into other areas of policy development and implementation. In order to improve current weak enforcement mechanisms and poor environmental management practices, the new draft EIA Law broadens the scope of assessment, and includes procedural provisions related to every stage of the assessment process including: development, implementation, appraisal, and review. Specifically, Article 4 provides that "Assessments of environmental impact shall include the following:

- 4.1.1 Strategic environmental assessment;
- 4.1.2 Environmental baseline assessment;
- 4.1.3 Environmental impact assessment; and,
- 4.1.4 Cumulative impact assessment."

With the exception of Article 5 (which deals with SEA), and Article 6.2 (which deals with cumulative impact assessment), the remainder of the draft EIA Law deals with EIA procedure and Environmental Management Plan (EMP) procedure.

The draft EIA Law differentiates between the development of the "methodological guidelines for EIA" and "procedural regulation". For example, Article 7.7 states that "... The state central administrative body in charge of nature and the environment shall approve the regulation and methodological guidelines for the conduct of environmental impact assessments."

In fact, a set of "Methodological Guidelines for EIA" were approved by Order of the Minister of Nature, Environment, and Tourism on 4 January 2010. They provide significant detail on methods and tools for EIA, SEA, and CIA. An unusual situation therefore exists where detailed methodological guidelines have been produced prior to an enabling law and an implementing regulation. We assume that these methodological

³ See Article 80 of "General direction of the legal reform of Mongolia until 2012" approved by Resolution No. 38 of the State Great Hural, 2009

⁴ See Article 3.13.2 of the Action Plan of the Government Mongolia, 2008-2012.

guidelines will remain after the promulgation of the new EIA Law and the new regulations, although they may need minor revision and updating as methods and approaches improve.

The draft EIA Law consists of the following Articles that relate directly to EIA procedure:

- Article 6: Environmental Baseline Assessment
- * Article 7: General EIA
- * Article 8: Detailed EIA (DEIA)
- * Article 9: Environmental Management Plan
- * Article 10: Appraisal of DEIA
- * Article 11: Review Process
- * Article 12: Licensing for Conducting DEIA
- * Articles 13 to 16: Rights and Obligations of Project Implements, and Entities Licensed to Perform DEIA
- * Article 17: Public Participation in the Process of EIA
- * Article 18: Liabilities for Breach of the Legislation
- * Article 19: Compensation for Damages
- * Annex: Classification of Projects Subject to General EIA.

2.1.2 Similarities and Differences Between the Existing EIA Law and the Draft EIA Law

In general, the draft EIA Law significantly extends the reach of the existing law, which was promulgated in 1998 and amended in 2001 and 2006.

The existing law focuses predominantly on regulation General EIA (GEIA) and Detailed (EIA). While the draft law still deals extensively with these two forms of EIA, it also provides for SEA, CIA, and "environmental baseline assessment".

The draft law provides a skeleton framework for SEA and CIA, which will require substantial expansion in the proposed regulation, to make procedures for both concepts clear to all stakeholders.

Other differences include more detail on the powers and responsibilities of the proposed "Technical Board", which is intended to play a significant role in overseeing EIA, SEA and CIA, and which replaces the "EIA Commission" which is only briefly outlined in the existing law. In addition, new Articles are added on public participation, on environmental restoration bonds, and extended sections are presented on EIA appraisal, review, and licensing of "professional entities" that will undertake EIA studies on behalf of project implementers.

The laws are similar with respect to the outlines of what should be contained in DEIAs; how environmental management planning should be undertaken (termed "environmental protection planning" and "environmental monitoring program" in the existing law); and the rights and duties of different participants in the EIA process.

2.1.3 Implementing Regulations Associated with the Existing EIA Law

Over the years since the initial promulgation of the existing EIA Law in 1998, a number of regulations have been written to clarify the law, and to present procedures that were meant to help proponents and other stakeholders understand how the law should be interpreted. These regulations are worth outlining, as some or all of their content may be subsumed within the new regulations.

"Guidelines on formulating EPPs and EMPs"

These guidelines are formally referenced as Attachment No. 1, to the Minister of Nature, Environment, and Tourism Order No. 87, 2000.

They present guidance to assist project implements in understanding the requirements of Article 6 ("Environmental Protection Plan and Environmental Monitoring Programme") of the existing EIA law. These guidelines will be drawn on in the development of the new EIA Procedures regulation. It is recommended that they be repealed once the new EIA Procedures regulation comes into force.

"Regulation on the EIA Committee"

This regulation is formally referenced as Attachment No. 1, to the Minister of Nature, Environment, and Tourism Order No. 119, 27 April 2006.

No definition or detail is provided in the existing law on the powers and responsibilities of "the Commission", although the term is mentioned in Article 9.3 and Article 9.4. The regulation provides detail on the Commission's powers and responsibilities. This regulation may be drawn on in the development of the new EIA Procedures regulation, with respect to the proposed "Technical Board". It is recommended that this regulation be repealed once the new EIA Procedures regulation comes into force.

"Methodological Guidelines on EIA"

These guidelines are formally referenced as an Attachment to the Minister of Nature, Environment and Tourism, Order No. A2, 4 January 2010.

These guidelines were mentioned above. They contain significant detail on methods and types of assessments, as well as guidelines and methods for calculating environmental, health, and social impacts of industrial development. They act as methodological guidance, rather than as procedural regulation. As a consequence, it is recommended that they not be repealed upon promulgation of the new set of regulations, but that they remain as a handbook of tools and approaches to EIA, SEA, and CIA.

"Regulation on Detailed EIA Appraisal"

This regulation is formally referenced as an Attachment to the Minister of Nature, Environment, and Tourism Order No. 195, 21 June 2006.

Very little direction is provided on appraisal of DEIA in the existing law. As a consequence, this regulation was approved in mid-2006. This regulation may be drawn on in the development of the new EIA Procedures regulation, with respect to the appraisal of DEIA. It is recommended that this regulation be repealed once the new EIA Procedures regulation comes into force.

2.1.4 Recent Changes Made to Article 17 in the Draft EIA Law

Article 17 of the draft EIA Law provides for the extensive participation of the public, professionals, experts, and local administrations in EIA activities, not only at the development stage, but also in the implementation, appraisal, and revision stages of assessments. The consulting team has suggested making changes to this Article before the draft is submitted to the State Great Hural. MNET officials have agreed to make the following changes:

The title of Article 17 becomes "Article 17: Public participation in the process of environmental impact assessments," and public participation becomes an integral part of EIA procedures. The term "may" has been replaced with "shall", as follows:

- "17.3: Public comments shall be invited during the process of strategic assessments of national and regional polices, that the government plans to adopt, and development programs and plans to be implemented.
- "17.4: Members of public shall comment in writing and verbally and shall do so within not more than 30 working days.
- "17.5: Public participation shall be regulated by a procedure which shall be approved by the Minister of Nature, Environment, and Tourism."

In addition, Article 17 has been moved from the "Miscellaneous" section to the main part of the Law.

2.2 Summary of SEA Provisions in the Draft EIA Law

The power to regulate strategic environmental assessment is given by Article 4.1 of the draft EIA Law. Article 5 deals specifically with SEA. It reads as follows:

- 5.1 The line ministry proposing the policies, programs and plans shall be responsible for having the policies, programs and plans strategically appraised and submitting the strategic appraisal report together with the draft policy document to the state central administrative body in charge of nature and environment prior to their submission to the Government Cabinet.
- 5.2 Strategic assessments shall be carried out by a professional entity licensed by the state central administrative body in charge of nature and environment with due inputs from a team of research institutions, independent experts and professionals.
- 5.3 The procedure for strategic and cumulative impact assessments shall be approved by the government
- 5.4 The opinions and recommendations presented in the strategic assessment shall first be discussed by the Technical Board and then presented to the government by the Minister of Nature and Environment.
- 5.5 The line ministry proposing the project and the state central administrative organization in charge of nature and environment shall disclose the information regarding the opinions and recommendations resulting from the strategic assessment to the public by via their websites. A print version shall also be made accessible to the public.

There are no other provisions for SEA in the draft EIA Law.

2.3 Summary of Public Participation Provisions in the Draft EIA Law

The power to regulate public participation is given by Article 17.5 in the Draft EIA Law. In Chapter Four of the draft EIA law, Article 17 contains five provisions that deal specifically with public participation in EIA processes.

Article 17.1 requires that

"the state central administrative organization in charge of nature and environment (currently MNET) shall make public, via its website, information regarding the development programmes and plans that are subject to a strategic assessment and the projects that have undergone an environmental impact assessment".

As such, information disclosure becomes part of government responsibility. Article 17.4 states that:

"it is the responsibility of the legal entity that performs the detailed EIA to organize, at the report-preparation stage, consultations with and formally seek comments from the local authority, the community that is likely to be affected by the project, and local residents living in the area where the proposed project will be implemented."

The draft law thereby outlines the importance of public participation in the detailed EIA stage. Also Article 17.2 states that:

"public comments may be invited during the process of strategic assessments of national and regional policies that the government plans to adopt, and development programmes and plans to be implemented."

Public participation in the SEA process will be dealt with in the SEA regulation.

Finally, Article 8.4.8 states that:

"notes of consultations made with the local authority and the community likely to be affected by the proposed project should be included in the detailed EIA report."

Also included in the draft EIA law, are articles that may possibly impede disclosure of the information required for public participation in EIA processes. For example, Article 16.1.4 requires that entities licensed to perform detailed EIA (in other words, the selected EIA consulting companies) should "keep confidential information regarding the technique, technology and business specific to the proposed project".

In similar vein, Article 13.1.3, which is one of the clauses that deals with the rights of project implementers, states that the implementer may:

"...require the entity chosen (ie the EIA company) to conduct the strategic assessment and the impact assessment to keep confidential some techniques, technology, and business-related information that are specific to the policy, programming, and planning of the project."

These Articles could in theory be used to justify not making the detailed EIA a public document. Similar Articles can be found in EIA law in other jurisdictions, and many researchers (Dick, 2004, and others) note that these legal provisions are usually only applied to the consultant engaged by the proponent, and do not apply to government. In the latter case, the only component of the feasibility design/detailed EIA that can

justifiably remain confidential is the economic analysis. All other components of the feasibility design and EIA should be fully open to public review.

It should also be noted that there are public participation provisions in the existing Mongolian EIA Law (approved in 1998) that will be repealed when the new law is promulgated. For example, Article 5.4 of the existing law states that:

"the detailed EIA report shall contain comments: i) from local people; ii) and the Citizens' Representative Hural of the soum and district where the project is to be implemented."

Article 7.3 notes that:

"the state central administrative organization in charge of nature and environment will make decisions to approve the implementation of the project according to the conclusions of EIA experts and the comments of the local people."

There are also provisions for public participation in regulations that sit beneath the existing EIA Law. These regulations include: "Methodological Procedure on EIA"⁵, "Procedure of the EIA Commission"⁶, and "EIA Monitoring Procedure"⁷. The current redrafting of the public participation regulation will draw on the existing law and regulations, but all will presumably be repealed when the new law and regulations are accepted.

2.4 Summary of Environmental Restoration Bond Provisions in the Draft EIA Law

Article 9 of the draft EIA Law contains five sub-articles that deal specifically with the use of a refundable bond for guaranteeing the implementation of annual activities under an Environmental Management Plan. According to these provisions, the project implementer shall submit, for approval, the implementation report of the previous year's work plan, together with a work plan and budget for the coming year, based on the EMP, to the authority that conducted the general EIA⁸. The project implementer⁹, with the exception of companies operating in the mineral exploitation, enrichment and processing, and chemical industries, should remit a bond equal to 50% of the annual operating budget of the EMP, in a special bank account opened by the relevant soums and district Governors. The project implementer shall report the implementation status of the work plan annually. Mining operators 10 shall remit a bond to a Ministry of Nature, Environment, and Tourism (MNET) account that is equal to the annual operating budget of the EMP prior to the beginning of its fiscal year, the funds to be used for nature protection and restoration. According to procedure, the bond shall be reimbursed, based on the implementation status of the EMP, the mining closure plan, 11, 12 and approval by MNET.

⁹ Article 9.7 in the draft EIA Law

⁵ This procedure was approved on 4 January 2010, by MNET Order No. A-2.

⁶ This procedure was approved on 27 April 2006 by MNET Order No. 119.

⁷ This procedure was approved by MNET Order No. 87, 2000.

⁸ Article 9.6 in the draft EIA Law

¹⁰ Article 9.8 in the draft EIA Law

¹¹ Article 14.1.3 in draft EIA Law: mining closure plan needs to elaborated and submit to MNET no more than three years prior to closure

In the existing EIA Law, the bond secured for mining activities 13 is actually regulated by the Minerals Law. Reimbursement of the bond will be issued by the authority that completed the general EIA, based on the implementation status of the EMP and according to related regulation¹⁴.

The differences between the draft EIA law and the existing EIA Law are as follows:

- the provision for the remittance of a bond for mining activities is now incorporated 1) in the EIA law and the amount of the bond is doubled:
- the mining closure plan should be submitted to authorities at least three years 2) before planned closure,
- the bond covers both environmental protection and monitoring activities; 3)
- 4) monitoring procedures for bank transfers of bonds are clarified.

3 **Provisions in other Mongolian Legislation and** Regulation

3.1 EIA Procedures

Two other laws touch on the regulation of environmental impact assessment and environmental approvals. These are the Law on Mineral Resources, and the Law on State Inspection.

3.1.1 The Law on Mineral Resources (1997 and 2006)

This Law regulates the exploration and production of mineral resources and the rehabilitation and decommissioning of mining properties. To obtain an exploration license, mining companies must submit a proposal to the Mineral Resources Authority (MRA). The MRA then submits the application to the Citizens' Representative Hural, at the relevant level, for its comments. Generally, these exploration licenses are granted. If the mining company subsequently wants to upgrade an exploration license to an exploitation license, it must provide a detailed EIA/EMP. Citizen's full participation in this process is mandatory.

The Law requires exploration license holders to prepare and implement environmental protection plans (EPPs), which must include measures to minimize environmental disturbance, control pollution and rehabilitate the site. Mining license holders are obliged to prepare an EIA and an EPP. The EIA identifies possible adverse environmental impacts of mining on land, water, air, vegetation, animals and humans, and include measures to avoid or mitigate identified impacts. The EPP summarizes environmental impact management commitments and provides an estimated budget for environmental protection, particularly in the following areas:

¹² Article 9.13 in the draft EIA Law Article 6.3 in the existing EIA law

¹⁴ Article 6.5 in the existing EIA law

- * control (transport, storage, use and disposal) of hazardous substances;
- * protection, utilization, and conservation of surface water and groundwater;
- * construction, utilization, and safe operation of tailings, impoundments, and dams;
- * other measures (such as the protection of air quality and biodiversity resources) that may be appropriate to a particular operation; and
- * progressive site rehabilitation and reclamation to a safe and productive condition.

It is worth noting that the provisions for EIA in the Law on Mineral Resources, which are presented in Article 39 and Article 40, effectively duplicate many of the provisions on the draft EIA Law. The legal convention is that, where there is such overlap or duplication, the most recent law prevails. In this case this would mean that the EIA Law will prevail, once it is promulgated. In addition, however, the Law on Mineral Resources makes it clear that the agency responsible for overseeing EIA for exploration and exploitation licensees is the same state central administrative agency in charge of nature and the environment that controls the EIA processes that are laid out in the draft EIA Law. In practice, then, there will be no real difference in how mining projects are dealt with. However, the Government may want to consider repealing Article 39 and Article 40 of the Law on Mineral Resources, to make it clear that the EIA Law prevails.

The Law on Mineral Resources also regulates an environmental restoration bond system. This issue is dealt with in Section 2.4 and Section 3.4.

3.1.2 Mongolian Law on State Inspection (2003)

The Mongolian Law on State Inspection regulates all state audits and inspections. Thus the Strengthening Political Institutions and Accountability Program (SPIA) is the essential government agency that enforces this law. The law clearly defines the roles and responsibilities of state inspectors. According to the law, a state inspector has the legal right to impose sanctions, in the form of fines, and to cease the operations of a factory.

The SPIA, formed in 2003, is responsible for environmental inspection services nationwide and must report to the Deputy Prime Minister. SPIA consists of Nature and Environmental Inspection, Infrastructure Inspection (including transportation, road and communications), Industry and Trade Inspection, and Food Safety and Agricultural Inspection. Environmental Inspectors are responsible for environmental monitoring, operational inspections, and information collection. Inspectors have the authority to:

- * require individuals, organisations, or economic entities to cease activities that are harmful to the environment;
- * suspend the operations of any entity in violation of environmental regulation, standards, or permissible levels:
- cause any economic entity or organisation to control environmental impacts, take samples and have samples analyzed; and
- * impose administrative penalties, as provided in law, on those who violate environmental regulations and standards.

3.2 **SEA**

There are no provisions for strategic environmental assessment in any existing Mongolian laws or regulations.

3.3 Public Participation

There are no special provisions for public participation in EIA in other existing Mongolian laws or regulations, but several important general provisions related to public participation and information disclosure exist in some legal documents.

The Mongolian law on environmental protection notes that "Government decision-making activities for environmental protection and natural resource use, at all levels, shall be transparent."¹⁵

Over the course of the last decade, a number of successful initiatives for herders' and local stakeholders' participation in decision-making on pasture and other natural resource management activities have been carried out. They have been facilitated through the assistance of a number of international donor organizations including the German Association for Technological Cooperation (GTZ), United Nations Development Programme (UNDP), Swiss Development Corporation (SDC), The Asian Development Bank (ADB), The International Development Research Centre (IDRC), the World Bank (IBRD), the Food and Agricultural Organization of the United Nations (FAO), World Vision, and others.

On the basis of these activities, an amendment to the Law on Environmental Protection was jointly developed. This law was approved in 2005, and has several important articles that ensure local peoples' participation in natural resource management. The Amendment¹⁶ to the law strongly supports a policy for community-based natural resource management (CBNRM), as it legally recognizes "community" (nukurlul) as "a group of local citizens in support of the sound use of natural resources and for environmental protection; it creates a legal basis for the allocation of natural resources to local communities. The Amendment permits the Government to recognize the importance of CBNRM and to legally support communities in resource management by allocating natural resource use and protection to the communities by co-management (CM) agreements.

The "procedure for the allocation of certain natural resources to the communities, for their sound use and protection¹⁷," was initiated by the study: "Sustainable Management of Common Natural Resources in Mongolia¹⁸" (MNET- IDRC)), and approved by Minister's Decree for Nature and the Environment, in 2006. This procedure supports social, economic, and ecological capacity development of local communities.

Currently in Mongolia, more than 791 local communities (MNET, 2010) have been established for the sound use of natural resources and environmental protection. The

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¹⁵ Law on Environmental Protection, 1995

¹⁶ Article 33f, Law on Environmental Protection, 2005. This was the first legal document in Mongolia that recognized rights of local communities and participation of community members in NRM.

¹⁷ This procedure was approved by MNET Decree 114, in May, 2006 and was renewed in 2009 by MNET Decree

H. Ykhanbai et al, Final Technical Report of the Project on "Sustainable Management of Common Natural Resources in Mongolia," Phase III, MNET-IDRC, 2007.

new Law on Forests (2009) also supports local people's participation in the management and allocation of a community's forest resources. Currently, all national programs, policies, and legal documents on NRM and environmental protection support community participation in decision-making. In addition, community-based pasture and NRM approaches are being strongly considered in the draft of the Pasture Law.

An important article, contained in the law on "Information Disclosure and the Right to Information," can be useful for information disclosure for public participation in EIA.

Article 14 of this law notes that, "the state organizations should establish special information databases and provide a list of all available information to the public." Article 10 states, "citizens requesting information will apply in writing and provide their family and given name, civic address, telephone number, the date of the request, and his/her signature. Government institutions accepting citizens' requests do not require any additional information".

The Law on Organizational Confidentiality notes that "... it is prohibited to keep secret all information regarding the materials, production, service, and technological activities of organizations and economic entities if this information provides evidence of potential negative impacts to the environment and/or to human health."

The Law on Minerals notes that "... project proponents in the mining sector will organize public meetings and discussions at the local level, for cooperation among local organizations ... and will appoint local community members to monitor planned activities and agreements with the public."

3.4 Environmental Restoration Bond

Existing Mongolian minerals law provides for the remittance of a bond that guarantees the implementation of an EMP for both mineral exploration²⁰ and exploitation²¹. The bond shall equal 50 % of the annual operating budget for planned environmental protection activities in both cases. The bond shall be deposited in two different bank accounts: one account for local exploration, opened by the local government; and one account for exploitation, opened by central governments. The regulation of bond accounts for mining restoration activities, by Minister's order, has existed in Mongolian regulation since January 2007²². The regulation consists of 5 Chapters; Chapter 1: General Provisions e.g. goal and location of bonds; Chapter 2: Bond Income; Chapter 3: Bond Expenditures; Chapter 4: Monitoring of Bonds (or Roles and Responsibilities of Authorities); Chapter 5: Other Provisions e.g. liabilities and reporting lines.

Mongolia joined the Extractive Industries Transparency Initiative (EITI) and issued a decree of the Government in order to implement this initiative and clarify the roles and responsibilities of government entities. According to this decree, MNET should report on the status of the bond for mining restoration activities.

In May 2009, the State Khural (the Parliament of Mongolia) approved the general guidance or list of legislative acts that need to be improved/revised or ratified during its

Provisions in other Mongolian Legislation and Regulation

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¹⁹ This law was approved in July 2011 by the Mongolian Parliament and is now being implemented.

²⁰ Article 38.1.8 Mineral Law.

²¹ Article 39.1.9 Mineral Law.

²² Minister's order of MNET, Nr.6, 09 January 2007.

legislative period, which ends in 2012²³. According to this order, the MNET should have drafted a law on "compensation" for adverse impacts on the environment in 2010. The draft of this law²⁴ was outlined in 2009, with support of the project "Strengthening Environmental Governance, UNDP MON/07/104", which is based on "the polluter pays" principle. Unfortunately, adoption of this law will not likely take place within this legislative period.

The Parliament's order Nr. 38, 14th May, 2009.

He Parliament's order Nr

4 Previous Donor Assistance and other Relevant Studies

4.1 EIA Procedures

International donors have assisted in the development of Mongolia's environmental assessment-related laws and regulations since about 2004. In 2004, The World Bank Institutional Development Fund (IDF) Grant TF 051255 served to strengthen environmental management capacity in Mongolia by helping it address three interrelated objectives:

- to improve the ability of the Government of Mongolia to assess its institutional needs for environmental and natural resources management;
- to improve existing environmental standards and environmental assessment capabilities; and
- to enhance the Government of Mongolia's capacity to implement and manage environmental and natural resource management policies.

The project had three inter-related components that facilitated the above outcomes. Within the project, Component 2 assessed the existing capacity within MNET, and other relevant government agencies, for monitoring and enforcing existing environmental standards for air, water, and solid and hazardous waste management. In addition, it identified deficiencies in the EIA process, and broadened opportunities for MNET staff to learn from worldwide EIA best practices²⁵.

A project financed by the United Nations Development Programme (UNDP) and the Netherlands Government supported the MNET on SEA, EIA and environmental auditing. This study emphasized that a lack of sectoral integration in decision-making on the use of natural resources was a major problem in Mongolia. It recommended that the government introduce SEA in its environmental governance and noted that this would permit it to implement national sector programs that consider the environmental, economic, and social impact of industrial development and investment projects.

Also, the study recommended improving public participation in EIA processes by involving local people in the formulation of terms of reference for EIAs and by providing proper access to EIA reports. Further, the Netherlands Government and World Bank project NEMO (Netherlands-Mongolia Trust Fund for Environmental Reform) developed three recommendations for the revised Law on EIA in 2009. These were SEA, public participation in EIA processes, and monitoring requirements for EIA²⁶. In addition, the NEMO project assisted with the development of the Methodological Guidelines on EIA" (MNET Order No. A2, 4 January 2010).

Phase II of the NEMO project ("NEMO II") assisted in developing an approach for preparing Detailed Environmental Impact Assessment (DEIA) reports in accordance with international standards and best practices. In the framework of this project the methodological guideline was redeveloped in 2010 as was the "examination criteria and

Previous Donor Assistance and other Relevant Studies

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²⁵ Final report. Component 2: Improvement of existing environmental standards and environmental assessment capabilities. World Bank IDF Grant TF 051255, January 2004

²⁶ Report "Strategic Environmental Assessment, Environmental Impact Assessment, and Environmental Audit in Mongolia', UNDP-NEMO (2009).

review methodology for the detailed environmental impact assessment."²⁷ This last-mentioned contract reviewed the examination criteria and review methodology for DEIA, and recommended that preparation and examination stages of the DEIA be clarified. It also reviewed EIA procedure, and recommended that the rights and responsibilities of the Committee be clarified, that gaps in procedure be rectified, and that the rights and responsibilities of the examiner and the assessors be differentiated. The report suggested that the examiners develop a checklist to help them determine whether a proposed EIA is ready for review or needs further work by the EIA consultant.

4.2 **SEA**

Considerable progress has been made over the last 5 years with the introduction of SEA to Mongolia. Virtually all activity has been supported either by the UNDP-UNEP Strengthening Environmental Governance Programme in Mongolia, or by the World Bank-Netherlands-Mongolia Trust Fund for Environmental Reform (NEMO)²⁸.

Under the UNDP-UNEP Phase I programme, an assessment of institutional structures for environmental management was produced in August 2008 by Tortell, Borjigdkhan, and Naidansuren²⁹. This was subsequently incorporated into an overall legal and administrative "compilation" report produced in early 2009. An additional consulting report was produced that dealt with introducing strategic environmental assessment (SEA), environmental auditing (EA), and reforms to the system of environmental impact assessment (EIA)³⁰.

Tortell et al (2008), presented recommendations related to mainstreaming environmental issues into government "policies, decisions and actions"; further devolving environmental responsibilities to local government; boosting the profile of MNET; introducing an Environmental Management Information System (EIMS), and boosting the role of the non-government sector.

Phase I made considerable progress with the introduction of strategic environmental assessment (SEA). Before the initiation of Phase I, SEA was almost an entirely new concept for Mongolia. This meant that it lagged behind most other developing countries in Asia, where SEA has been trialed in different forms for perhaps the last 10 years. Over a short period of time, SEA has been introduced into the draft amended Law on Environmental Impact Assessment as Chapter II³¹. In addition, a SEA regulation has been drafted; basic SEA training has been provided to a small number of participants³²; and a pilot SEA was undertaken in relation to the impacts of mining on water supplies in

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²⁷ Report on "Examination Criteria and Review Methodology for Detailed Environmental Impact Assessment Report". UNDP-NEMP II, 2010.

²⁸ Phase II of NEMO will be completed in December 2011. Phase II of the UNDP-UNEP programme began in mid-2011 and will run until the end of 2013.

²⁰¹¹ and will run until the end of 2013.

²⁹ This report, titled "Institutional Structures for Environmental Management in Mongolia", will be referred to from this point onwards as Tortell et al (2008).

³⁰ This report, titled "Strategic Environmental Assessment, Environmental Impact Assessment, and Environmental Audit in Mongolia", will be referred to from this point onwards as UNDP (2009).

At the time of writing, the amendments to the Law on EIA are still being discussed before presentation to Parliament.

³² In 2009, 15 representatives (7 women and 8 men) from government and non-governmental organizations were trained on SEA at the UNEP Regional Resource Center (RRCAP) based in Thailand.

two regional mining locations. The SEA training programme also resulted in a Strategic Environmental Assessment Manual³³.

Under the "environmental regulation" component of the NEMO project, which ran for 5 years until the end of 2011, considerable resources were directed to the redrafting of the EIA Law, and on specific trial SEA activity. One outcome was a Regional Environmental Assessment for the Southern Gobi Region³⁴. In addition, the NEMO project assisted in the development of a 2010 guidance document entitled "Methodological Instruction for EIA", which provides assistance for proponents undertaking both EIA and SEA.

These combined activities have led to an increased awareness of the potential that SEA can provide to improving the environmental consequences of policies, plans, and programmes (PPPs). However, much work remains to be done before environmental issues are routinely considered in the development of PPPs (which is the main aim of SEA).

It is important to note that SEA can be thought of in two different conceptions. Ex-post SEA (or "after-the-fact SEA") is undertaken on PPPs that are already substantially designed and approved. In a sense, this is akin to EIA for development projects, where the intention is to predict and evaluate the impacts of a project that is already at least partly designed. Ex-ante SEA (or "before-the-fact SEA") aims to incorporate environmental issues/concerns into PPPs during the development or design of the PPP. In many respects, ex-ante SEA is similar to the concept of environmental mainstreaming. Initiatives undertaken to date have concentrated mainly on ex-post SEA. This is appropriate, as it is the easiest point at which to begin the development of a SEA system.

4.3 Public Participation

Over the last three to five years a number of donor-funded projects have touched on the issue of public participation in EIA processes. One of most important studies was undertaken by the Centre for Human Rights and Development (CHRD) in 2010 on: "Local people's participation in detailed EIA in Mongolia".

As part of this study, 47 reports of detailed EIAs were selected from a total of 317 EIA reports that were reviewed by MNET during the 2006 to 2010 period.

Significant conclusions from the CHRD study include:

- In general, there is inadequate implementation of opinions and recommendations of the public in the conclusions and directions of EIAs. From all 47 general EIA reports only 7 of these reports, or 15 %, incorporate public opinions or comments in the planning stages of the detailed EIA.
- There is a lack of public participation in detailed EIA studies. From 47 detailed EIA reports only 4 reports, or 8 %, included public opinions and comments. In the majority of reports, the public was not involved in the EIA process in accordance

³⁴ Walton, T. (2010), Southern Gobi Regional Environmental Assessment. Mongolia Discussion Papers, East Asia and Pacific Sustainable Development Department. Washington, D.C.: World Bank.

Previous Donor Assistance and other Relevant Studies

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³³ UNDP (2009), Manual on Strategic Environmental Assessment. Produced by the Strengthening Environmental Governance in Mongolia programme.

with EIA laws and related procedures. On the difficultly of incorporating public input into EIA, this monitoring report noted: "comments and opinions of local people can be collected during the detailed EIA process, but because there has been a lack of information made available to the public on the input process, public opinions and comments have been absent in many cases."

A general conclusion from the CHRD study is that, "there are adequate legal provisions in environmental protection laws and in EIA law on public participation in EIA, but the implementation of these laws is poor. What is required is a strengthening of the activities of the public, local citizens, and NGOs in the EIA process at all levels."

Specific comments of the CHRD study were directed to the following areas of public participation in EIA:

- the need to improve legal and regulatory procedures for public participation;
- how to clarify the likely direct and indirect effects of project implementation on local people;
- the need to explain a project's potential negative and positive impacts to local people;
- the need to establish methods for obtaining local people's opinions and comments; and,
- the need to determine the views of other stakeholders or affected parties, other than those of local people.

Another similar study was undertaken by the World Bank in 2004 and focused specifically on, "Improving existing environmental standards and environmental assessment and monitoring capabilities in Mongolia35." According to this study, the EIA process is intended to promote constructive communication among the local communities potentially affected by a project, the project proponent, and government review agencies. Effective public consultation can provide a number of benefits to a project, such as foster an atmosphere of trust and cooperation with local people; give early indications of public misunderstandings about the project; generate detailed local knowledge about the characteristics of the development site; generate ideas from local communities on how the positive benefits of the project could be enhanced; and detect potential negative impacts on local people as early as possible so that impacts can be avoided or fairly compensated to prevent hardship and controversy.

The recent UNDP-MNET project on: "Strengthening Environmental Governance in Mongolia³⁶" examined methods of improving the availability of information on environmental activities to the general public. This study provides information on media focal points and organized training sessions on how to improve relationships with the public. But currently such focal points are lacking in central and local level environmental management systems in the country.

³⁶ UNDP-MNET project on: Strengthening Environmental Governance in Mongolia," MON/07/104, Final report, 2010.

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³⁵ Dick, J. (2004), "Improving existing environmental standards and environmental assessment and monitoring capabilities in Mongolia," Draft report, IBRD.

Finally, the MNET began testing an EIA information database³⁷ in January, 2010. The environmental database includes natural resources management special data, is structured for the purpose of EIA, and considers the following: the definition of EIA; the legal basis for EIA; companies certified for conducting EIA; conclusions of the General EIA Expert; reports of detailed EIAs; and public information and comments. Currently (30 November 2011), the public can access the conclusions of the general EIA of 239 projects. Progress has been made in providing EIA information on the web, however this information is very general, and information on the negative impacts of projects, on detailed EIA information, and comments of local people impacted by projects remains inaccessible (closed) to the public.

4.4 Environmental Restoration Bonds

Comprehensive analyses on gaps in environmental law in Mongolia have been conducted by donor assistance³⁸, but none focus specifically on provisions for the use of financial instruments under existing EIA and mining law, except in relation to the deposit and administration of bonds39, where there has been some critical interest. Most of the critics note a) a misuse of bonds, mainly by local governors; b) the remitted funds/bonds were insufficient for environmental protection/restoration from project activity due to corruption and/or work plans that did not include detailed EIAs; and, c) the inability of the relevant authority to judge the adequacy of environmental protection activities and the budgets related to projects.

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³⁷ This database was developed by the UNDP—Dutch-funded project on "Natural Resources Management and Geographic Information Systems", as part of the general geo-information data base and managed by the Information and Computer Centre of NAMEM. The assess link is: http://geodata.mne-ngis.mn/eia

38 Assessment of environmental laws, final report, prepared by Ian Hannam, UNDP Project "Strengthening"

³⁸ Assessment of environmental laws, final report, prepared by lan Hannam, UNDP Project "Strengthening Environmental Governance in Mongolia, January 2009 Dick (2004).

5 International Experience: Practices and Lessons Learned

5.1 EIA Procedures

Undertaking an international review of the state-of-the-art of EIA procedures is clearly beyond the remit of this diagnostic work report. Fortunately, the eleven "environmental safeguard policy principles" contained in Section V of the ADB Safeguard Policy Statement (SPS) are generally recognised as representing environmental assessment "best practice".

The attached Annex 1 consists of an "equivalence assessment" that compares the draft EIA Law against the eleven SPS principles.

The right hand columns of the matrix in Annex 1 outlines the extent of equivalence, and recommended gap-filling measures. It should be noted that gap-filling must take place within the content of the proposed regulations, as the law itself is about to be passed by the Parliament, and so cannot be amended at this point.

The assessment contained in Annex 1 leads to the following general conclusions:

- * the draft EIA Law is a "framework law". As such, it does not include the level of detail required by the SPS Principles;
- * the draft EIA Law provides a sound basis for equivalence;
- * close to full equivalence can be obtained through careful design of the four proposed regulations, and particularly, the "EIA Procedures" regulation and the "Public Participation" regulation.
- * the only areas of Policy Principle where there is substantial non-equivalence is for Policy Principles 8, 9, 10, and 11. This is because these are essentially "principle-focused", while the draft EIA Law is process-focused. Gaps can be dealt with through directions on the content and design of EMPs.

5.2 SEA

5.2.1 Introduction

Since the introduction of SEA into public policy around 15 years ago, there have been a number of reviews of international experience with the tool. This section draws on the most significant recent reviews of SEA implementation. Its purpose is to draw lessons that can be applied to the writing of the Mongolian SEA regulation.

Reviews of international experience tend to concentrate not just on the regulatory and institutional aspects of SEA, but also on the effectiveness and efficiency of SEA processes as a whole. This is useful material, because it can inform the structure and content of the proposed SEA regulation.

5.2.2 Developed Country Reviews

A substantial literature now exists on the application of SEA in developed countries. Much of this is focused on process design and implementation in single countries.

International Experience: Practices and Lessons Learned

There is not room in this report to attempt to review this literature. Instead, this section summarizes two recent multi-country reviews of SEA performance in developed countries, both of which attempted to draw "lesson learned" from SEA implementation over the last five or so years.

The first review was undertaken by a group of researchers on contract to the Canadian International Development Agency (CIDA) to provide input to an evaluation of the Canadian federal SEA process (Benevides et al, 2009). The researchers undertook a detailed review of the international literature. In summary, the investigation revealed broad international agreement on major components of, and requirements for, design of an effective SEA regime. Many of these conclusions have ramifications for the design of the proposed Mongolian SEA regulation. The key findings are as follows:

- The regime must be applied early and proactively to ensure that attention to environmental and sustainability considerations begins at the outset of deliberations on strategic initiatives.
- The assessment must integrate biophysical (or narrowly "environmental"), social and economic aspects, and their interactions, and the assessment work must be effectively integrated into the core of the larger planning and decision-making process(es) for strategic undertakings. The regime cannot work if its requirements are structured and viewed as an additional hurdle to get over.
- The assessment regime must take into account multiple, mutually influential tiers of strategic decision making (decision making on policies, plans and programmes at various levels) and be designed to provide clear implications for assessment and decision making at the project level. Proper design for dealing with the multiple tiers of assessment must recognize the importance of learning and guidance both from higher to lower tier decision making and from lower to higher tier decision making in the interests of improving assessment quality as well as efficiency.
- In particular, the regime must be designed so that strategic level assessments provide clear and timely guidance to the project level; where appropriate, such guidance should be authoritative and application of the guidance in relevant lower tier planning and decision making should be mandatory unless there is evidence that the guidance is obsolete or unsuitable for the particular circumstances.
- The process must be guided by regulatory, policy and/or other forms of direction that establish a standard of assessment to be met, enhance consistency and facilitate improvement through ongoing strengthening and clarification of the guidance.
- The process must be flexible and adaptable to different kinds of and contexts for strategic decision making.
- The process must be transparent.
- The process must include opportunities for public involvement throughout, subject to due recognition of legitimate needs for Cabinet confidentiality.
- The assessment must be followed by monitoring and enforcement addressing actual performance, as well as actual effects compared with predictions, and

- encouraging lesson learning to improve future PPPs as well as the assessment process itself.
- Effective SEA requires broad engagement of all the relevant players who may be affected by or otherwise concerned about strategic level issues and effects, and who have an interest in ensuring that they are addressed well in PPPs.

The second summarized review of developed country SEA application was undertaken in 2011 by the European Network for Strategic Environmental Assessment (ENSEA)⁴⁰. The organisation ENSEA compared the SEA frameworks against eight factors grouped under three headings, as presented in Table 1.

Table 1: Comparison Criteria used to Compare SEA Frameworks in Seven European Countries

Institutional/Governance Aspects

Transposition of SEA Directive (level of implementation?)

SEA procedural model applied (dual-track or integrated?)

Tiering (are there effective levels between SEAs at different levels of plans/programmes?)

Methodological Aspects

Guidance and availability of baseline data (is official guidance issued by national authorities? Are mechanisms in place to support the collection of baseline data?)

Assessment of effects (what kind of approaches are used ... qualitative, quantitative, or both?)

Monitoring and follow-up (are acknowledged sets of indicators used that allow for comparison between different SEAs? Are there established mechanisms to verify the implementation of the PPP?)

Participation and Quality Assurance

Consultation and participation (are there any norms on consultation and public involvement? In which phases of the SEA does consultation and participation take place? Is there any agency that supports authorities and practitioners in setting up participation processes?)

Quality assurance (are there any mechanisms in place for quality assurance of environmental reports?)

This cross-national comparison produced a number of conclusions, most of which are directly relevant to the Mongolian situation. First, the review confirmed that SEA systems vary significantly in their design. Second, the majority of countries exhibit a "dual-track" SEA procedure, meaning that the SEA process runs in parallel with the relevant PPP process. Third, baseline data collection is difficult because it is dispersed among different sources. The need of a more harmonized and easily accessible set of baseline data seems clear. Fourth, even in countries with a well developed tradition of public participation in decision-making, the actual influence of public participation on the

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⁴⁰ UK, Italy, Spain, Romania, Czech Republic, Austria, Malta.

outcome of the SEA process, and the PPP process seems to be limited. Finally, most of the studied countries lacked established sets of indicators, and monitoring appeared to have a weak influence on decision-making.

In their review of 15 academic research papers that focus predominantly on SEA implementation in developed countries, Runhaar and Driessen (2007) present 10 factors that are considered to contribute to SEA's impact on decision-making. In order of importance, they are:

- 1. Flexible SEA that fits into the decision-making context.
- 2. Stakeholder participation.
- 3. Transparency of the SEA process.
- 4. Binding character of SEA.
- 5. Quality of the assessment.
- 6. Values in SEA should reflect values in policy context.
- 7. 'Openness' of decision-makers to environment/sustainability.
- 8. Tiering of SEA with other assessments.
- 9. Adequate resources.
- 10. Effective communication.

5.2.3 Developing Country Reviews

It has only been in the last two years that there has been enough experience in developing countries to undertake detailed cross-national reviews of SEA experience. For example, Dalal-Clayton and Sadler's 2005 international SEA evaluation had relatively little to say with regard to Asian countries other than China and Vietnam.

In mid-2009, however, the World Bank published a cross-national review of SEA implementation in seven countries (China, Vietnam, Indonesia, Malaysia, Philippines, Thailand, and Lao) (Dusik and Xie, 2009).

The report identified two main approaches to SEA in the studied countries. One approach has SEA acting as an environmental safeguard check on PPPs that have already been drafted, but before their formal adoption. In the second approach, SEA is applied as a fully internalized planning tool that considers environmental or sustainability concerns during the elaboration of the PPP itself. The authors state that, in principle, these different approaches to the use of SEA are not mutually exclusive, but a preference toward one or the other has significant implications for SEA practice. This is clearly the case in China, as will be seen later in this section.

The World Bank report presented seven "key conclusions/recommendations", of which the following four are directly relevant to the development of the Mongolian SEA regulation:

1. SEA should be promoted as a set of core assessment activities that can be flexibly integrated into planning and decision-making.

- 2. SEA should address environmental as well as social and economic concerns of decision-makers and relevant stakeholders.
- 3. SEA should use robust assessment approaches that can operate in the face of significant data gaps.
 - SEA practice in the region is constrained by limited access to data and a tradition of impact-focused, quantitative prediction. Simple assessment techniques that can cope with information gaps and use stakeholder inputs may provide a more feasible means of analysis.
- 4. Strengthen inter-institutional consultations and gradually improve transparency of SEA processes for the public.
 - SEA processes should require inter-agency consultation and input at the stages of scoping and review of SEA findings, and public access and comment on SEA reports. Currently, it may not be realistic to expect the provision of major opportunities for public participation in SEA processes in the region. However, greater openness and transparency of SEA systems can and should be emphasized and pursued, especially with regard to unrestricted public accessibility of SEA reports.

With regard to China, Bina (2011) reports that by the end of 2008, more than 200 doctoral and masters dissertations, and 500 academic papers, had been produced on SEA in China. This literature has focused primarily on four aspects: the concept and theory of SEA; methodologies and indicator research; application research; and case study reviews. Most interest and effort concerned regional development, urban construction, industrial development, and transportation, reflecting the industrialization, urbanization, and modernization occurring with China's rapid economic development.

Since the entry into force of the Law on EIA in 2003, the Ministry of Environmental Protection (MEP), and other ministries, have released special legislation and regulations to support SEA application, and some provinces or municipalities have also issued related administrative instruments. Possibly the most important regulatory development has been the promulgation of the Planning Environmental Impact Assessment Ordinance in 2009. This is considered by many to be a considerable step forward in China's environmental regulation, as it places into law the procedural norms for SEA in China, which is often referred to as "plan environmental impact assessment" (PEIA).

PEIA was trialed for six years before the Ordinance gave it detailed legal backing. In fact, it has been estimated that some 500 PEIAs have been undertaken since 2003. The Chinese system uses a combination of "safeguard checking" and "integrated planning" approaches to SEA, as outlined earlier. As Dusik and Xie (2009) explain, SEA for the preparation of sector plans (e.g., for industry, agriculture, animal husbandry, forestry, energy, water conservancy, transportation, urban construction, tourism and natural resources development) analyzes the impacts of drafted development plans once they have been completed, but before their adoption. It requires the preparation of a separate Plan EA Report, which should be reviewed independently prior to decision-making on the relevant plan.

In the second approach, SEA is used to integrate environmental considerations into all phases of the preparation of spatial and land use plans, including those for the

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development and utilization of regions, river basins and sea waters. For these plans, China's EIA Law requires the preparation of an EA Chapter or Statement, which should be elaborated during the preparation of the plan and is a part of the proposed plan itself. This approach requires only basic reporting by the planning team. The first SEA approach resembles a 'soft form' of environmental permitting for plans; the second promotes the use of SEA as a fully integrated planning tool.

Despite the impressive strides that China has made in developing a legal structure for SEA, and in trialing its application, concerns still exist about implementation. In their "Memorandum on the Draft Regulation of the People's Republic of China on Plan Environmental Impact Assessment", Dalkmann and Bina (undated) claim that concerns have centred on the following areas: roles and responsibilities; involvement of the public; timing of the assessment; scope (which plans should be assessed); methodologies and tools; treatment of alternatives; and, influence of the Plan EIA report on the final decision.

5.3 Public Participation

This section briefly summarizes some of the most significant international experiences, mostly in the developing countries of Asia, in public participation in EIA, in the following areas: i) public participation in general environmental protection; ii) information disclosure; and, iii) mechanisms for public participation in EIA.

5.3.1 Public Participation in General Environmental Protection in China

In China, environmental policy has evolved as follows: i) Command control policy (1970s); ii) Market-based policy (1980s); and iii) Information disclosure and dialogue (1990s). Information exchange and disclosure is the main trend in China's current policy.

Public participation in environmental protection is divided into the following stages: Pre-Participation: Progress-Participation: Post-Participation: and Self-Participation¹⁹. Pre-Participation is the premise of public participation in environmental protection, where the public should participate in the legislative process of any environmental laws and regulations or at the concept stage of any projects. This is high-level, in-depth participation. Progress-Participation is the key to public participation in environmental protection, where the public should participate in the implementation processes of projects. This means supervisory participation. Supervision of the government and enterprises shall be fulfilled through the media, social activities, and arbitration on environmental conflicts, and a citizen voting process. Post-Participation ensures public participation in environmental protection, where the public participates whenever there are occurrences of environmental pollution or ecological impairment resulting from development activity. This means that the public takes an active (controlling) role in both the supervisory, pre-development phase, and the post-development, environmental restoration phase. Self-Participation is the foundation of public participation in environmental protection where the public should be motivated to participate in any environmental protection and related activities. Ultimately, public participants in EIA processes will be conscientious, self-disciplined, and self-motivated.

5.3.2 Information Disclosure for Public Participation in EIA

Many countries around the world have concluded that information disclosure is the essential foundation for public participation in EIA. This is a supporting principle for sustainable development, globalization, democracy, and human rights. For example, in China⁴¹, environmental information disclosure is a precondition for public participation. The public cannot actively participate without sufficient, accurate information. In addition to information disclosure, it is important to build sufficient information channels, such as: broadcasting media, Internet, official websites, hotlines, and official open-house hours. But as Chinese experience shows, several other critical factors should be carefully considered. In addition to establishing communication channels, accessibility, applicability, availability, convenience, and variety are also important factors. Therefore, in the case of China, the most important role for information disclosure and dissemination is played by national and local governments. Also, in some other Asian countries, such as Cambodia⁴², the MoE (Ministry of Environment) must co-operate with other line ministries/institutions in halting all existing/ongoing activities. Similar to this experience is Thailand⁴³, where the Ministry of Environment may issue a notification in the Government Gazette that requires that a project or activity provide specific information.

The Philippines⁴⁴ is somewhat different, as project proponents are responsible for determining and disclosing all relevant information necessary for a methodical assessment of the environmental impacts of their projects. This is one way to disseminate adequate information to the public, but in this case, companies should strictly follow all environmental standards and legal provisions. regulation in the Philippines requires that information systems should include regular updates through a website and other means. Also, in Laos⁴⁵, the minimum requirement in legislation is that the project implementers include notification of stakeholders, and dissemination of information about the project and its impacts are required.

5.3.3 Mechanisms for Public Participation in EIA

In Lao PDR, the project owner is responsible for all costs associated with the implementation of all elements of the project's EIA, including its own costs and the costs of government agencies in planning and conducting public involvement. In the case of the Philippines, there is a Multi-party Monitoring Team (MMT). This is a communitybased multi-sectoral team organized for the purpose of monitoring the proponent's compliance with an Environment Compliance Certificate (ECC). Proponents required to establish a MMT shall establish an Environmental Monitoring Fund (EMF). The MMT shall be composed of representatives of the proponent and stakeholder groups.

Mechanisms for public participation in EIA in China are shown in Table 2.

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⁴¹ Junjie Ge, et al, "Public participation in China's environmental protection," Chapter 2.

⁴² Sub-decree on Environmental Impact Assessment Process, Kingdom of Cambodia, No: 72 ANRK.BK, 1999. ⁴³ Enhancement and Conservation of National Environmental Quality Act, Thailand, B.E. 2535, A.D. 1992.

⁴⁴ Department of Environment and Natural Resources, "Implementing Rules and Regulations (IRR) for the Philippine Environmental Impact Statement (EIS) System" 2003.

Regulations on Environmental Assessment in the Laotian PDR, No: 1770/STEA, 2000.

Table 2: Public Participation in Environmental Impact Assessment in China⁴⁶

Stage	Level	Public Participation Activities			
Screening	Pre-Participation	Information Disclosure			
Scope	Pre-Participation	Information Disclosure, Public Survey, Expert Consultation			
Forecasting	Pre-Participation	Expert Consultation, Meeting, Conference, and Symposium			
Evaluation	Pre-Participation	Expert Consultation, Meeting, Conference, and Symposium			
Compiling	Pre-Participation	Information Disclosure, Public Survey, Expert Consultation			
Auditing	Post- Participation	Public Hearings			

Also on international experiences, in our opinion, the following two general publications are worthy of note: i) Lessons learned from Public Participation in EIA in Developing Countries in Asia⁴⁷, and ii) Public Participation in Environmental Impact Assessment in a Trans-boundary Context, in Developed EU countries⁴⁸.

Both reports recommend that, at a minimum, national EIA processes should include the following provisions:

- * the public in the areas likely to be affected are entitled to express comments and opinions on the proposed activity before the final decision on this activity is made;
- * reasonable time frames must be provided for each of the different stages of public participation in the EIA procedure and for making the final decision on the proposed activity; and,
- * due account is taken of the results of public participation in the EIA process.

5.4 Environmental Restoration Bonds

5.4.1 Introduction

Government policy instruments for integrating environmental considerations into economic decisions may be classified into three broad categories: command and control instruments (CACs); market-based instruments (MBIs), and other policies.

Command and control instruments (CACs)

Command and control instruments, also referred to as *standards* or *regulations*, are the most common forms of environmental policies in both advanced and developing

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⁴⁶ Chang I-Shin, Wu Jing, "Planning and Rationalization of Public Participation in China's Environmental Management," 2011.

ADB, "EIA in Developing Countries in Asia, Chapter 2, Institutional Aspects of EIA, Public Participation, 1997.
 Guidance on Public Participation in Environmental Impact Assessment in a Trans-boundary Context, Economic Commission for Europe, 2009 ece/mp.eia/7.

countries. As the name implies, the CAC approach consists of a 'command', which sets a standard —the maximum level of permissible pollution, and a 'control', which monitors and enforces the standard.

Market-based instruments (MBIs)

Unlike the Command and Control (CAC) approach, MBIs use price or other economic variables to provide incentives for polluters to reduce harmful emissions. MBIs include charges, subsidies, marketable (or tradable) permits, and other MBIs including deposit/refund systems, eco-labelling, licenses, and property rights.

Other government policies

Other government policies used to integrate environmental considerations into economic decisions include: environmental quality promotion; liability legislation; zoning, bans, and fines; poverty alleviation and family planning programmes; and, banking procedures. Arguably the most relevant for the Mongolian situation is liability legislation.

In this approach, the law requires the polluting firm to provide compensation to individuals or communities for an environment that has been adversely affected by its operations. There are two main forms of liability legislation: financial provision, and zero net impact legislation.

The financial provision is to provide the government with sufficient financial resources to cover known and unknown environmental liabilities that arise due to non-performance or non-compliance by industry operators.

In zero impact legislation, the firm is legally required to ensure that environmental damage that has occurred in one particular area is compensated for by funding and implementing an appropriate environmental project in another area.

The financial provision encompasses two aspects: a) quantifying the financial amount of the environmental liabilities (known and unknown); and b) selecting the appropriate financial instruments to underwrite the liabilities.

Therefore, it is important to consider the following questions prior to implementing the financial provision:

- What kind regulatory framework exists for the financial provision?
- What is the main objective (scope) of the financial provision?
- How to calculate the amount of the financial provision?
- What are the appropriate financial instruments (cash deposit, escrow accounts, insurance, bonds, letters of credit, etc. to select?
- How is the financial provision executed?

There are many cases of financial provisions applied to potential environmental liability in developed countries, especially Australia, Canada, South Africa, and the USA, and with fewer cases in developing countries. There is not room in this report to review all of these cases. Instead, the following two sections will summarize three exampless: a) the application of environmental bonds to the mining sector of Western Australia; b) the European Union (EU) Environmental Liability Directive (ELD); and c) the Environmental Guarantee Fund of the Philippines.

5.4.2 Developed Country Reviews

Western Australia

Regulatory framework

In Australia, each state has its own mining legislation, environmental protection legislation, and regulatory bodies. The Department of Mines and Petroleum (DMP) is the lead regulator and decision-making authority for mining projects in Western Australia under the *Mining Act 1978*⁴⁹ DMP regulates the industry to ensure that closure conditions applied and commitments made are implemented during the lifetime of the mining project. The 2010 amendments to the Mining Act 1978 require a Mine Closure Plan to be submitted to DMP for approval as part of mining proposal applications received after 30 June 2011. The approved plan must then be reviewed and submitted again for approval by DMP three years after its initial approval, or at such time as required, in writing, by DMP.

The financial instrument, its objective and scope

The environmental bond system is used to protect a state from financial liability should a mineral tenement-owner fail to comply with the mine site rehabilitation requirement. Performance bonds are generally set as part of the exploration and mining proposal approval process. Amounts range⁵⁰ from a minimum of US\$5000 for exploration activities to over US\$30 million for major mining activities. The bonds consist of three main types: a security, required for small mining or exploration operations, valued at less than US\$10,000; a bank guarantee, required for small mining operation with limited infrastructure, valued at greater than US\$10,000 and less than US\$25,000; and an unconditional performance bonds, required for large mining operations with significant infrastructure. Western Australian security policy requires that the size of the bond equal 25 percent of total rehabilitation costs.

Calculation of performance bonds

Bond amounts are calculated using a minimum set of bond rate/criteria that reflect the estimated cost of rehabilitation. The rate may vary according to site assessment risk. Activities, such as exploration drilling, or structures, such as tailings dams or waste dumps, are categorized as high to moderate risk. (See guidelines for the calculation of bonds: www.doir.wa.gov.au). A description of the legislation pertaining to financial provision for rehabilitation, and the methods used to calculate the provision, are contained in Western Australia Department of Minerals and Energy (DME) publications titled "Guidelines to Help You Get Environmental Approval for Mining Projects in Western Australia" and "Guidelines for the Preparation of an Annual Environmental Report."

Bond reduction and retirement

For existing mining operations, the production of an Annual Environmental Report (AER) is a requirement for all mining projects conducted under the Mining Act with an anticipated lifespan in excess of two years and a condition on the relevant tenements.

http://www.austlii.com/au/legis/wa/consol_act/ma197881/
 Policy options for Mining Securities in Western Australia, Preliminary discussion paper, December 2010

The object of the AER is to concisely document the major mining, environmental management, and rehabilitation activities for the reporting year and proposed activities for the following year. After submission of the AER, the DME will conduct a site visit in order to carry out an Environmental Performance Review of the operation and reassess the bond amount current on the site.

Progressive rehabilitation is encouraged. Bond reduction will be considered where it can be demonstrated that rehabilitation has acceptable structure, function, and resilience to fire and other stress factors. The time scale to meet requirements will vary according to rainfall regimes. When there is a reduction in the bond amount required for a tenement, a new bond in the lower amount must be remitted before the existing bond can be retired. Bond amounts may be increased if it is determined that risk level has increased.

When the department is satisfied that mine closure standards have been met, the department will make a recommendation to the Minister that the bond be retired unconditionally.

A personal communication with an officer from the Western Australian Environmental Protection Authority indicated that there is only one mine in WA where bonds have been returned. There is apparently one other mine in the whole of Australia which has been "acceptably" closed and where the regulator has signed off on it. A paper from BHP (2006) stated there are no examples of large mines anywhere in the world that have been "sustainably closed" with regulatory signoff.⁵¹

The Western Australian government initiated a review of the environmental performance bond system in 2006. The purpose of the review was to determine whether alternative financial instruments, such as insurance, could optimize flexibility for the mineral industry while maintaining acceptable levels of financial risk for the State and the Minister. This review has been completed and was openly discussed until 15th February 2011. The major findings of the review are as follows⁵²:

- The requirement of unconditional cash-backed performance funds can bring significant financial constraints to mining companies.
- Alternatives are a) allowing unconditional performance funds to be backed by a surety from an insurance company; b) to establish a Mining Security Fidelity Fund with contributions being an alternative to the service costs required for environmental bonds.
- An insurance-based system may not be a viable option to replace the current system at this time. It may, however, play a role in covering part of the State's rehabilitation exposure.

The European Union

The new Environmental Liability Directive (ELD)⁵³, which entered into force on 30 April 2007, specifically implements the "polluter pays principle." Its fundamental aim is to hold

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⁵¹ Personal communication. Mr Tim Gentle. Environmental Protection Authority of Western Australia. November 23, 2011.

<sup>2011.
&</sup>lt;sup>52</sup> Policy options for Mining Securities in Western Australia, Preliminary discussion paper, December 2010
⁵³ http://europa.eu/legislation_summaries/enterprise/interaction_with_other_policies/l28120_en.htm

operators whose activities have caused environmental damage financially liable for remedying this damage.

The regulatory framework

The Environmental Liability Directive 2004/35/EC of 21 April 2004 was devised to prevent and repair environmental damage; it provides a framework of environmental liability based on "the polluter pays" principle. The deadline for ratification into domestic law was 30th April 2007.

The Directive provides for two distinct, but complementary, liability regimes. The first one applies to operators who professionally conduct risky or potentially risky activities. These activities are listed in Annex III of the Directive. Under this regime, an operator can be held liable even if he is without fault, though there are a few cases in which he can be exempted from liability.

The second liability regime applies to all professional activities, including those outside Annex III, but an operator will only be held liable if he/she was at fault or negligent and if he/she has caused damage to species and natural habitats protected at the EU level under "The 1992 Habitats and 1979 Birds Directives." 21

The financial instrument, its objectives and scope

According to Article 14(1) of the Directive, Member States shall take measures to encourage the development of financial security instruments and markets to cover Environmental Liability Directive (ELD)-related liabilities.

There are a number of financial security instruments under consideration²². For example, in January 2011, Bulgaria was set to introduce compulsory financial security covering all operators under Annex III. The scheme was to be introduced to all operators at the same time and allows for insurance, pools, bank and other financial guarantees as proof of liability coverage. In the Czech Republic, financial security for all Annex III operators will become compulsory from January 2013. Insurance and bank guarantees will be an acceptable means to provide evidence that liabilities are covered.

5.4.3 Developing Country Reviews

The Philippines²³

The regulatory framework

As part of the implementation of the Environmental Impact Statement System (EISS), the Environmental Guarantee Fund (EGF) was created. Department Administrative Order No. 21 s. of 1992, known as 'Amending the Revised Rules and Regulations Implementing P. D. 1586' (EISS) paved the way for its creation.

The financial instrument, its objectives and scope

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²¹ Council Directive 92/43/EEC of 21 May 1992, and Council Directive 79/409/EEC of 2 April 1979,

consecutively. 22 Study on the implementation effectiveness of the environmental liability directive and related financial security issues, Final Report, November 2009, Stevens & Bolton LLP http://www.unescap.org/drpad/vc/conference/ex_ph_4_peg.htm

The Environmental Guarantee Fund (EGF) is a financial policy aimed at industries that have highly toxic waste streams (and thus have the potential to cause catastrophic damage to the environment). The official definition of the EGF "...a negotiated amount, on a per project basis, that covers expenses for information and communication activities by multi-sectoral teams, any repair or rehabilitation works, and compensation for damages attributable to the operation of the project."

Calculation of the EGF amount

As mentioned above, the EGF amount is negotiated on a per-project basis and The Department of Environment and Natural Resources (DENR) determines whether the project poses a significant public risk or whether it requires rehabilitation or restoration.

Fund expenditures

An EGF Committee, composed of representatives from the Environmental Management Bureau's (EMB) Central Office, the EMB Regional Office, the affected communities, and the relevant government agencies identified by EMB, will be formed to manage the fund. The EGF shall be readily accessible and disbursable for the immediate cleanup or rehabilitation of areas affected by environmental damage and the resulting deterioration of environmental quality as a direct consequence of a project's construction, operation, or abandonment. It shall likewise be used to compensate parties and communities affected by the negative impacts of a project and to fund community-based environmentally related projects including, but not limited to, information, education, and emergency preparedness programs.

The benefits of setting up an EGF were illustrated in the response to an incident that involved the disastrous seepage of mine tailings into the waterways of the Marinduque due to the activities of the Marcopper Mining Corporation. The EGF was tapped to compensate the affected families and to fund the rehabilitation of damaged areas.

6 Implications for the Development of the Mongolian Regulations

6.1 EIA Procedures

EIA has been in place in Mongolia for many years. Unlike the situation for SEA and CIA, there are existing procedures in place for EIA. The law itself has been amended over the years and four regulations support the EIA process. As a consequence, the new EIA Procedures regulation will need to borrow from previous experience. As was indicated in Section 2.1.3, most existing regulations will be repealed, and replaced with one EIA Procedures regulation that deals primarily with the following:

- * EIA process steps;
- * procedures for Environmental Management Planning (consisting of Environmental Protection Plans and Environmental Monitoring Programmes);
- * powers, responsibilities, and procedures for the new Technical Board for Environmental Impact Assessment; and,
- * rights and obligations of different parties in the EIA process.

The new EIA Procedures regulation would also take note of international standards, and so would take specific note of Column D ("gap-filling measures") of Annex 1. This column indicates areas where Mongolian regulation could be strengthened so that it meets the demands of the ADB SPS.

It should also be noted that the EIA Procedures regulation will need to be closely crossreferenced with the other three proposed regulations, to ensure that no duplication or misalignment takes place.

The regulation should contain sections that deal with the following requirements:

- * Purpose and scope of the regulation
- * Definitions
- * Principles of EIA
- * Determination of the duties and responsibilities of relevant State authorities
- * The EIA study process:
 - Preliminary assessment (General EIA) (Article 7):
 - + screening
 - + scoping
 - + Environmental baseline assessment (Article 6.1.);
 - + Offset options on volunteer basis (Article 6.1.3.) a study for ex-situ biodiversity conservation;
 - + decision-making on the GEIA;

- Detailed assessment (Detailed EIA) (Article 8):
 - + consideration of alternatives:
 - + identification of indirect, and induced impacts;
 - + identification of biological, physical, and socio-economic impacts;
 - + impact prediction;
 - + impact evaluation;
 - + mitigation;
 - + content of Environmental Management Plans.
- * EIA study review and appraisal
- * Decision-making
- * Follow-up and monitoring
- * Legally-binding approval conditions
- * Roles and responsibilities of the project implementer and other stakeholders
- * Duties and responsibilities of the Technical Board (Articles 7.8, 7.9.), its composition, members' roles and responsibilities
- * Experts rights, responsibilities, appointments, etc., (Article 7.6)
- * Authorization of the legal entity to conduct Detailed EIAs
- * Tiering of the EIA with other levels of assessment, decision-making, and coordination between government agencies
- * Access to and use of data, and transparency of information
- * Public participation (cross-reference to the proposed Public Participation regulation)
- * Grievance mechanisms
- * Offences and enforcement
- * Annexes containing relevant forms such as:
 - flow chart of the EIA process;
 - EIA application form;
 - required contents of GEIA or DEIA studies.

6.2 SEA

Section 4.1 of this report indicates that Mongolia has approached the introduction of SEA in an incremental and careful manner, using a combination of capacity building, trial SEA application, and development of a preliminary regulatory structure. After

approximately 5 years of experimentation, the time is ripe for the introduction of a framework SEA law, along with a regulation that would establish the foundation and structure for a workable SEA process. Section 2.1 makes it clear that Chapter II of the new EIA law provides the legal power for a widely applicable SEA regulation.

The combination of lessons learned from recent SEA implementation experience, along with an assessment of the Mongolian context, suggest that the proposed SEA regulation should take the following issues into account.

- 1. All commentators are clear that "adaptation to context" is extremely important. Given the early stage of development of SEA in Mongolia, the regulation should establish a general foundation so that the different varieties of SEA can be applied. Specifically, the regulation should establish the rules for both the "safeguard checking" and "integrated planning" models of SEA.
- 2. The regulation should contain sections that deal with the following requirements:
 - 2.1 purpose of the regulation
 - 2.2 scope and definitions
 - 2.3 commencement of the regulation
 - 2.4 duty of agencies (roles and responsibilities)
 - 2.5 principles of SEA
 - 2.6 requirements of SEA for safeguard checking (including process steps that include consideration of alternatives)
 - 2.7 requirements of SEA for integrated planning (including process steps that include consideration of alternatives)
 - 2.8 timing of SEA
 - 2.9 tiering of SEA with other levels of assessment
 - 2.10 access to and use of, data
 - 2.11 public participation (including points at which participation should take place) and information disclosure
 - 2.12 requirements and procedures for review
 - 2.13 decision-making and coordination between government agencies
 - 2.14 compliance, monitoring of impacts, follow-up, and enforcement
 - 2.15 legally binding conditions
 - 2.16 grievance mechanisms
- 3. Detailed process steps should be elaborated in a separate and detailed guideline. This would entail redrafting of the 2010 guidance document entitled "Methodological Instruction for EIA".

6.3 Public Participation

Sections 4.2 and 5.2 of this report make it clear that there is growing demand for public participation in EIA processes in Mongolia, and that existing legal and policy

approaches are poorly implemented due to a lack of clear regulatory procedures and mechanisms. International experience shows that the best EIA includes the broader participation of the public in its processes. The present scaling-up process of community-based natural resource management approaches, and the allocation of pasture and other natural resources to the local communities also demands public participation in EIA. Recent approval of a law on open public access to information is also one of the major supports for the successful implementation of public participation in EIA.

The new regulatory framework for public participation in EIA should be introduced on a trial basis, at least in the early stages. It also requires adequate institutional capacity development at the national (MNET) level; at the micro (EIA companies) level; and at the local level of environmental management in the aimags and municipal offices.

The combination of lessons learned from international experiences, along with an assessment of the Mongolian context, suggests that the proposed public participation in EIA regulation should be based on the following principles:

- * Public participation regulation in Mongolia should consider socio-economic development and ecological conditions in the country, as well as its traditions, culture, institutional structure, and the capacity of diverse stakeholders.
- * Public participation procedures should be easily implemented, and should focus on gender and social equity, citizens' participation in decision making, trust building among the stakeholders, support to local development, sound use of land and natural resources in both urban and rural areas, respect human rights, and the achievement of goals for future sustainable development.
- * It is paramount that the public participate from the beginning of the EIA process through to the implementation of the EMP.
- * The procedure should clarify roles and responsibilities of stakeholders, and outline legally binding mechanisms for its violation, as well as establish a time frame for public participation in each stage of the EIA process.
- * It should also determine the information disclosure mechanism and who will finance it.
- * The regulation should establish a two-way co-management system for determining and solving problems with the affected local people, for planning and mitigating negative impacts of the project, and to support local community development, on the basis of recognizing local communities as units of economic development in Mongolia.

Public participation requirements will vary with each stage of the EIA process. Table 3 presents preliminary thinking about activities that could take place at different points in the Mongolian process.

Table 3: PP in different stages of EIA: Initial Ideas for the Mongolian EIA Procedure

EIA Procedure Stage	EIA Study Stage	Public Participation Activities
Otage	Otage	

General EIA	Screening and scoping	Information Disclosure Brochure about the project Information briefs Daily newspapers, radio, TV announcements
Expert comments for Detailed EIA	Screening and scoping	Expert Consultation Public comments
Detailed EIA	Identification, prediction, evaluation	Information Disclosure Brochure about the project's impacts Community comments Community meetings, Participatory Rural Assessment Gender and Social Analysis Public meetings & discussions Public Surveys Public Hearings
Expert review	Review and appraisal	Expert Consultation Public Comments Public Hearings
EIA commission decision	Approval	Expert Consultation NGOs' comments
Implementing EIA	Monitoring	Community Participatory Monitoring and Evaluation (PM&E) meeting Conference and Symposium
	Monitoring	Expert comments

A preliminary structure for the proposed regulation on public participation in EIA processes could contain the following sections:

- 1. Purpose of the regulation.
- 2. Scope and definitions (public, affected parties, social, economic, and cultural impacts, etc.).
- 3. Commencement of the regulation.
- 4. Principles and techniques of public participation in EIA (PRA, social and gender analysis, stakeholder analysis, etc).
- 5. Disclosure and distribution of environmental information for public participation (cooperation between stakeholders for the dissemination of information to the public and the types of disclosure and distribution of information to the public and the local community).
- 6. Roles and responsibilities of central and local governments "aimaks and city environmental offices".
- 7. Roles and responsibilities of the project implementer and the EIA company.
- 8. Rights and responsibilities of citizens, the public, and NGOs.
- 9. Public participation in general EIA approval.

- 10. Public participation in detailed EIA.
- 11. Public participation in detailed EIA approval.
- 12. Timing of public participation (when the public is informed, when they comment on the project, when they will be informed about the inclusion/rejection of their comments).
- 13. Financing of public participation activities in EIA processes (benefit & cost sharing mechanism).
- 14. Institutional structure for public participation.
- 15. Public participation in the implementation and monitoring of EIA plans (PM&E principles).
- 16. Legally binding conditions.
- 17. Grievance mechanisms.

6.4 Environmental Restoration Bonds

This report discusses the use of financial instruments and, in particular, the refundable bond as financial security for environmental restoration subsequent to damage due to mining projects. It provides background material on the use of the refundable bond to protect the environment in areas undergoing varying degrees of mining development. It indicates that the provisions for remitting a bond for environmental restoration, under the new EIA law, provide the foundation and "parameters" for the proposed regulation.

This study's main purpose is to point to important lessons learned about the impact of mining projects on local environments and to the need for financial measures that hold the mining community responsible for necessary remediation. The goal of the requirement of a refundable bond is to provide the government with sufficient financial resources to cover "known" environmental liabilities, identified through the EIA process and determined to have been a result of non-performance or non-compliance by industry operators. Therefore, the amount of the deposit depends very much on the quality of EIA and associated EMP recommendations. Unfortunately, current legislation does not allow for the consideration of covering for "unknown" environmental risks, which might arise due to a substandard EIA or faulty or negligent activity by mining industry operators.

As mentioned above, and to elaborate further on the regulation for the refundable bond, it is important to consider and include the following elements:

- * legislative framework;
- * objective or scope of the refundable bond;
- * how to determine the right size of the bond in financial terms;
- * reimbursement of the bond or how to measure performance or compliance;
- * expenditure/disbursement of the bond in the event of non-performance or non-compliance; and,
- * monitoring of the refundable bond system by the Government and members of the public.

6.4.1 Legislative framework:

The legislative framework for the environmental restoration bond is the draft EIA Law, and especially Article 9. The content of the environmental restoration bond regulation will also be influenced by existing regulations, and new regulations being drafted as part of this project.

The relevant existing regulations are:

- MNET Minister's order Nr A-2, in 04 January 2010, on "Guidance for conducting EIA."
- MNET Minister's order Nr 157, in 27 May 2010, "Guidance to calculate environmental damage and its compensation."
- Joint order of Ministers for MNET and Mineral Resources and Energy in 10 May 2010, Nr. A-132/112 on "Guidance for calculation of restoration expenditure for areas damaged due to mining activities."
- MNET Minister's order Nr. 06, 09 January 2007. "Monitoring of deposits of mining companies that hold exploration and exploitation licences."
- Government's decree Nr.80, 2007, "Duties of Governmental entities on Implementation of Extractive Industries Transparency Initiative."

6.4.2 Objective and scope:

Annual work plan for environmental protection and monitoring plan based on overall EMP developed as part of EIA study.

6.4.3 How do we determine the right financial amount for the refundable bond?

This should be based on the EMP of the EIA report, the annual work plan for environmental protection and monitoring, and the mining closure plan. These should all be included in corresponding budgets

6.4.4 Reimbursement of the bond or how to measure performance or compliance

There are procedures already in place for the mining sector (MNET Minister's order Nr. 06, 09 January 2007), but similar measures are lacking for other sectors.

6.4.5 Expenditure of the bond in case of non-performance or non-compliance

There are some procedures already in place for the mining sector (MNET Minister's order Nr. 06, 09 January 2007), but similar measures are lacking for other sectors.

6.4.6 Monitoring of the refundable bond system by the Government and members of the public

There are procedures in place for governmental monitoring of the mining sector (MNET Minister's order Nr. 06, 09 January 2007). There are also procedures in place for public

monitoring (Government's decree Nr.80, 2007, "Duties of Governmental entities on Implementation of Extractive Industries Transparency Initiative'), but procedures are lacking for other sectors.

Remitting the refundable bond is very complex; it depends on existing legislation and the work of other team members.

It is also important to consider institutional capacity. Under MNET's current capacity of three people per EIA, it is not possible to manage all of the refundable bonds deposited against existing mining exploitation activities (1195 exploitation licenses in 2011, official source of mining authority). This suggests the need to support current and future environmental law and regulation with the requisite manpower.

7 References

Annandale. D. (2001), 'Developing and evaluating environmental impact assessment systems for small developing countries', *Impact Assessment and Project Appraisal*, vol.19, no.3, pp187-193.

Annandale, D. and Le Hoi Nam (2009), Strategic Assessment Approaches in National Planning and Policy Making of Countries in Asia and the Pacific. Paper prepared for the SDPlanNET Conference, Bangkok.

Arnstein, Sherry R (1969), A Ladder of Citizen Participation," JAIP, Vol. 35, No. 4, J pp. 216-224.

Aschemann, R., G. Baldizzone, K.Gatt, M.Musil, M.Nistorescu, C. Rega, J.P. Singer, M.Smutny, V. Tanner-Tremaine (2011), Comparison of Different National SEA Frameworks. Poster presented at International Association for Impact Assessment Conference, Prague, September.

Azizan M. (2008), "A review on public participation in environmental impact assessment in Malaysia."

Benevides, H., D. Kirchhoff, R. Gibson and M. Doelle (2009), Law and Policy Options for Strategic Environmental Assessment in Canada. Submitted to the Canadian Environmental Assessment Agency in partial satisfaction of a Contribution Agreement dated July 2008 between the Canadian Environmental Assessment Agency and the University of Waterloo.

Bina, O. (2007), 'A critical review of the dominant lines of argumentation on the need for strategic environmental assessment'. *Environmental Impact Assessment Review*, 27, 585–606.

Bina, O. (2008), 'Context and systems: Thinking more broadly about strategic environmental assessment in China'. *Environmental Management*, 42:717–733.

Bina, O. (2011), 'Review of practice and prospects for SEA in China'. *Environmental Impact Assessment Review*, 31:515–520.

Chang I-Shin, WU Jing (2011), "Planning and Rationalization of Public Participation in China's Environmental Management," *Management Science and Engineering*, vol. 5, no. 1, 2011, pp. 37-50, ww.cscanada.org

Dalal-Clayton, B and B. Sadler (2005), Strategic Environmental Assessment, A Source Book and Reference Guide to International Experience. London: Earthscan.

Dalkmann, H. and Bina, O. (undated), Memorandum on the Draft Regulation of the People's Republic of China on Plan Environmental Impact Assessment. Report for the GTZ project: 'Environmental Policy Advisory Service Component 2: Environmental Legislation and Enforcement' (project no. 06.2131.8-002.00).

Dick, J. (2004), "Improving existing environmental standards and environmental assessment and monitoring capabilities in Mongolia," Draft report, IBRD.

Dusik, J., and J. Xie (2009), Strategic Environmental Assessment in East and South East Asia. Sustainable Development Department, East Asia and Pacific Region, World Bank, Washington, D.C.

Dusik, J. (2010), Making SEA fit for political culture of strategic decision-making: Recommendations for General Technical Guidance on SEA in Indonesia. Version 8, May 27th. Indonesia-Denmark Environmental Support Programme, Phase 2, Component 1.

Fischer, T. B. (2005), 'Having an impact? — Context elements for effective SEA application in transport policy, plan and programme making'. Journal of Environmental Assessment Policy and Management, 7(3), 407–432.

Hilding-Rydevik, T. and H. Bjarnadóttir (2007). 'Context awareness and sensitivity in SEA implementation'. Environmental Impact Assessment Review, 27, 666–684.

Jiliberto, R. (2011), 'Recognizing the institutional dimension of strategic environmental assessment'. Impact Assessment and Project Appraisal, 29(2).

Junjie Ge, et al (2009), "Public participation in China's environmental protection," Chapter 2.

OECD (2011), Strategic Environmental Assessment in Development Practice: A Review of Recent Experience. Preliminary Version.

Runhaar, H. and P.P. J. Driessen (2007), 'What makes strategic environmental assessment successful environmental assessment? The role of context in the contribution of SEA to decision making'. Impact Assessment and Project Appraisal, 25(1), pages 2–14.

Annex 1: Equivalence Assessment Matrix: Mongolia Draft EIA Law Compared with the ADB SPS

(A) ADB Safeguard Policy Statement	(B) Corresponding Legal Provisions of the draft of the Law on EIA ⁵⁴	(C) Extent of Equivalence	(D) Recommended Gap-filling Measures
	a screening process for each proposed project, as early as possible, to determine the appropriate and a commensurate with the significance of potential impacts and risks.	e extent and type of environ	onmental assessment so that
Key element (1) Use a screening process to determine the appropriate extent and type of environmental assessment	Article 7 ("Environmental Impact Assessments") lays out the screening procedure. Projects listed in Annex 1 are subject to "General EIA". Article 7.4 outlines the process used to decide whether a given project should be required to undergo "Detailed EIA" (ie full EIA). "7.4. General environmental impact assessments for all new projects and existing plants, factories, services and building facilities that are planned to be renovated and expanded and projects that will make use of natural resources in one way or another shall be performed by an assessment expert who shall complete the assessment within 14 working days and issue a formal opinion as to whether: 7.4.1. The project should not be permitted or rejected on the grounds that it is likely to cause considerable harm to the environment by virtue of its proposed technology, technique and activities; that it is absent in the land management planning; that its activities are inconsistent with the state policy, the strategic assessment opinions or relevant legislation; 7.4.2. The project may be implemented without a detailed environmental impact assessment subject to specific conditions;	Full equivalence	None required.

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There are relevant provisions of the new draft of Law on EIA, Mongolia, Law on The Law on Environmental protection, Law on Mining, Law on protection of cultural heritage and other laws and regulations of Mongolia. All provisions are directly written at beginning shall be provisions of the draft of the Law on EIA, provisions of the other relevant laws shall be written with the names of the laws.

⁵⁵ "Full Equivalence" denotes that the Mongolian legal requirement(s) are in complete harmony with the corresponding ADB Safeguard Objective, Scope and Trigger, Policy Principle or Key Element thereof. "Partial Equivalence" denotes that the Mongolian legal requirement is in partial harmony with the corresponding ADB Safeguard Objective, Scope and Trigger, Policy Principle or Key Element; and "No Equivalence" denotes that no Mongolia's legal requirement can be found that corresponds to the particular ADB Safeguard Objective, Scope and Trigger, Policy Principle or Key Element.

(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence	Recommended Gap-filling Measures
biological, socioeconomic	luct an environmental assessment for each proposed project to identify potential direct, indirect, including impacts on livelihood through environmental media, health and safety, vulnerable groups of a rea of influence. Assess potential trans-boundary and global impacts, including climate characteristics.	s, and gender issues), and	physical cultural resources in
Key element (1)	There is no explicit reference to "indirect impacts" in the legal framework. All potential references to indirect impacts are implicit.	Partial equivalence	The proposed regulation on "EIA Procedures" will
Identify indirect as well	The power to regulation for environmental impact assessment is given in Article 4 ("Assessments of Environmental Impact"):		include directions on the need to identify indirect
as direct impacts	4.1 Assessments of environmental impact shall include the following:		impacts.
, , , , , , , , , , , , , , , , , , ,	4.1.1 Strategic environmental assessment;		
	4.1.2 Environmental baseline assessment;		
	4.1.3 Environmental impact assessment;		
	4.1.4 Cumulative impact assessment;		
	Environmental impact assessment is defined in Article 3.1.6 as:		
	"3.1.6. "Environmental impact assessment" shall mean prior identification, mitigation and elimination of possible adverse impacts of a particular project to be implemented by individuals, business entities and organizations on human health and the environment".		
	With respect to the causes of impacts, the required format for a Detailed Environmental Impact Assessment (DEIA) report is stated in Art.8.4:		
	"The Detailed Environmental Impact Assessment Report shall include the following:		
	8.4.1. The baseline data and indicators of the environment in which the project is proposed to be implemented;		
	8.4.2 Estimations and findings of studies that are conducted to identify a potential and the major negative impact of the project and establish their magnitude, spatial extent and consequences.		
Key element (2)	Article 6.2: Cumulative impact assessment	Full equivalence.	
Identify cumulative impacts	6.2.1 The state central administrative organization in charge of nature and environment shall conduct the assessment specified in Article 3.1.5 to analyze the effects on a region and basin from various projects implemented by individuals and business entities with due inputs from a licensed professional entity.	The proposed regulation on SEA and Cumulative Impact Assessment will	
	6.2.4 The professional licensed entity shall submit for review the environmental baseline assessment report and cumulative impact assessment report to the Technical Board designated for hearing assessments at the state central administrative organization in charge of nature and environment.	provide detailed instruction on how cumulative impacts should be identified.	

(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence	Recommended Gap-filling Measures
	The power to develop specific regulations on cumulative impact assessment is provided by Article 5.3: "The procedure for strategic and cumulative impact assessments shall be approved by the government".		
Key element (3) Identify induced	There is no explicit reference to "induced impacts" in the legal framework. All potential references to indirect impacts are implicit.	Partial equivalence	The proposed regulation on "EIA Procedures" will
impacts	The power to regulation for environmental impact assessment is given in Article 4 ("Assessments of Environmental Impact"):		include directions on the need to identify induced
	4.1 Assessments of environmental impact shall include the following:		impacts.
	4.1.1 Strategic environmental assessment;		
	4.1.2 Environmental baseline assessment;		
	4.1.3 Environmental impact assessment;		
	4.1.4 Cumulative impact assessment;		
	Environmental impact assessment is defined in Article 3.1.6 as:		
	"3.1.6. "Environmental impact assessment" shall mean prior identification, mitigation and elimination of possible adverse impacts of a particular project to be implemented by individuals, business entities and organizations on human health and the environment".		
	With respect to the causes of impacts, the required format for a Detailed Environmental Impact Assessment (DEIA) report is stated in Art.8.4:		
	"The Detailed Environmental Impact Assessment Report shall include the following:		
	8.4.1. The baseline data and indicators of the environment in which the project is proposed to be implemented;		
	8.4.2 Estimations and findings of studies that are conducted to identify a potential and the major negative impact of the project and establish their magnitude, spatial extent and consequences.		
Key element (4)	There is no explicit reference to "identification of physical impacts" in the legal framework. All potential references to physical impacts are implicit.	Partial Equivalence.	The proposed regulation on "EIA Procedures" will
Identify physical impacts	Article 3.1.10 defines "risk assessment" as meaning:		include directions on the
	"Risk assessment" shall mean prior identification of potential impacts of		need to identify physical
	chemical, biological and physical factors and natural hazards on human, flora, fauna and the environment.		impacts.
Key element (5)	There is no explicit reference to "identification of biological impacts" in the legal framework. All potential references to biological impacts are implicit.	Partial Equivalence.	The proposed regulation on "EIA Procedures" will
Identify biological	Article 3.1.10 defines "risk assessment" as meaning: "Risk assessment" shall mean prior		include directions on the

(A)	(B)	(C)		(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent	of Equivalence	Recommended Gap-filling Measures
impacts	identification of potential impacts of chemical, biological and physical factors and natural hazards on human, flora, fauna and he environment.			need to identify biological impacts.
Key element (6)	There is no explicit reference to "identification of socio-economic impacts" in the legal framework. All potential references to socio-economic impacts are implicit. There is implicit recognition of the need to identify socio-economic impacts in the following sub-	Partial I	Equivalence	The proposed regulation on "EIA Procedures" will include directions on the
Identify socioeconomic impacts (including on	articles:			need to identify socio-
livelihood through environmental health and safety, vulnerable	3.1.6. "Environmental impact assessment" shall mean prior identification, mitigation and elimination of possible adverse impacts of a particular project to be implemented by individuals, business entities and organizations on human health and the environment;			economic impacts.
groups, and gender issues media,)	8.4.5 Risk assessment of impacts of the proposed project on human health and environment if the general environmental impact assessment requires doing so.			
	8.4.9 Other issues pertaining to the cultural stratum and special nature of the project.			
	3.1.3 "Strategic environmental assessment" (hereinafter referred to as strategic assessment) shall mean the identification, in the process of preparing national, regional and sectoral policies, development programs and plans that are to be endorsed by the Parliament and Government, and, in the context of impending nature and climatic changes, of potential risks, adverse impacts and consequences of actions to be taken in accordance with those policies, programs and plans on the environment, society and human health;			
	3.1.5 "Cumulative impact assessment" shall mean the analysis of all effects with regard to human health, both combined and duplicate, on a particular area and basin and the environment from various projects implemented by individuals, business entities, and organizations and proposing proper mitigation measures			
	3.1.4 "Environmental baseline assessment" shall mean an assessment that are carried out during the preparation of a feasibility study, design and drawing of any projects and formulation of national, regional and sector development programs and plans in order to establish the existing conditions and state of nature and environment of the territory, in which the proposed projects, programs and plans are to be implemented and to identify any environmental considerations that the project, programs, plans and policies need to incorporate.			
Key element (7)	There is no explicit reference to "identification of impacts on physical/cultural resources" in the legal framework. All potential references to physical and cultural resource impacts are implicit.	Partial I	Equivalence.	The proposed regulation on "EIA Procedures" will
Identify impacts on physical cultural resources	Article 8.4.9 requires that the following be dealt with in a DEIA: "Other issues pertaining to the cultural stratum and special nature of the project".			require the identification of physical/cultural resource impacts.

(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence	Recommended Gap-filling Measures
Key element (8)	The following articles are relevant:	Full Equivalence.	None required.
Identify impacts in the context of the project's	8.3. The authorized legal entity shall prepare a report presenting the findings of the detailed environmental impact assessment and develop an environmental management plan.		
area of influence	8.4. The Detailed Environmental Impact Assessment Report shall include the following:		
	8.4.1. The baseline data and indicators of the environment in which the project is proposed to be implemented;		
	8.4.2 Estimations and findings of studies that are conducted to identify a potential and the major negative impact of the project and establish their magnitude, spatial extent and consequences.		
	8.4.3 Recommendations for measures to mitigate and eliminate potential and the major impact of the project;		
Key element (9)	There is no explicit reference to "assessment of trans-boundary impacts" in the legal framework. All potential references to trans-boundary impacts are implicit.	Partial Equivalence.	The proposed regulation on "EIA Procedures" will
Assess potential trans-	The following articles are relevant:		require the assessment of
boundary impacts	2.2. If an international treaty to which Mongolia is a signatory provides otherwise, then the provisions of the international treaty shall prevail.		trans-boundary impacts.
	6.2.1 The state central administrative organization in charge of nature and environment shall conduct the assessment specified in Article 3.1.5 to analyze the effects on a region and basin from various projects implemented by individuals and business entities with due inputs from a licensed professional entity.		
Key element (10)	Assessment of potential global impacts such as might be associated with climate change are touched on in the following articles:	Full Equivalence.	None required.
Assess potential global impacts, including climate change	3.1.3 "Strategic environmental assessment" (hereinafter referred to as strategic assessment) shall mean the identification, in the process of preparing national, regional and sectoral policies, development programs and plans that are to be endorsed by the Parliament and Government, and, in the context of impending nature and climatic changes, of potential risks, adverse impacts and consequences of actions to be taken in accordance with those policies, programs and plans on the environment, society and human health;		
	3.1.4 "Environmental baseline assessment" shall mean an assessment that are carried out during the preparation of a feasibility study, design and drawing of any projects and formulation of national, regional and sector development programs and plans in order to establish the existing conditions and state of nature and environment of the territory, in which the proposed projects, programs and plans are to be implemented and to identify any environmental considerations that the project, programs, plans and policies need to incorporate;		
	3.1.5 "Cumulative impact assessment" shall mean the analysis of all effects with regard to		

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(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence	Recommended Gap-filling Measures
	human health, both combined and duplicate, on a particular area and basin and the environment from various projects implemented by individuals, business entities, and organizations and proposing proper mitigation measures.		
Key element (11)	See above mentioned provisions related to SEA.	Full Equivalence.	None required.
Use strategic environmental assessment			
	ine alternatives to the project's location, design, technology, and components and their potential particular alternative proposed. Also consider the no-project alternative.	al environmental and socia	al impacts and document the
Key element (1) Examine alternatives to the project's location, design, technology.	The issue of alternatives is not dealt with in the draft EIA Law.	No equivalence	The proposed regulation on "EIA Procedures" will specify the need to consider alternatives
Key element (2) Consider the no-project alternative	The issue of alternatives is not dealt with in the draft EIA Law.	No equivalence	The proposed regulation on "EIA Procedures" will specify the need to consider the no-project alternative.
and management. Preparelated institutional or or	and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhanare an environmental management plan (EMP) that includes the proposed mitigation measures, ganizational arrangements, capacity development and training measures, implementation schereparation include mitigation of potential adverse impacts to the level of no significant harm to third	environmental monitoring dule, cost estimates, and	and reporting requirements, performance indicators. Key
Key element (1)	Article 8 deals with Detailed EIA (ie "full" EIA).	Full equivalence	None required.
Avoid, and where	Article 8.4 states that:		
avoidance is not	"The Detailed Environmental Impact Assessment Report shall include the following:		
possible, minimize, mitigate, and/or offset adverse impacts and	8.4.3 Recommendations for measures to mitigate and eliminate potential and the major impact of the project".		
enhance positive	In addition, with respect to "offsetting adverse impacts", section6.1.3 states that:		
impacts by means of environmental planning and management	"The project implementer shall initiate a study for ex-situ biodiversity conservation with due inputs from professional and research institutions".		
Key element (2) Prepare an	Article 9 ("Environmental Management Plan") deals with procedures for developing EMPs, which would include Environmental Protection Plans, and Environmental Monitoring Programmes.	Partial equivalence	The mandate to produce EMPs exists in Article 9. Specific contents required
environmental	Specific Key Elements, such as: the proposed mitigation measures, environmental monitoring		

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(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence	Recommended Gap-filling Measures
management plan (EMP)	and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators are not necessarily discussed in Article 9.		will be elaborated in the "EIA Procedures" regulation.
stakeholders, including a known to and understood	y out meaningful consultation with affected people and facilitate their informed participation. ffected people and concerned nongovernment organizations, early in the project preparation proced by decision makers and taken into account. Continue consultations with stakeholders throughout assessment. Establish a grievance redress mechanism to receive and facilitate resolution of the a erformance.	ess and ensure that their v project implementation as	iews and concerns are made necessary to address issues
Key element (1)	Article 17 deals with public participation in the process of EIA.	Full equivalence	None required
Carry out meaningful	Article 17.4 states:		
consultation with affected people and facilitate their informed participation	"It is the responsibility of the legal entity performing the detailed environmental impact assessment to organize, at the report preparation stage, consultations with and formally seek comments from the local authority, the community that is likely to be affected by the project and local residents living in the area where the proposed project is going to be implemented".		
	Article 8.4.8 states that:		
	"Notes of consultations made with the local authority and the community likely to be affected by the proposed project should be included in the detailed EIA report."		
Key element (2) Ensure women's participation in consultation	No specific mention is made of women's participation in EIA consultation processes.	No equivalence	Specific direction will be provided on participation of women in the EIA process in the proposed "Public Participation" regulation.
Key element (3) Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process.	No specific mention is made of the scheduling of participation at different points of the EIA process	No equivalence	The proposed "Public Participation" regulation will outline specific consultation points during the EIA process. This will be cross-referenced to the "EIA Procedures" regulation.
Key element (4) Establish a grievance redress mechanism	No mention is made of the need for project-level grievance mechanisms	No equivalence	Articles relating to project- level grievance mechanisms will be inserted into the "EIA

			, · · · · · · · · · · · · · · · · · · ·
(A)	(B)	(C)	(D)
ADB Safeguard Policy Statement	Corresponding Legal Provisions of the draft of the Law on EIA 54	Extent of Equivalence 55	Recommended Gap-filling Measures
			Procedures" regulation.
	se a draft environmental assessment (including the EMP) in a timely manner, before project appraised people and other stakeholders. Disclose the final environmental assessment, and its updates if ar		
Key element (1) Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place.	Article 17.1 states: "The state central administrative organization in charge of nature and environment shall make public via its website information regarding the development programs and plans that are subject to a strategic assessment and the projects that have undergone an environmental impact assessment". Article14.1.2 states: "To report, within the established deadline, the implementation status of the environmental management plan to the local community, local authority, affected parties and the relevant state central organization".	Partial equivalence	The proposed "Public Participation" regulation and the proposed "EIA Procedures" regulation will both present directions for disclosure of draft environmental assessment documents prior to appraisal by the Technical Board.
Key element (2) Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders	No mention is made of the need to disclose the final environmental impact assessment.	No equivalence	The proposed "Public Participation" regulation and the proposed "EIA Procedures" regulation will both present directions for disclosure of final environmental assessment documents.
Policy Principle 7: Implementation	nent the EMP and monitor its effectiveness. Document monitoring results, including the developmen	nt and implementation of co	prrective actions, and disclose
Key element (1) Implement the EMP and monitor its effectiveness.	Article 9.10 states: "Local rangers, state environmental inspectors, governors of all levels, the relevant state central administrative organization and non-governmental organizations shall monitor the implementation of the environmental management plan and the mine closure management plan".	Full equivalence	None required.
Key element (2) Document monitoring results, including the development and implementation of	Article 9.11 states: "If necessary, the entity that has performed the general environmental impact assessment may require that an independent review be commissioned at the expense of the project implementer to review the project's performance in the implementation of environmental management plan and restoration measures and based on the findings of the monitoring referred to in Article 9.10".	Partial equivalence	Directions for documentation and disclosure of monitoring results/reports will be included in the proposed "EIA Procedures"

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(A) ADB Safeguard Policy Statement	(B) Corresponding Legal Provisions of the draft of the Law on EIA ⁵⁴	(C) Extent of Equivalence 55	(D) Recommended Gap-filling Measures	
corrective actions, and disclose monitoring reports.	Article 9.5.2 states: The Environmental Monitoring Program shall address the monitoring and analysis of changes made to the state of environment as a result of the project activity and shall clarify reporting requirements and the ways to implement the plan as well as providing the timeline and estimated budget".		regulation.	
to function, (ii) there is no within a legally protected significant conversion or	implement project activities in areas of critical habitats, unless (i) there are no measurable adverse reduction in the population of any recognized endangered or critically endangered species, and (iii area, implement additional programs to promote and enhance the conservation aims of the protect degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantial is appropriately mitigated. Use a precautionary approach to the use, development, and management	 i) any lesser impacts are med area. In an area of natustantially outweigh the environment. 	itigated. If a project is located ral habitats, there must be no ronmental costs, and (iii) any	
	The draft EIA Law makes no principle-based statements about environmental protection. It is entirely process-focused. The Law on Environmental Protection (1995) deals with critical habitat issues to some extent.	No equivalence	The proposed "EIA Procedures" regulation will mention the need to assess the impact of development projects on critical habitats. Direction will also be given in relation to environmental management planning.	
such as the World Bank avoidance is not possible generation, and release	pollution prevention and control technologies and practices consistent with international good prace Group's Environmental, Health and Safety Guidelines. Adopt cleaner production processes and go le, minimize or control the intensity or load of pollutant emissions and discharges, including dof hazardous materials from their production, transportation, handling, and storage. Avoid the use e, and manage pesticides based on integrated pest management approaches and reduce reliance of	od energy efficiency practi irect and indirect greenho of hazardous materials su	ces. Avoid pollution, or, when use gases emissions, waste ubject to international bans or	
Key element (1) Apply pollution prevention and control technologies and practices consistent with international good practices.	Article 8.4.4 states that a Detailed Environmental Impact Assessment report shall include the following: "Recommendations for alternative methods and technology that may potentially reduce the pollution level expected from the proposed project and for environmentally-friendly method and technology".	Full equivalence	None required.	
Policy Principle 10: Provi response measures to av	Policy Principle 10: Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and esponse measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.			
	Requirements for SEA, CIA, and EIA, all call for assessment of potential impact on human health. Article 8.4.5 states:	Partial equivalence	The "EIA Procedures" regulation will include	

(A) ADB Safeguard Policy Statement	(B) Corresponding Legal Provisions of the draft of the Law on EIA ⁵⁴	(C) Extent of Equivalence	(D) Recommended Gap-filling Measures
	"Risk assessment of impacts of the proposed project on human health and environment if the general environmental impact assessment requires doing so".		directions on environmental management planning. EMPs could include information on providing safe and healthy working conditions.
Policy Principle 11: Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.			
	The draft EIA Law does not mention the need to conserve physical cultural resources.		The "EIA Procedures" regulation will include directions on environmental management planning. EMPs could include information on conserving physical cultural resources.