PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT/CREDIT

IN THE AMOUNT OF SDR 5.72 MILLION

TO

MONGOLIA

FOR A

MINING SECTOR INSTITUTIONAL STRENGTHENING TECHNICAL ASSISTANCE PROJECT

May 28, 2008

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CURRENCY EQUIVALENTS
Exchange Rate Effective April 30 2008

Currency Unit  =  Tugrug (MNT)
SDR  =  US$1.62976
US$  =  SDR 0.61358
1 MNT  =  US$0.00008583
1 US$  =  MNT 1,165.0

FISCAL YEAR
January 1  -  December 31

ABBREVIATIONS AND ACRONYMS
ADB  Asian Development Bank
ASM  Artisanal and Small-scale Mining
AusAID  Australian Agency for International Development
CAS  Country Assistance Strategy
EBRD  European Bank for Reconstruction and Development
EIA  Environmental Impact Assessment
EITI  Extractive Industries Transparency Initiative
Erdenes  Erdenes MGL LLC, Holding Company for State Equity
FDI  Foreign Direct Investment
GAP  Governance Assistance Project
GDP  Gross Domestic Product
GDNT  General Department of National Taxation
GMIA  Geological and Mining Inspection Agency
GTZ  define
HIES-LSMS  Household Living Standards Survey
IDA  International Development Association
IEC  Information, Education, and Communication
JSDF  Japanese Social Development Fund
MoF  Ministry of Finance
MoFE  Ministry of Fuel and Energy
MoIT  Ministry of Industry and Trade
MoNE  Ministry of Nature and Environment
MRPAM  Mineral Resources and Petroleum Authority of Mongolia
NDS  National Development Strategy
PDO  Project Development Objective
PIU  Project Implementation Unit
PPIAF  Public Private Infrastructure Advisory Facility
SDC  Swiss Agency for Development Cooperation
SESA  Strategic Environmental and Social Assessment
SSIA  State Specialized Inspection Agency

Vice Presidents (EAP/SDN): James Adams/Katherine Sierra
Country Director: David Dollar
Country Manager: Arshad Sayed
Sector Manager: Paulo De Sa
Task Team Leader: Graeme Hancock
# MONGOLIA
Mining Sector Institutional Strengthening Technical Assistance Project

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MONGOLIA

MINING SECTOR INSTITUTIONAL STRENGTHENING
TECHNICAL ASSISTANCE PROJECT

PROJECT APPRAISAL DOCUMENT

EAST ASIA AND PACIFIC

COCPO

Date: May 28, 2008
Country Director: David Dollar
Sector Manager/Director: Paulo De Sa

Team Leader: Graeme Eric Hancock
Sectors: Mining and other extractive (60%);
Central government administration (40%)
Themes: Macroeconomic management
(P); Other financial and private sector
development (P); Public expenditure, financial
management and procurement (S); Tax policy
and administration (S)

Environmental screening category: Partial
Assessment

Project ID: P108768

Lending Instrument: Technical Assistance
Loan

Project Financing Data

[ ] Loan [X] Credit [X] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 9.30

Proposed terms: The IDA Financing consists of a grant and a credit in the following amounts:
(a) an amount equivalent to two million five hundred seventy thousand Special Drawing Rights
(SDR 2,570,000) (“Grant”); and
(b) an amount equivalent to three million one hundred and fifty thousand Special Drawing Rights
(SDR 3,150,000) (“Credit”).

The Maximum Commitment Charge Rate payable by the Recipient on the Unwithdrawn
Financing Balance shall be one-half of one percent (1/2 of 1%) per annum. The Service Charge
payable by the Recipient on the Withdrawn Credit Balance shall be equal to three-fourths of one
percent (3/4 of 1%) per annum. The Payment Dates are March 15 and September 15 in each
year and the principal amount of the Credit shall be repaid commencing September 15, 2018 and
ending March 15, 2048. The Payment Currency is United States Dollar.

Financing Plan (US$m)

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<th>Source</th>
<th>Local</th>
<th>Foreign</th>
<th>Total</th>
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<tr>
<td>BORROWER/RECIPIENT</td>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>0.00</td>
<td>9.30</td>
<td>9.30</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>9.30</td>
<td>10.30</td>
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Project development objective  Ref. PAD II.C., Technical Annex 3
The project development objective (PDO) for this first phase of support is to assist the Government to develop further the policy, fiscal, legal, regulatory and institutional framework for the mining and extractive sector that meets the needs of government, industry, and civil society. This includes the operation of Erdenes MGL LLC according to good international practice associated with a commercial entity.

Project description [one-sentence summary of each component]  Ref. PAD II.D., Technical Annex 4
The Project consists of four components: (a) Strengthening the Capacity to Manage Mining Revenues and Develop Economic and Sector Policies, (b) Improving Regulatory Capacity to Manage Mining Sector Development, (c) Developing the Capacity for Management of State Equity and (d) Project Management. In addition, there will be a parallel but closely linked activity, the Southern Mongolia Regional Infrastructure Strategy funded by the Public-Private
Infrastructure Advisory Facility (PPIAF) and AusAID. The Project concept includes support for activities in four main agencies: Ministry of Finance (MoF), the General Department of National Taxation (GDNT), the Ministry of Industry and Trade (MoIT) and the Mineral Resources and Petroleum Authority of Mongolia (MRPAM). In addition there will be collaboration with the Ministry of Nature and Environment (MoNE). Project assistance would address a range of issues across these agencies, including development of mining sector policy and strategy; review of the institutional framework for mining; establishment of a proper legal and regulatory regime for mining, including the need for the Government to introduce a robust mechanism for the promulgation of regulations by Cabinet; management of macroeconomic impacts of large mining sector developments, including improved minerals sector tax collection and audit capacity; clarification and improvements in minerals sector benefit distribution; and capacity building for management of environmental and social impacts of mining (including artisanal and small-scale mining). A core focus of all Project activities will be the development of human resources capacity within Government agencies.

Which safeguard policies are triggered, if any? *Ref. PAD IV.F., Technical Annex 10*

The project has been classified by the World Bank as Category B as defined in the Bank’s Operational Policy 4.01 on Environmental Assessment. As technical assistance, the proposed Project will not finance any direct exploration or exploitation of mineral resources. However, the Project is being implemented in a sector which can have significant environmental and social impacts. An initial review of key environmental issues in the mining sector has been prepared which found that the environmental problems associated with mining in Mongolia relate primarily to pollution management and physical disruption of pasture lands and water resources by both artisanal and larger mining operations. The review found that there are a number of weaknesses in the regulatory framework including the lack of a Socioeconomic Impact Assessment, limited enforcement of sanctions for non-compliance with environmental requirements, lack of an ASM legal and regulatory framework and fragmented and poorly coordinated institutional arrangements. Existing communities bear most of the risks but receive little of the benefits such as mining-related employment. The review identified institutional strengthening measures and other actions to improve mining sector environmental protection and social mitigation. Further measures may also be identified through the overall mining sector institutional assessment to be undertaken with support from this project and through a Strategic Environmental and Social Assessment (SESA).

Significant, non-standard conditions, if any, for: *Ref. PAD III.F.*

Board presentation:
None

Loan/credit effectiveness:
- An inter-ministerial Project Steering Committee, chaired by the State Secretary of Finance or his alternate, and comprised of senior representatives from MOF, MIT, MNE, MRPAM, GDNT, SPC, Erdenes MGL LLC and the PIU’s Project Manager, has been established;
- A Project Director has been selected and appointed from within the membership of the Project Steering Committee by the State Secretary for Finance;
- The establishment of a PIU within the MoF, including appointment of the Project Manager,
Procurement Specialist, and Financial Officer under terms of reference, experience, and qualifications satisfactory to IDA;

- Preparation and adoption by MoF of a Project Implementation Manual satisfactory to IDA;
- Preparation by MoF of a financial management manual for IDA financed expenditures with a Project Financial Management system and reporting formats satisfactory to IDA;

Covenants applicable to project implementation:

- Not later than August 15 each year, commencing on August 15, 2009, the PIU will furnish to the Steering Committee and the Association for review and concurrence, a draft Annual Implementation Plan for the following fiscal year, which plan shall identify Project activities by component and sub-component, and their related expenditures and financing sources, and thereafter, implement the Project activities during the respective fiscal year pursuant to such plan as so discussed with, and agreed by, the Steering Committee and the Association.
- Not later than March 31, 2009, the Government will select and engage the services of an external, independent auditor for the Project under terms of reference and with experience and qualifications acceptable to IDA.
- MRPAM will develop a set of draft model contracts for the extractive industries by January 31, 2010 for discussion with IDA and finalization by March 31, 2010;
- MoF will complete the mining sector institutional assessment study, discussion of findings and recommendations with IDA by June 30, 2010 and implementation of recommendations thereafter;
- By June 30, 2010 Erdenes will be established and have adopted corporate systems, legal framework and structure acceptable to the Association, consistent with those of a commercial entity operating under OECD Principles of Corporate Governance;
- By June 30, 2010 Erdenes will publicly disclose quarterly activity reports and annual reports documenting the company’s activities, financial condition including audited financial statements (income statements, balance sheet and sources and uses of funds) in a manner and substance consistent with the reporting requirements prevailing for stock exchange listed companies in Mongolia;
- By June 30, 2010, Erdenes MGL LLC will complete preparation of a strategy and implementation plan for the listing of shares of the company on the Mongolian Stock Exchange pursuant to Clause 5.6 of the Minerals Law, 2006.
I. STRATEGIC CONTEXT AND RATIONALE

A. Country and Sector Issues

1. **Background.** Mongolia has managed the transition from a centrally planned socialist economy to a market economy well. Since 1990 it has made good progress in undertaking fundamental economic reforms centered on price liberalization, privatization, and the establishment of market institutions. Despite early losses in GDP during the early to mid 1990s with the withdrawal of subsidies from the Russian Government, the benefits of the reform efforts can now be seen in the growth performance of the Mongolian economy and the accompanying structural changes in the economy.

2. **Development Challenges.** However, formidable challenges remain in managing Mongolia’s “tyrannies of distance and isolation,” delivering services equitably and cost effectively, and generating broad-based growth with jobs and income for Mongolians living in rural and urban areas, especially the poor. Mongolia’s heavy dependence on the exports of a few key commodities—copper, gold, and cashmere—has made the economy particularly vulnerable to fluctuations in commodity prices and natural disasters. This makes it all the more urgent to ensure that Mongolia makes best use of the ongoing commodity boom period to meet its poverty alleviation and development goals most effectively. The country faces the challenge of creating economic opportunities for its rural population and urban unemployed in an economy whose GDP growth over the next few years will depend largely on the mining sector, which traditionally has been an enclave activity in Mongolia as in most countries and, given its capital-intensive nature, does not create much direct employment. Meanwhile, progress in reducing maternal mortality rates, as well as in improving water and sanitation services, has been insufficient to meet the Millennium Development Goals. The recent World Bank Poverty Assessment (2006) for Mongolia found that rural herder households had the highest incidence of poverty (41.2 percent). A 2002 analysis of household survey data found that the most pressing poverty challenges in Mongolia are related to widespread livestock mortality risks, attrition before upper secondary schooling, and the burden of heating costs on households.¹

3. **Mining’s Contribution to the Economy.** Mining is a major and increasing contributor to the economy. Historic output is largely copper, gold, coal and fluorspar, with most production coming from the majority state-owned Erdenet copper mining company, which earns about half of all foreign exchange and provides almost 25 percent of government revenues. Most gold production has historically come from small-scale placer (alluvial) operations. But this changed following the commencement of commercial scale hard rock gold mining at Boroo in 2003 and production from newly commissioned private sector mines increased gold production substantially in 2004 and 2005 to an annual level of around 24,000 kilograms (kg) compared to about 5,000 kg previously. In 2007, mining directly accounted for about 20 percent of real GDP (at 2005 constant prices), 56 percent of gross industrial output, 69 percent of exports, and 36 percent of government revenue. The economy grew at 9.9 percent in 2007 up from 8.6 percent in 2006 and 7.3 percent in 2005. A significant proportion of the GDP growth attributable to the mining sector has to a large extent offset some declines in other sectors including agriculture.

¹ A new HIES-LSMS is currently underway as a result of which more recent poverty estimates will become available towards the end of 2008.
The formal mining sector employs over 14,500 people and informal/artisanal mining involves four to five times this number.

4. **Large-scale Mining.** Mongolia’s mineral potential is extensive, with over 6,000 mineral occurrences comprising 80 different mineral commodities currently identified, the most significant of which being base metals (mainly copper and zinc), gold, coal, uranium, and fluorspar. Following the passage of the Mineral Law of 1997 investment in mineral exploration has risen dramatically. Foreign direct investment (FDI) in mineral and petroleum exploration and development was US$148 million in 2004 and US$191 million in 2005, of which US$40 million was for grass roots exploration. FDI for the sector constituted 68 percent of total FDI for 2005. The boom in exploration has resulted in the discovery of an impressive pipeline of potential world class mineral projects including Oyu Tolgoi (copper and gold) and Tavan Tolgoi (coal) in the South Gobi as well as Tsagaan Suvraga (copper and molybdenum), Tumurtei (iron ore), Ulaan (lead and zinc), Gatsuurt (gold), and Golden Hills (gold). The mining sector has the potential to increase output substantially over the next decade and is projected to double or even triple from 2005 levels by 2010 if the Oyu Tolgoi and Tavan Tolgoi projects receive development approvals and are successfully brought into production. An investment of over US$5 billion will be required just for these two projects which is twice the GDP of the country.

5. **Artisanal and Small-scale Mining (ASM).** There were an estimated 67,000 full time and part time artisanal and small-scale miners in Mongolia in 2007. ASM gold production in 2007 has been estimated by the Swiss Agency for Development and Cooperation (SDC)-supported Sustainable Artisanal Mining Project at 5,200 kg with an estimated value of US$140 million. After agriculture, ASM is the largest generator of rural incomes, supporting an estimated 250,000 people, including the miners and their extended family members. Thus, close to 10 percent of the population derive direct or indirect cash benefits from ASM. However, income benefits from the sector must be balanced against potentially high environmental and community health costs. The ASM miners generally have low levels of understanding of mining risks, engage in unsafe mining practices, and liberally use mercury and occasionally cyanide (for gold extraction) without understanding the risks for their own health and the natural environment.

6. **Challenges in the Mining Sector.** Mongolia’s mining sector has the potential to contribute significantly to economic growth and to provide revenues to help address the poverty alleviation and development challenges noted above. Indeed, Mongolia is on the verge of a major minerals investment boom with final approvals and negotiations presently taking place for investments in excess of US$5 billion. However, this raises the challenges of sound overall macroeconomic management in the face of volatile commodity prices and risks of “Dutch disease”. The existing industry has greatly benefited from the world commodities price boom which is now in its third year, and is likely to be sustained for some time to come. Meanwhile, tax revenues have not increased as anticipated due to a variety of reasons including, significant under-pricing of coal exports for tax avoidance purposes. In fact, some companies are reporting coal sales export prices that are a small fraction of prevailing world market prices while other mining companies are simply holding back from selling their gold production to the Central Bank (which is required by Mongolian law) and borrowing against them as collateral. With the lack of clarity in intergovernmental fiscal arrangements, there is a mis-match of revenue and spending authority at the sub-national levels of Government. As a result, sub-national governments (aimags and soums) lack adequate funds to deal with the increasing pressure for
basic service delivery and essential infrastructure as mining developments take place. In addition, there are gaps in environmental protection regulations and no provision for mandatory social impact assessments. The state is planning to take an equity participation in new “strategic” mining projects but lacks a guiding policy. The equity will be held by a state holding company — Erdenes MGL LLC (Erdenes) — which has only recently been established and its management systems need to be put in place. Licensing lacks transparency and can be subject to discretionary actions. There is a wealth of geological data but it is not suitably formatted to be readily available and usable by interested investors or widely disseminated for analyses. Artisanal and small-scale mining (ASM) are widespread but for the most part informal and illegal with poor health, safety and environmental practices. Thus, the successful future development of the sector will to a large extent depend on the government's ability to establish and maintain an effective regulatory and fiscal framework, prudently and transparently manage its mineral wealth to the benefit of all of its population, and ensure sound environmental and social performance of the sector.

7. **Governance Context.** According to Transparency International and the World Bank’s Governance Indicators, perceptions of corruption in Mongolia have worsened substantially since 2001, and perceptions of corruption as an obstacle to growth are more widespread in Mongolia than in a number of comparator countries. The 2006 World Bank Investment Climate Survey results suggest that corruption in Mongolia may be a symptom of rising inequalities, stemming from perceptions of lack of transparency and accountability in the public sector. The survey results indicate that unofficial payments required for obtaining exploration and mining licenses were high, and estimated at around 40 percent of the official fees. Twenty-six percent of firms reported being required to pay bribes to obtain access to electricity, water, and/or communications infrastructure. Mongolia’s ranking in the latest World Bank Governance Indicators (2008) has also fallen relative to other countries as compared to 2007 rankings. Mongolia is one of the twenty-six Country Governance and Anti-Corruption (CGAC) pilot countries in the World Bank. In that regard, a Governance Assessment involving diagnostic work, civic consultation, and stakeholder dialogue is currently underway including a focus on the mining sector. Additional details of the governance context of Mongolia are provided in Annex 11.

8. **Anti-Corruption Measures.** The recent passage of the anti-corruption legislation, the implementation of the Asset and Income Declaration requirements for senior government officials and Parliamentarians, and the adoption of the Extractive Industries Transparency Initiative (EITI) are commendable steps by the Government in the right direction. However, much remains to be done, and the Government has stated its intention to continue to strengthen its public sector governance capacity and implement the anti-corruption law effectively, and promote transparency in government-business interactions. The proposed Project will support the anti-corruption agenda through building effective policy and institutional capacity to manage mining revenue flows including through the further development and implementation of EITI. It will support the ongoing development of a transparent and efficient mineral licensing system as well as assist in the development of clearly articulated legislation and regulations relating to mining sector development and management, which are not subject to discretionary powers.

9. **Government Mining Sector Strategy.** The Government has prepared a draft Private Sector Development strategy, aimed at accelerating economic growth through export-oriented,
private sector driven economic development. This strategy highlights mining as a lead industry for private sector development. The strategy for large-scale mining is to encourage environmentally and socially sustainable mineral exploration, development, and production that contributes to economic development through exports and taxes. However, the Government has also recently adopted a strategy of mandatory State equity participation in mining. The Government's decision to take a 51 percent State equity at sites designated as "strategic deposits" such as Oyu Tolgoi and Tavan Tolgoi has stirred controversy internationally, having been viewed unfavorably by international investors. The Government holding company, Erdenes will need to mobilize US$2.5 billion or more as its share of these first two projects. The establishment of Erdenes provides an opportunity for the government to broaden ownership in the ownership of the mining industry by Mongolian people by listing part of the Erdenes equity on the Mongolian Stock Exchange which would not only mobilize capital for Erdenes but also enable ordinary Mongolians to own shares in Erdenes. To attract foreign investment with high technology and modern management resources in the mining sector, the Government needs to further develop and stabilize mining regulations that are responsive to investors' concerns, and implement an internationally competitive fiscal regime and a sound macroeconomic policy framework to effectively manage revenue from the sector.

10. **Strategy to Improve ASM.** The Government's strategy towards ASM has previously been to discourage the sector through banning the use of mercury and cyanide in an attempt to reduce the harmful health, safety, and environmental impacts. However, this has not proven effective and with today's high gold prices and increased incomes from ASM gold mining, ASM activities are rapidly expanding. In order to reduce the negative impact of the artisanal miners and develop small and medium sized commercial enterprises in the sector, the Government has recently approved a temporary regulation (with effect until 2015) aimed at coordinating artisanal mining activities and introduced a program so that ASM miners can develop micro-mining sector enterprises. The passage of the regulations for this program is the first step towards developing and improving the regulatory framework for artisanal miners leading to a systematic program of artisanal miner formalization. However, there is an ongoing and urgent need to pass enabling legislation and provide on-site training and extension services to support improved ASM mining practices and the adoption of new environmentally sound technologies, as well as training in environmental management and rehabilitation.

11. **Mining Sector Development Constraints.** The rapid escalation of mineral development activity in Mongolia at a time of a sustained boom in world commodity prices has resulted in some pushback by the State toward private sector-led development including the establishment of Erdenes (as noted in para 6) which is supported by a new Minerals Law that was passed in 2006. However the regulations to support the law and provide details of due process and standards for mineral licensing, occupational health and safety standards, and environmental and social guidelines have not yet been prepared or promulgated. New tax measures, including increased royalty rates and a windfall profits tax on gold and copper production, have also been introduced. These measures are having a distortionary effect, particularly on officially recorded gold production and export performance with the dramatic fall in gold sales to the Bank of Mongolia since the introduction of the tax, and a corresponding reduction in recorded production and government receipts.
12. **Potential Macroeconomic Impacts.** The pending development of Oyu Tolgoi and Tavan Tolgoi, both world class deposits located in the South Gobi, present the State with particular challenges. These developments will likely increase Mongolia’s mineral exports to over 90 percent of total exports, and tax receipts from the mining industry will likely exceed 50 percent of total tax receipts. In addition, these large new mining exports will also create large balance of payments surpluses which are likely to impact on the value of the Mongolian Tugrug which will need to be carefully managed. Recent engagement with the Government on the potential mining investment boom in Mongolia has primarily been on issues of policy and investment climate, and it is clear that the Government needs urgent assistance to manage the macro economic and physical development impacts of mining and to ensure that economic growth remains stable and the sector is effectively managed and monitored.

13. **Institutional Framework.** There is a growing recognition within the Government that the current institutional framework for mining sector management has developed in a fragmented manner and may not be the most efficient and effective. For example, for historical reasons the Mining Rescue Service is housed in the Ministry of Fuel and Energy (MoFE), while mining inspections are undertaken by the State Specialized Inspection Agency, and licensing administration and other technical responsibilities lies with the Mineral Resources and Petroleum Authority of Mongolia (MRPAM), which is currently in the Ministry of Industry and Trade (MoIT). The separation of functions means that specialist expertise is split between agencies making it difficult for mining sector technical development issues to be managed in a coherent manner and keep up with rapidly evolving mine technological developments. The Government is currently considering a number of functional re-organizations and in April 2008 announced a proposal to reduce the number of Ministries from 13 to 9. The proposal includes creating a Ministry of Mining and Natural Resources, which combines the current Ministries of Nature and Environment (MoNE), with the part of MoIT that is responsible for minerals mining and the part of MoFE that is responsible for coal mining. MRPAM’s technical expertise is expected to be folded into this new Ministry. The proposed support to MoIT/MRPAM under this Project can easily shift to the new Ministry if and when it is established.

14. **Key Areas for Support.** The Government anticipates that this proposed Mining Sector Institutional Strengthening Technical Assistance Project will make a contribution towards implementing both the large and small scale mining strategies of the Government. The proposed Project has been designed in close consultation with officials in various ministries and government agencies, who have identified several key risks and development needs, which are to be addressed by the proposed Project and are presented below.

**Macroeconomic Management, Policy Development and Economic Risk Mitigation:**

- Lack of a clear policy framework for managing mining revenues, associated risks from commodity price volatility, and their macroeconomic impacts;
- Lack of instruments to smooth revenue flows to the budget through upswings and downturns of commodity price cycles;
- Lack of effective and transparent process for mineral related revenue sharing between central government, aimags (districts), and soums (local level government);
- Lack of a set of consistent mining sector policies, fiscal framework, and deficiencies in mineral tax legislation;
- Missed opportunities for revenue collection from existing mining operations;
- Risk of investors engaging in speculative rather than productive activities;
- Fragmented and overlapping institutional framework for mining sector management;
- Lack of a State mineral investment policy and model investment agreements;
- Incomplete development of the Government holding company to manage state equity holdings;
- Lack of independent sector policy analysis and communication of policy initiatives for effective civil society consultation and engagement.

**Regulation, Control, and Environmental and Social Risk Mitigation:**

- Incomplete mining sector regulatory and policy frameworks to ensure that the large scale mining industry can be licensed, administered, and regulated in a fully effective manner;
- Absence of an ASM regulatory framework so that ASM activities can become formalized and the widespread use of unsafe and environmentally damaging ASM mining practices can be reduced through both regulatory requirements and outreach activities;
- Lack of standard procedures and guidelines that would ensure developers in the sector utilize best practices to address the occupational health and safety, environmental and social dimensions of mining;
- Lack of modern company reporting requirements;
- Lack of institutional capacities in the area of mining licensing, environmental and social protection, safety, and technical audit and compliance enforcement;
- Lack of transparency and accountability in the management of mining and exploration licenses;
- Outdated classification of mineral reserves and resources data;
- Underdeveloped digital geological information systems for investors to use, which currently cover a very limited range of information types.

**B. Rationale for Bank Involvement**

15. **Bank Support for the Sector.** The Bank has been engaged with and supporting the development of the regulatory framework in Mongolia for private sector-led mining sector exploration and development for more than 10 years. During this time the focus of activities has been largely on establishing the initial legislative and fiscal regimes to apply to mining and supporting work on improving the efficiency of State-owned coal mining operations at Baganuur near Ulaanbaatar. This work culminated in the passage of the 1997 Mineral Law and adoption of a reasonably competitive fiscal regime for the sector. This led to a rapid increase in private sector mineral exploration and mine development including the development of the Boroo gold mine and the discovery of the Oyu Tolgoi Copper deposit. However the government has reversed course in recent times and has taken initiatives that have reduced the competitiveness of the sector. The proposed Project will provide support for an orderly analysis of the impact of different policy initiatives on sector development so that the Government can carefully consider the implications of different options and how its actions compare to good international practice.

16. **Comparative Advantage.** IDA’s comparative advantage is its long-term engagement and depth of knowledge of Mongolia’s mining sector, combined with IDA’s international mining
sector experience and practice. IDA brings experience with mineral development and macroeconomic issues, as well as with regulatory, fiscal, and economic management, revenue sharing, community development, gender, social safeguards, the demand side of governance, and sustainable mining development aspects including international experience and good practice regarding the governance and development of the sector. Through engagement in public expenditure management, IDA is well-placed to advise the government how it can integrate mining sector reform with the broader macroeconomic and fiscal management issues and ensure that results are shared with other sectors. There are no other sources of assistance in Mongolia that have the potential to provide such broad, cross-sectoral impacts. Moreover, IDA’s involvement and value added in mining is recognized by other development partners in Mongolia who have confirmed that donors should work together in providing advice to the government on mining sector development and that the proposed Project fits well with overall donor activities and approaches for the mining sector.

C. Higher Level Objectives to Which the Project Contributes

17. **Higher Level Objective.** The proposed Project is seen as the first phase of a longer-term (in the order of 10 years) engagement to support the Government in this key sector. The higher level national development objective to which the Project contributes is to present to the Government options to improve the management of the mining industry and thereby to increase the mining industry’s contributions to the national budget so that the Government has additional financial means to address poverty, infrastructure, and human development issues in Mongolia.

18. **National Development Strategy.** The proposed Project is in line with the Government’s National Development Strategy (NDS). Key elements of the NDS include good governance, export-driven economic growth (focusing on sectors in which Mongolia has a comparative advantage such as mining), rural development, poverty reduction, and empowerment through human resource development, with priority on pro-poor expenditures. By focusing on the mining sector, where Mongolia has a clear comparative advantage, and on helping improve governance and development outcomes from the sector, the Project is well aligned with the NDS.

19. **Rural Livelihoods.** For the rural population of Mongolia, the Project will support the government to address health, safety and environmental issues associated with ASM and help to improve rural livelihoods and welfare through the development ASM that is legitimate, effectively regulated, and environmentally sustainable. The support for ASM-related rural livelihoods provided by this project complements the support for agriculture-related rural livelihoods being provided by the Sustainable Livelihoods project.

20. **EITI and Other Objectives.** The Extractive Industries Transparency Initiative (EITI) aims at improving the governance of mining revenues at the national level. The Government has taken significant steps to implement EITI and has prepared the first EITI Reconciliation Report on payments and receipts for the year 2006. The 2006 reconciliation report, which has been made public and discussed by civil society, has identified a number of discrepancies and weaknesses in the recording and reporting of mining industry receipts, and identified several areas for the Government to address to improve systems for future reconciliations. The Government is taking steps to determine the nature of the discrepancies and is preparing recommendations for actions to be taken prior to the next annual reconciliation. Preparations for
the 2007 reconciliation process are under way. The proposed Project will provide ongoing support for implementation of recommendations arising from the EITI findings into the future. The Project will also assist in this area through improving the legislation guiding mining sector taxation and work with the General Department of National Taxation (GDNT) to improve the quality of taxation audits of the sector. Other government objectives supported by the Project include (a) improving the investment climate of Mongolia through implementation of a sound policy, fiscal and regulatory environment; (b) improving the quality of geological data available to both Government, investors and the general public; (c) increasing public participation in decision making related to mining and infrastructure development at the Aimag and Soum levels.

21. **Country Assistance Strategy.** The World Bank is currently engaged in a dialogue with the Government on a Country Assistance Strategy (CAS) for the period 2008-2011. While the CAS will not be finalized until after the June 2008 elections, a key pillar of the proposed CAS is “enhancing the development benefits of the mining economy.” The proposed Project’s focus on identifying international good practice and presenting options to strengthen sector governance and economic management, improve sector management, and promote effective and socially and environmentally sustainable sector activities is in line with this proposed CAS pillar. The Project contributes to the proposed CAS pillar of improving rural livelihoods and environment by supporting mining communities to attain improved development outcomes from mining benefits and enhanced rural livelihoods and safety through improved ASM activities. Since mining is, and will remain, a critical activity in Mongolia, priority attention to the sector is expected to continue after the elections. In addition, the Project will be closely linked and build on more general progress made under the ongoing Governance Assistance Project (GAP) which is providing Mongolia with support for overall governance and public expenditure reform in partnership with other donors including small components dealing with tax administration and development and introduction of a computerized mining cadastre.

II. **PROJECT DESCRIPTION**

A. **Lending Instrument**

22. **Lending Instrument.** The lending instrument is a Technical Assistance Grant/Credit blend comprising 45% grant and 55% credit reflecting the availability of IDA funds. A Technical Assistance operation was selected because the operation focuses on capacity building and institutional strengthening.

B. **Project Development Objective and Key Indicators**

23. **Project Development Objective.** The project development objective (PDO) for this first phase of support is to assist the Government to develop further the policy, fiscal, legal, regulatory and institutional framework for the mining and extractive sector that meets the needs of government, industry, and civil society. This includes the operation of Erdenes MGL LLC according to good international practice associated with a commercial entity. The primary target groups of this Project are the staff of the government regulatory and commercial agencies involved in managing the mining sector and the economy, as well as Members of Parliament, mining industry, and civil society stakeholders. **Table 1** outlines the PDO, expected outcomes and key indicators to track progress against expected outcomes. Further details are given in
Annex 3. The second and subsequent phases would make sure that conditions are in place to ensure the progress under this project is sustained and would inter alia address the effective use of mining-related funds especially by sub-national governments, scale up pilot assistance to be undertaken as part of this project to GDNT for tax assessments and audits and continue to build the capacity of sector agencies to enforce compliance with the regulatory framework. It would also build on initiatives under this project to improve the impacts of ASM and develop informed consultation with affected communities and other civil society groups regarding mining sector development and enable their participation in monitoring both mining sector environmental and social impacts and the outcomes of national, aimag and soum use of mining-related income.

<table>
<thead>
<tr>
<th>Targets</th>
<th>Key Indicators</th>
</tr>
</thead>
</table>
| The project development objective (PDO) for this first phase of support is to assist the Government to develop further the policy, fiscal, legal, regulatory and institutional framework for the mining and extractive sector that meets the needs of government, industry, and civil society. This includes the operation of Erdenes MGL LLC according to good international practice associated with a commercial entity. | • Annual budget decisions to replenish or withdraw from the newly established Sovereign Wealth Fund or other mineral revenue stabilization mechanism are made based on sound macro-economic criteria  
• Annual level of mining-related transfers from national government to aimag and soum authorities is known and disclosed publicly.  
• Pilot mining tax audits are completed and assessments raised.  
• Clear authority and responsibilities are specified for Government mining sector management institutions, especially regarding environmental and social aspects associated with mining activities.  
• Mineral licensing procedures are streamlined and processing times reduced.  
• Geological information is digitized and published and readily available in user-friendly digital formats.  
• Good practice internal management systems and public reporting procedures consistent with OECD Principles of Corporate Governance are established for the state equity holding company Erdenes MGL LLC |

<table>
<thead>
<tr>
<th>Expected Outcomes</th>
<th>Key Indicators</th>
</tr>
</thead>
</table>
| Improved effectiveness of key economic management institutions | • Sovereign Wealth Fund or alternative mineral revenue stabilization mechanism established  
• Preparation and adoption of good practice draft Model Mining Investment Agreements  
• Preparation, adoption and publication of a good practice policy statement on State equity participation in the mining sector  
• Establishment of a policy “Think Tank” in the Prime ministers Office which produces professional quality mining sector economic and policy reports |
| Improved effectiveness of key revenue collection agencies | • Income tax law on mining amendment and supporting regulations drafted, enacted, and implementation started  
• GDNT tax audit staff trained and competent to carry out mining company tax audits  
• Options study prepared based on review of Double Taxation Treaties |
| Improved effectiveness of key extractive industry sector institutions and improved management for ASM | • Modern Mining cadastre regulations are prepared, promulgated, implemented, and monitored  
• Modern company reporting requirements regulations are prepared, promulgated, implemented, and monitored  
• Modern occupation, health and safety regulations are prepared, promulgated, implemented, and monitored  
• Socioeconomic Impact Assessment and social mitigation provisions including resettlement and compensation regulations are prepared, promulgated, implemented, and monitored  
• Modern mine closure and post closure regulations are prepared, promulgated, implemented, and monitored |
C. Project Components

24. **The Project consists of four components:** (a) Strengthening the Capacity to Manage Mining Revenues and Develop Economic and Sector Policies, (b) Improving Regulatory Capacity to Manage Mining Sector Development, (c) Developing the Capacity for Management of State Equity, and (d) Project Management. In addition, there will be a parallel but closely linked activity, funded by the Public-Private Infrastructure Advisory Facility (PPIAF) and AusAID, to support the development of a Southern Mongolia Regional Infrastructure Strategy (**Annex 2**). The focus is on helping the Ministry of Finance, the Ministry of Industry and Trade, the Ministry of Fuel and Energy, and the Ministry of Roads, Transport and Tourism to prepare a number of option studies leading to the preparation of a strategic plan to integrate mining into the regional transport, energy and urban infrastructure in the South Gobi in anticipation of the Oyu Tolgoi and Tavan Tolgoi mines. The program will also examine the potential for public-private partnership agreements for infrastructure development. Other donor contributions, and in particular from EBRD, will support and deepen the project’s engagement with the Geological Information Centre of MRPAM by supporting the implementation of information systems, development of databases and digitization of geological information. Ongoing support from GTZ will broaden the engagement with MRPAM’s Mining Department to increase capacity building for mining company regulatory compliance. Summary information regarding the Project components is provided below, with more detail in **Annex 4**. Detailed costs information is included in **Annex 5**.

25. **Project Description.** The Project concept includes support for activities in four main agencies: Ministry of Finance (MoF), the General Department of National Taxation (GDNT), the Ministry of Industry and Trade (MoIT) and the Mineral Resources and Petroleum Authority of Mongolia (MRPAM). In addition there will be collaboration with the Ministry of Nature and Environment (MoNE). Project assistance would address a range of issues across these agencies, including development of mining sector policy and strategy; review and simplification of the institutional framework for mining; establishment of a modern legal and regulatory regime for mining, including the need for the Government to introduce a robust mechanism for the promulgation of regulations by Cabinet; management of macroeconomic impacts of large mining sector developments to reduce the potentially harmful impacts of commodity cycles and “dutch disease”, including improved minerals sector tax collection and audit capacity to ensure that taxes are properly assessed and paid; clarification and improvements in minerals sector benefit distribution so that mineral districts and mining communities are able to better share in the benefits of mining; and capacity building to minimize and mitigate the negative environmental and social impacts of mining (including artisanal and small-scale mining). Another core focus of all Project activities will be the development of human resources capacity within Government agencies which is needed for both shorter term and longer term effective administration of the sector. In addition to on-the-job training provided under each component, the Project will
support formal training programs as well as training workshops and participation in targeted learning events and conferences. The Project will also support study tours and staff twinning or secondment programs for government staff into counterpart agencies in other countries.

- **Component 1: Strengthening the Capacity to Manage Mining Revenues, and Develop Economic and Sector Policies (US$4.1 million).** The principal target group for this component is the staff of the MoF, MoIT MRPAM, Erdenes and GDNT. MoF, MoIT MRPAM and Erdenes will be provided with support to enhance capabilities of their staff to (a) prepare various mineral sector policies related to sustainable mining development, revenue sharing with sub national levels of government, state equity participation, minerals taxation and exploration; (b) carry out mineral sector financial planning and forecasting, (c) prepare model contracts and investment agreements for future projects; (d) establish a sector communications strategy to convey to civil society, investors and the political leadership the objectives, outcomes and policy initiatives resulting from the project; and (e) undertake a review of the institutional framework and responsibilities and authorities of the various government agencies engaged in mining sector management. GDNT will be provided support to (a) prepare new mining tax legislation; (b) carry out a review of Double Taxation Treaties; (c) receive training on mining taxation assessment techniques, including risk assessments; and (d) carry out full mining and petroleum project tax audits. In addition, there is currently a lack of independent, informed policy analysis and comment on the strategic directions being taken by the Government in the mining sector and the proposed Project will support establishment of an independent policy unit or “think tank” within the Prime Minister’s Department to undertake objective, expert analysis of government policy initiatives and foster informed debate on the policy directions being taken by the Government.

- **Component 2: Improving Regulatory Capacity to Manage Mining Sector Development (US$3.0 million).** The principal target group for this component is the staff of MoIT and MRPAM. This component will include five main activities: (a) support to MoIT and MRPAM to improve the legal and regulatory framework governing the sector especially regarding licensing, environmental protection, social mitigation and mineral sector institutional roles and responsibilities; (b) ongoing support to the cadastre office to complete the establishment and operation of a fully computerized mineral licensing system (i.e., cadastre) and completion of the cadastre regulations; (c) support to MRPAM and MoNE to further develop the regulatory frameworks for environmental and social management of large- and small-scale mining, including establishment of mine closure regulations and coordination and clarification of mineral sector institutional roles and responsibilities; (d) support staff development and capacity building for effective implementation to achieve improved mineral industry regulatory compliance based on the newly developed regulatory frameworks; (e) supplementing the assistance given by the Swiss Development Cooperation Small and Artisanal Mining Project to develop environmental training programs for operations and rehabilitation of ASM sites, support the formalization of the sector and outreach activities, including miner education and training, establishment of a database of artisanal and small-scale locations and miners; and (f) support to improve the management of mineral reserve and resource data, particularly with respect to strategic mineral deposits, develop an information management policy and support the development of systems for an
increase in the scale and scope of data digitizing of the very large stores of geological information.

- **Component 3: Developing the Capacity for Management of State Equity (US$1.4 million).** The principal target groups for this component are the management and staff of Erdenes and the staff of the MoF, MoIT and the State Property Commission who are building the capacity and institutional framework for the management of State mining sector equity holdings through Erdenes. The component will assist the Government to put in place the proper legal framework, governance and oversight structure, and financial and fiduciary arrangements for Erdenes consistent with the OECD Principles of Corporate Governance. This component will also support the training and development of the company’s Directors (including any independent Directors) and officers in international best practice with respect to corporate financial management and reporting arrangements and assist the company to prepare for listing on the Mongolian Stock Exchange pursuant to it’s obligations under Clause 5.6 of the Minerals Law 2006. The component will also assist Erdenes staff, management and Board with the provision of advice on investment strategies and project financing as well as technical training of staff on mineral project evaluation, feasibility studies, and financial modeling.

- **Component 4: Project Management (US$0.8 million).** The principal target group for this component is the Project Implementation Unit (PIU), which will be established in MoF. PIU staff will be supported to monitor, supervise, and provide technical and administrative assistance to the proposed Project. The Project will finance a Project Coordinator, Procurement Specialist, and Financial Management Specialist dedicated to the proposed Project. Ad-hoc international advisors may also be required from time to time to monitor implementation of specific specialist activities.

D. Lessons Learned and Reflected in the Project Design

26. **Lessons Learned.** Similar mining technical assistance projects have been and are being implemented in several other countries, with satisfactory or generally satisfactory ratings. Success has been achieved by taking a holistic, integrated approach to sector reform, with carefully and tightly designed components that have clear outputs and outcomes and integration of stakeholder concerns into project design, with an emphasis on engaging with civil society groups as a way to help achieve improved development outcomes from mining. The main lessons learned from such projects and reflected in this proposed Project include: (a) the requirement to establish a sector-specific focus with clear delineation of authority and responsibility of various ministries and agencies involved in the sector; (b) strong beneficiary participation in project preparation, organization, and coordination at the field level; (c) sustainability of project components built around institutional champions for different components; (d) strong ownership and political commitment to project objectives; and (e) effective communication of the project’s objectives and outcomes to civil society. The components proposed for support under the proposed Project were largely identified and scoped by staff from the various ministries and agencies involved in managing the sector.
E. Alternatives Considered and Reasons for Rejection

27. The first alternative considered was an investment operation. However, the Project is not focused on infrastructure investment, but rather on strategy, policy, and legal and regulatory framework issues including institutional strengthening, and capacity building. The second alternative considered was an Adaptable Program Lending (APL) instrument, recognizing the long term programmatic approach under consideration. However, given the dynamic and fluid nature of the Mongolian policy environment it was considered very difficult to establish specific triggers for subsequent phases of an APL with the necessary degree of confidence.

III. IMPLEMENTATION

A. Partnership Arrangements

28. **Memorandum of Understanding.** Project activities will be coordinated closely as part of the overall approach of development partners towards the sector—including the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the International Finance Corporation (IFC) and the World Bank who signed a joint Memorandum of Understanding (MOU) with the Government in April 2007. The objective of the MOU is to assist the Government to deal with mining sector development issues. The MOU focused on the following four areas of support: (a) assessment of the infrastructure needed for the development of the mining sector; (b) development of mining regulations and capacity building in government agencies; (c) assistance in the legal and institutional establishment of Erdenes and (d) advisory services in relation to the selection of strategic investors for the development of the strategic deposits. This Project supports objectives (b) (c) and (d). IDA is leveraging parallel PPIAF and AusAID trust funds of US$0.7 million to support objective (a).

29. **Development Partners Support.** In addition to the PPIAF and AusAID support noted above, preliminary discussions have indicated that the following development partners will be supporting this Project through parallel grant financing. This includes US$1.5 million from ADB, US$2.3 million from EBRD and US$5 million from GTZ of Germany. The donor community has agreed to coordinate activities with respect to mining sector engagement with the Government, and the Bank has offered to take the lead in ensuring that donor actions are complementary and avoid duplication. Initial discussions with donors have already resulted in the coordination of actions in support of the Geological Information Center which has made more of this project’s funding available for regulatory compliance measures and enhancing corporate governance in Erdenes.

30. **Artisanal and Small-scale Mining (ASM).** In the area of ASM, SDC is the main development partner, assisting with regulatory development, providing staff development and training for MRPAM’s ASM Division as well as logistical support for site visits and the preparation and publication of educational materials. The support for ASM under the proposed Project is complementary to SDC assistance. Several other development agencies are presently involved in supporting Mongolia particularly in the area of environmental management and training, mining safety and laboratory development, including the United Nations, the Netherlands and Germany (see Table 2). The Netherlands BNPP trust fund has a particularly important role with respect to this Project as it will support a World Bank managed Strategic
Environmental and Social Assessment (SESA) which will help identify mining sector environmental and social regulatory and policy gaps which the Project should address. During Project implementation opportunities will be identified to increase collaboration with interested development partners to enhance Project activities.

Table 2. Donor Activities Relevant to the Project

<table>
<thead>
<tr>
<th>Donor</th>
<th>Activity</th>
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<tbody>
<tr>
<td>World Bank</td>
<td>Sustainable Livelihoods Project</td>
</tr>
<tr>
<td></td>
<td>Mongolia Country Governance and Anti-Corruption assessment including a strong mining sector governance focus</td>
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<tr>
<td></td>
<td>Mongolia Governance Assistance Project (GAP) – Management of Public Finances</td>
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<td></td>
<td>GAP Project - Strengthening Tax Administration</td>
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<td></td>
<td>GAP Project - Mining Cadastre Computerization</td>
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<tr>
<td></td>
<td>PPIAF/AusAID Southern Mongolia Infrastructure Strategy</td>
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<tr>
<td></td>
<td>EITI Multi-donor Trust Fund</td>
</tr>
<tr>
<td>Netherlands</td>
<td>BNPP Netherlands Environment Project including Strategic Environmental and Social Assessment (World Bank Executed)</td>
</tr>
<tr>
<td>Swiss Development Cooperation</td>
<td>Sustainable Artisanal Mining Project and support for sustainable use of natural resources</td>
</tr>
<tr>
<td>EBRD</td>
<td>Project assessment training for Erdenes on strategic deposits plus preliminary advice regarding the holding company structure and corporate systems (under MoU); Training and data management development in the Geological Information Center.</td>
</tr>
<tr>
<td>IFC</td>
<td>Legal advice on holding company structure for the government shareholding in mining (under MoU)</td>
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<tr>
<td>ADB</td>
<td>Mining sector fiscal assessments for OT Investment Agreement and support in structuring of priority infrastructure and downstream projects; strategic advice on the mining sector fiscal issues and the framework for structuring projects, selecting strategic partners, and negotiating agreements related to the minerals assets of the Government; assistance to Erdenes with technical training and advice on company structure for government shareholdings in mining (under MOU)</td>
</tr>
<tr>
<td>Germany (GTZ/CIM)</td>
<td>Capacity building of Mining Inspectors in SSIA and technical capacity in the Mining Department of MRPAM; support for the central geological laboratory</td>
</tr>
<tr>
<td>WHO</td>
<td>Artisanal Mining areas environmental and health studies, and training and material support for clinical toxicology and environmental health risk assessment along with laboratory training and equipment</td>
</tr>
<tr>
<td>UNFPA</td>
<td>Mobile services to artisanal miners and unregistered migrants in 7 aimags and UB, educational materials on health, water and sanitation</td>
</tr>
<tr>
<td>WWF</td>
<td>Toxic chemicals and mining, training publications and advocacy</td>
</tr>
<tr>
<td>IMF</td>
<td>Advice on mining taxation and the Development Fund</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Assessment of environmental risks of mercury pollution in affected soums of the Selenge aimag</td>
</tr>
<tr>
<td>Australia</td>
<td>Joint Working Group on Mining and Energy Cooperation. Supporting Infrastructure development strategy in Southern Mongolia</td>
</tr>
<tr>
<td>Japan</td>
<td>Two-step loan for environmental protection</td>
</tr>
</tbody>
</table>
B. Institutional and Implementation Arrangements

31. **Implementing Role.** A Project Implementation Unit (PIU) will be established for the project in MoF which has prior experience in implementing World Bank projects and is presently responsible for implementing the GAP. The PIU will be responsible for overall Project coordination and management, including all fiduciary requirements. The PIU will provide substantial support to the each of the four Project beneficiary agencies to assist them in efficient and effective Project implementation. Responsibility for achievement of outputs and objectives of each of the Project components will rest with the management of each beneficiary agency. Four of the agencies to receive support, i.e., MoF, GDNT, MRPAM, MoIT, have the necessary capabilities and a demonstrated track record in project implementation as demonstrated under the ongoing GAP Project. Erdenes has no current track record being a newly created entity. The PIU for the proposed Project and the GAP PIU (both located in MoF) will coordinate closely and the new PIU will derive operational support from the GAP PIU during its early establishment and operations. The PIU will report to an inter-ministerial Steering Committee, which will be responsible for providing policy guidance and supervision of inputs and outputs during Project implementation. The Steering Committee will be comprised of senior representatives from each of the implementing and beneficiary agencies. Further details on implementation arrangements are provided in **Annex 6** and Project preparation and supervision arrangements in **Annex 12**.

C. Monitoring and Evaluation of Outcomes/Results

32. **Data Sources.** The PIU will prepare and issue quarterly and annual monitoring reports. Macro economic data will be provided to the PIU by the MoF and the Bank of Mongolia who will be the primary sources of information for monitoring and evaluation of macroeconomic performance and policy outputs. MoF will also report on development of the draft model investment agreements. GDNT will be the primary source of data on taxation matters and audit performance. MRPAM will prepare monitoring reports for components relating to regulatory development and mining cadastre office performance, ASM development issues, and geological data compilations and provide them to the PIU. In each of the agencies listed above, the project will support capacity building to establish baselines and enhance the quality of future monitoring and evaluation not only of the performance of the sector but also the impact of the mining sector on both the social and physical environment, and the broader economy. More details are provided in the Arrangements for Results Monitoring Table in **Annex 3**.

D. Sustainability

33. **Borrower Ownership and Commitment.** The Government has demonstrated strong commitment in the identification and preparation of the proposed Project. The request for assistance came directly to IDA from the Minister for Finance, who asked that IDA provide support to the Government to manage the macroeconomic impacts of mining revenues as well as address issues of sector regulatory development and management. The design of the Project components for the MoF, GDNT, and MRPAM has been based on initial submissions and extensive work with the management and staff of each institution, as a result of which there is very substantial ownership of and commitment to implementation of the components relevant to the respective institutions. In the case of MRPAM, the success of the ongoing GAP-funded cadastre development component provides positive indications that future activities will be well
received. Institutional champions for each component include the Chairman, MRPAM; the Vice Minister, MoIT; the State Secretary, MoF; and the Deputy Director of GDNT. MRPAM has already appointed a manager for Foreign Aid Coordination to work in close coordination with the Project and other government and donor agencies.

34. Inter-governmental Coordination. The Project will provide support for improved coordination relating to mining development between different Ministries in the Government, in particular, regarding the engagement of MRPAM and MoNE with mining companies, and in developing effective monitoring and evaluation arrangements for social impacts and the effectiveness of mining community social programs. Another area that the Project will support is working with MRPAM, MoF, MoIT and mining area local governments with the aim of establishing appropriate revenue sharing arrangements to ensure that the affected aimags (districts) and soums (local governments) have sufficient resources to respond to the increased demand for services and infrastructure that inevitably arise as a result of increased expectations and in-migration to mining areas as mineral deposits are developed. The Project will help establish monitoring arrangements regarding the use of funds that are channeled back to mining areas in order to ensure that aimags and soums deliver increased quality and quantity of social programs and service delivery. This will involve establishing a collaborative and effective working relationship between MRPAM staff and local government officials.

E. Critical Risks and Possible Controversial Aspects

35. Critical Risks. The project faces a number of critical risks which are outlined in Table 3 together with actions to mitigate them. Risks for the project remain substantial in that there remains a significant potential that, despite the assistance provided by the Project, major policy initiatives may be taken by Parliament or by Government which are contrary to international good practice. However, the mining sector is poised to become the single largest contributor to GDP and Government revenue, and absence of an effective regulatory and fiscal framework for mining sector regulation and revenue management poses an even greater and more immediate threat to the economic, environmental and social integrity of the country. There is a very high risk that if the industry is allowed to develop within the current regulatory vacuum, the likely results will be: 1) poor revenue collection and management; 2) declining public finance accountability and increasing corruption, particularly in the allocation of financial and access to natural resources; 3) progressively increasing economic distortions and contraction of non-mining related economic activity with increasing symptoms of Dutch disease; 4) poor and wasteful exploitation and operating practices; 5) poor health and safety outcomes; 6) social and cultural disintegration and conflict; and 7) a degraded physical environment. The potential contribution of the project in enhancing good governance of the sector and minimizing the negative social, physical and economic consequences of mining sector dependence outweigh the possible reputational risk to the Bank from being engaged in this controversial sector in Mongolia.
### Table 3. Critical Risks and Mitigation Measures

<table>
<thead>
<tr>
<th>Description of Risk</th>
<th>Mitigation Measures</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Country and Sector Level Risks</strong></td>
<td></td>
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<tr>
<td>Commitment to reform by Government is weakened by ad hoc policy and legislative changes at the Parliamentary level.</td>
<td>Project supports strong policy and legislative development program supported by independent think tank and communications program.</td>
<td>S</td>
</tr>
<tr>
<td>2008 General Election results in new policy direction and policy instability reducing the relevance of the project development objective.</td>
<td>The critical importance of the mining sector to economic growth will not change with the election. Government priorities for assistance may change and the project will be responsive to these changes. Project components are designed to remain relevant as much as possible in that they deal with long term issues and programs. The Project team will review the scope of the project with relevant officials following the establishment of the new government.</td>
<td>H</td>
</tr>
<tr>
<td>The implementation champions for some project sub-components within government agencies may change with a new Government after the 2008 elections.</td>
<td>The Project team will continue to liaise with government counterparts concerning Project design and implementation and identify new champions as required for each Project component and sub-component.</td>
<td>M</td>
</tr>
<tr>
<td>Corruption in mineral sector management poses a threat to implementation of modern licensing practices.</td>
<td>The Project supports regulatory development and the establishment of transparent systems for the management of mineral revenues and revenue sharing as well as transparent allocation of mineral rights through the Cadastre. The Project will also support ongoing development and implementation of EITI.</td>
<td>S</td>
</tr>
<tr>
<td>Increasing adoption of populist policies including social transfers and subsidies pose threats to long term sustainability of public expenditures and investment in infrastructure and services, particularly during periods of low commodity prices.</td>
<td>The Project will support development of a revenue stabilization scheme and informed macroeconomic policy formulation and build capacity in revenue forecasting and public expenditure planning.</td>
<td>H</td>
</tr>
<tr>
<td>Increasing economic nationalism and rising State control over economic enterprises in the mining sector pose threats to private sector development and investment climate unless the state is able to mobilize its share of the funding for new investments and its activities are transparent, independently managed, and take place on a level playing field with private investors.</td>
<td>The Project supports policy and institutional development in the sector including support to establish the guiding principles and corporate governance arrangements for the State nominee holding company Erdenes MGL LLC. The state equity participation policy will address the issue of how the government will raise the financing needed to fund its participation in new mining projects.</td>
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</tr>
<tr>
<td><strong>II. Operation-specific Risks</strong></td>
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</tr>
<tr>
<td>Implementation of sector legal and policy frameworks may be incomplete unless clear lines of authority and responsibility are established particularly with respect to environmental and social management and monitoring.</td>
<td>The Project will assist the Government to complete the legal and regulatory framework for mining sector development and engage in new policy development. It will use the outcomes of a Strategic Environmental and Social Assessment and institutional analysis to identify and resolve institutional gaps and overlaps and establish clear lines of institutional responsibility.</td>
<td>M</td>
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<tr>
<td>Investors may hold back from investing in billion dollar projects due to uncertainties created by recent policy shifts to increase investment climate issues will be addressed through policy dialogue and investment promotion to mitigate developing negative perceptions in the industry.</td>
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Government intervention and ownership in the industry. | Exploration promotion activities will be strengthened through increased availability of geological information through development of a geological and geochemical Geographic Information System.

State owned Mining Company Erdenes MGL LLC pursues non-transparent corporate model and business plan contrary to good international practice | The Project support to Erdenes MGL LLC addresses both management and governance arrangements. Continuation of support will be conditioned on Erdenes making progress towards adopting international best practice with respect to corporate governance and public disclosure comparable to exchange listed companies. Failure to do so will result in disengagement with Erdenes by the Project.

Project implementation may start slowly because the PIU is being newly established and presently lacks financial management and procurement staff familiar with World Bank procedures. | The PIU is being established within MoF, which has extensive experience with PIUs for Bank projects. MoF experience should make up for any PIU inexperience. Capacity development of PIU will also be supported by close liaison with the TTL, Project team, and GAP PCU. Early training will be provided to PIU staff as necessary to ensure competence in their respective roles.

Some sections of civil society may oppose the Project and its outputs for lack of good understanding of its objectives and components. | A communications strategy will be developed and implemented under the Project to make sure that civil society and Parliamentarians are accurately informed about the Project, its objectives, and its expected outcomes.

Overall Risk | S

Note: H- High; S- Substantial; M- Medium; L - Low risk

35. Possible Controversial Aspects. Mining is a highly controversial and politicized sector both worldwide and in Mongolia. In Mongolia, this is particularly true with respect to the approval by the Government of investment agreements with mining companies to develop the Oyu Tolgoi and Tavan Tolgoi projects and government’s proposal to take 51 percent State equity in such strategic deposits. There is popular support in Mongolia for the move, as it is seen as a way to ensure that the people of Mongolia receive a fair share of the revenue from the development of the country’s mineral resources. In this area of State equity participation, the Government is building on its experience with the state-owned copper mining company Erdenet, which commenced operations in 1978 under the former socialist regime. However, given the expected capital costs of these two new projects, there are major questions about the State’s technological know-how and financing capacity to develop them successfully. Some international mining companies view the establishment of Erdenes MGL LLC with some skepticism, concerned that Erdenes may become a competitor with private sector investment under terms more favorable than those available to the private sector. They have also expressed concerns about the potential for political capture of the entity and a lack of transparency in its operations and financial reporting. In order to minimize these risks, the Project will assist Erdenes to adopt best practice corporate governance consistent with the OECD Principles of Corporate Governance and adopt transparent reporting arrangements comparable to those prevailing for stock exchange listed companies. The project will also assist the company to prepare to meet its obligations to list a minimum of 10% of its shares on the Mongolian Stock Exchange as required by Clause 5.6 of the Minerals Law of Mongolia. In the event that Erdenes management pursue a business model or adopt weak or inadequate corporate governance and management models inconsistent with the OECD Principles the Project will disengage from the assistance and communicate its findings to
management. Triggers which could lead to such disengagement are specified in the dated covenants listed below.

36. **IFC and MIGA Commercial Activities in the Mining Sector:** Another potentially controversial aspect of the Bank’s engagement with the Government in developing the regulatory framework for the mining sector is the fact that both IFC and MIGA are engaged in investments elsewhere in the world with a number of the major mining companies active in Mongolia. This includes investments by IFC in projects sponsored by Rio Tinto PLC, one of the developers of the Oyu Tolgoi project. Both IFC and MIGA have expressed interest in working with private sector mining companies in Mongolia and the possible involvement of IFC and MIGA will need to be disclosed to Government as and when this arises.

37. In addition to the standard conditions for negotiations, Board Presentation, and effectiveness, the following are proposed as non-standard conditions and dated covenants:

**Effectiveness Conditions:**

- An inter-ministerial Project Steering Committee, chaired by the State Secretary of Finance or his alternate, and comprised of senior representatives from MOF, MIT, MNE, MRPAM, GDNT, SPC, Erdenes MGL LLC and the PIU’s Project Manager, has been established;
- A Project Director has been selected and appointed from within the membership of the Project Steering Committee by the State Secretary for Finance;
- The establishment of a PIU within the MoF, including appointment of the Project Manager, Procurement Specialist, and Financial Officer under terms of reference, experience, and qualifications satisfactory to IDA;
- Preparation and adoption by MoF of a Project Implementation Manual satisfactory to IDA;
- Preparation by MoF of a financial management manual for IDA financed expenditures with a Project Financial Management system and reporting formats satisfactory to IDA;

**Dated Covenants:**

- Not later than August 15 each year, commencing on August 15, 2009, the PIU will furnish to the Steering Committee and the Association for review and concurrence, a draft Annual Implementation Plan for the following fiscal year, which plan shall identify Project activities by component and sub-component, and their related expenditures and financing sources, and thereafter, implement the Project activities during the respective fiscal year pursuant to such plan as so discussed with, and agreed by, the Steering Committee and the Association.
- Not later than March 31, 2009, the Government will select and engage the services of an external, independent auditor for the Project under terms of reference and with experience and qualifications acceptable to IDA.
- MRPAM will develop a set of draft model contracts for the extractive industries by January 31 2010 for discussion with IDA and finalization by March 31, 2010;
- MoF will complete the mining sector institutional assessment study, discussion of findings and recommendations with IDA by June 30, 2010 and implementation of recommendations thereafter;
By June 30, 2010 Erdenes will be established and have adopted corporate systems, legal framework and structure acceptable to the Association, consistent with those of a commercial entity operating under OECD Principles of Corporate Governance;

By June 30, 2010 Erdenes will publicly disclose quarterly activity reports and annual reports documenting the company’s activities, financial condition including audited financial statements (income statements, balance sheet and sources and uses of funds) in a manner and substance consistent with the reporting requirements prevailing for stock exchange listed companies in Mongolia;

By June 30, 2010, Erdenes MGL LLC will complete preparation of a strategy and implementation plan for the listing of shares of the company on the Mongolian Stock Exchange pursuant to Clause 5.6 of the Minerals Law, 2006.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analyses

38. The proposed Project provides technical assistance and, as such, does not lend itself easily to quantitative investment analysis or to the calculation of net present value (NPV) or economic rate of return. However, some macroeconomic indicators can be projected and compared with present performance, in particular (a) annual investment for exploration by mining companies; and (b) increased fiscal revenues from the expected increase in sector exploration and development activities, increased ASM production, and increased tax assessments from tax audits. While any figure must be considered highly speculative, an estimate of US$5-10 million per year seems a feasible range from the audits alone, which would result in a financial rate of return from the proposed Project of 65-125 percent (Annex 9). There are no major financial issues under the proposed Project.

B. Technical

39. The proposed Project will strengthen institutional capacity within MoF, MRPAM, MoIT, and GDNT. The main technical aspects are (a) the establishment of macro economic stabilization mechanisms/sovereign wealth fund in the MoF; (b) the establishment of a Geographic Information System and electronic mineral tenements management capabilities for MRPAM; and (c) establishment by MRPAM of an electronic database system for monitoring ASM.

C. Fiduciary

40. Financial Management. The assessment, based on guidelines issued by the Financial Management Sector Board on November 3, 2005, has concluded that the project, subject to the proper resolution of the FM related effectiveness conditions, meets the minimum Bank financial management requirements, as stipulated in BP/OP 10.02. MoF will recruit a competent, dedicated financial officer for the PIU. A designated account will be opened and managed by the PIU in association with disbursements for eligible expenditures. An initial allocation will be provided to MoF, which will be replenished subject to the presentation of replenishment requests comprising Statements of Expenditures or other appropriate supporting documentation such as contracts and invoices. Retroactive financing of up to 10% of the IDA Credit and Grant is provided for eligible project-related expenditures incurred on or after April 1st 2008. MoF,
through the PIU, will retain full control, responsibility, and accountability for Project procurement, financial management, reports, and financial audits, and will sign all contracts for goods and services. Financial management risk is the risk that IDA proceeds will not be used for the purposes intended and is a combination of country, sector and project specific risk factors. Taking into account the risk mitigation measures proposed under the project, the FM risk rating proposed during the appraisal stage for this project is "Moderate". Further details on financial management arrangements are provided in Annex 7.

41. **Procurement.** An assessment of the capacity of the implementing agency (i.e., MoF) to implement procurement actions for the Project was carried out in April 2008. The assessment reviewed the organizational structure for implementing the proposed Project and the proposed procedures for interaction between staff responsible for procurement and other national agencies. The overall Project risk for procurement is “Moderate”. MoF staff has significant experience with IDA and other international agency procurement systems. A procurement officer will be recruited by the PIU to carry out procurement, but the officer is likely to require some training to be able to independently manage procurement in accordance with IDA’s requirements. The following action plan has been agreed to address these concerns: (i) the terms of reference and qualifications for the procurement officer for the PIU requires World Bank’s prior review; (ii) procurement training for the PIU staff would be provided by the World Bank Ulaanbaatar Office prior to Project effectiveness; (iii) the procurement plan should be updated annually; and (iv) the format of the procurement monitoring report and procurement filing system would be agreed and be in place prior to project effectiveness. Further details on procurement arrangements are provided in Annex 8.

D. Social

42. **Opportunities and Risks.** There are both opportunities and risks for local communities affected by both large-scale mining and ASM activities. The opportunities relate to the benefits from mining, which typically consist of direct and indirect employment, mining-related financial transfers, and improved access of mining communities to services including, in particular, health and education services. The risks relate to environmental harm, loss of pasture for grazing, loss of traditional livelihoods, social disruption, increased crime, domestic violence, and cultural harm. A gender bias also generally exists whereby the bulk of the benefits accrue to men whereas the bulk of the risks fall upon women and children. Youth also tend to be disadvantaged in that mining development raises expectations of mining employment and careers, but in practice there are relatively few job opportunities available which results in disappointment and frustration because of unfulfilled expectations.

43. The key social challenges are the following:

- **Institutional and Legal/Regulatory Frameworks.** The existing institutional and regulatory frameworks for the mining sector do not deal comprehensively the social issues related to mining sector development. In order to safeguard communities living near large scale mining areas, appropriate institutional and regulatory frameworks are needed to address the impacts of mining activities on affected people, including the provision of both active and passive measures for social mitigation and socioeconomic development programs to compensate for any loss of traditional livelihoods. At the same time, the regulatory framework for ASM
needs to be established to formalize the sector, and should include elements such as the establishment of cooperatives and miners’ associations, the establishment of a cadastre system for registration of ASM licenses, boundaries and tenements which can be accessed at the soum level.

- **Private Public Partnerships.** Unless a mining area can diversify into a more broad-based economy, it remains vulnerable to the cyclicality of commodity prices and the inevitable sharp economic decline that comes when the mine closes. The mine is very often the key economic driver in an area being the main employer and major engine of economic prosperity. Partnerships between the Government, the mining companies, and local communities need to be established for the development of socioeconomic programs in the mining areas, with the objective of diversifying economic activities and thus ensuring some degree of sustainability of the respective community following mine closure.

- **Risk of Conflict between Large-scale Mining and ASM.** Tens of thousands of small-scale miners are engaged in placer gold mining and this potentially represents a major source of conflict with both herders and formal placer mining companies. For a period, the presence of informal miners around existing company operated placer mines was tolerated, provided their activities were confined to the tailings and waste dump areas. This arrangement enabled effective resource partitioning with minimum conflict between the two parties. This tacit understanding has subsequently broken down, triggered by several factors, such as incursion into future mining areas by artisanal miners, interference with mining equipment, and reclassification of some areas of waste tailings as valuable future reserves with increasing gold prices. Any new ASM legal and regulatory framework needs to include provisions on how to deal with such conflicts, including the clear definition of rights and license boundaries for each of the parties.

44. **Gender Equality.** At first glance, there appears to be relative gender equality in the mining sector in Mongolia compared to many other developing countries. However, evidence from recent studies and a gender analysis of national statistics show that the impacts of the transition to a market economy have been different for women and men. Many families were plunged into poverty during this period as previously protected jobs disappeared. At the same time, social services were drastically reduced so there remained little to alleviate the effects of unemployment. This period of rapid change has created gender gaps that are new to Mongolia in many areas of economic and social development.

45. **Gender Sensitive Reforms.** Despite the shift to a free market economy and the passing of equity legislation, distortions in the labor market remain. These have led to discrimination against women, a persistent wage gap across all sectors, inefficiencies in investments in education, and the loss of potential contributions from women to economic growth. Employment opportunities remain limited, and the small, peri-urban soums and aimags now have a high proportion of increasingly poor and often female-headed households. The Project will support gender-sensitive reforms in the mining sector to protect women from discrimination in the workplace and promote employment equity including affirmative action steps to increase the proportion of women in decision-making positions. The Project will also encourage separate

consultation with women so that their needs and interests are addressed in planning policies and in implementing and monitoring programs at the local community level.

**E. Environment**

46. **Regulatory Framework.** The existing environment regulatory framework for the large-scale mining sector is designed to ensure that the growth of the sector is environmentally sustainable. Cornerstones of this framework are the laws on environmental protection, which was amended as recently as 2006, and environmental impact assessment, which is in the process of being amended. Key legal requirements include the need to prepare an Environmental Impact Assessment (EIA) for all formal mining projects. But, capacity to implement regulations and monitor the environmental performance of the mining sector remains limited mostly due to financial and human resources constraints. This also weakens the overall institutional setting, which already suffers from limited coordination among the relevant agencies. Capacity building programs to address these shortcomings, particularly in MoNE, are in place, and being financed by both the Netherlands and UNDP.

47. **Environmental Issues.** As technical assistance, the proposed Project will not finance any direct exploration or exploitation of mineral resources. However, the Project is being implemented in a sector which can have significant environmental and social impacts. An initial review of key environmental issues in the mining sector has been prepared which found that the environmental problems associated with mining in Mongolia relate primarily to pollution management and physical disruption of pasture lands and water resources by both artisanal and larger mining operations. The review found that there are a number of weaknesses in the regulatory framework including the lack of a Socioeconomic Impact Assessment, limited enforcement of sanctions for non-compliance with environmental requirements, lack of an ASM legal and regulatory framework and fragmented and poorly coordinated institutional arrangements. Existing communities bear most of the risks but receive little of the benefits such as mining-related employment. The review identified institutional strengthening measures and other actions to improve mining sector environmental protection and social mitigation. Further measures may also be identified through the overall mining sector institutional assessment to be undertaken with support from this project and through the SESA. More details are presented in Annex 10.

48. **Benefits of Project Activities.** The proposed Project will support workshops with major stakeholders and professional development training for MRPAM and MoNE staff, which is expected to have a positive impact on the environment as these activities will improve skills, capabilities, and coordination of MRPAM and MoNE activities and actions. The proposed Project will assist staff to conduct field audits of mining projects, investigate mine safety and environmental compliance, and work with mining companies to improve the environmental and social sustainability of the operations. The Project-related ASM interventions should have positive environmental impacts through both improved mining methods and improved equipment, especially in the minimization of mercury use through more efficient gravity separation systems and thereby reduce mercury pollution.

**F. Safeguard Policies**
49. **Environmental Category.** The proposed Project rated category B for environmental purposes. The Project will not involve direct investment in mining activities, but through its policy and regulatory strengthening may have indirect environmental impacts by encouraging increased commercial-scale mining and ASM activities. There will be no construction under the Project and hence no resettlement or acquisition of land or assets will take place. Hence the resettlement policy is not triggered. No other safeguards policies are triggered by the Project.

50. **Strategic Environmental and Social Assessment.** The Bank has conducted an overall review of the status of environmental and social issues, and policies in the mining sector to identify institutional and regulatory gaps that should be addressed to strengthen existing compliance monitoring with regulations, and to investigate whether additional resources and standardized procedures might be needed to mitigate any identified risks. Based on the findings of the completed review, in the context of the Project particular attention will be given to (i) institutional strengthening actions to deal with environmental and social impacts associated with the growth and development of the mining sector (including artisanal and small scale mining); (ii) measures to overcome existing and projected policy, institutional and budgetary constraints that result in limited enforcement and implementation capacity; and (iii) ways to improve public participation and monitoring processes. In addition, the Project will benefit from the findings of a Strategic Environmental and Social Assessment (SESA) for the Southern Gobi Region; this exercise will be conducted to help frame a vision for a sustainable natural resources management in the context of the planned mining developments in the region. Further information about safeguards issues is presented in Annex 10.

51. During Project implementation further consultation will take place with NGOs, landowners, and industry representatives regarding mining sector environmental and social issues.

G. **Policy Exceptions and Readiness**

52. The proposed Project does not require any exceptions from IDA policies. The Project is expected to meet regional requirements for readiness for implementation with the following exceptions:

* By supporting the proposed project, IDA does not intend to prejudice the final determination of the parties' claims on the disputed areas.
MoF needs to put in place a PIU. The process will commence shortly after negotiations and will be funded by MoF’s own resources and reimbursed out of IDA funds through retroactive financing upon approval/availability of IDA funds;
Annex 1: Country and Sector or Program Background

A. Background

Mongolia's mineral potential is extensive, with over 6,000 mineral occurrences comprising 80 different mineral commodities currently identified, the most significant of which are base metals (mainly copper and zinc), gold, coal, uranium and fluorspar. Historic output is largely copper and gold, primarily from the majority state-owned Erdenet copper mining company, which earns about half of all foreign exchange and provides almost 25% of government revenues. Prior to the commencement of hard rock gold mining at Boroo in 2003, most gold production came from placer (alluvial) operations. Production from newly commissioned private sector mines increased gold production substantially in 2004 and 2005 to an annual level of around 24,000 kg.

Mining’s Contribution to the Economy. Mining is a major and increasing contributor to the economy. In 2007, mining directly accounted for about 20 percent of real GDP (at 2005 constant prices), 56 percent of gross industrial output, 69 percent of exports, and 36 percent of government revenue. The economy grew at 9.9 percent in 2007 up from 8.6 percent in 2006 and 7.3 percent in 2005. A significant proportion of the GDP growth attributable to the mining sector has to a large extent offset some declines in other sectors including agriculture. The formal mining sector employs over 14,500 people and informal/artisanal mining involves many times this number.

Mineral Exploration. Since 1998 Mongolia has seen resurgence in international interest and a rapid rise in mineral exploration, in part due to the 1997 Minerals Law which was prepared with funding support from the Bank. This highly regarded law played a pivotal role in attracting foreign exploration companies. Since the discovery of Oyu Tolgoi, the number of exploration licenses and amount of land held by licensees has increased fivefold, with exploration rising from US$6 million in 2000 to US$127 million in 2005. This dramatic increase was the largest in the world over this period and in 2004 exploration expenditures in Mongolia accounted for 4% of the total global exploration budget and 50% of reported expenditures within the Asia Pacific region. This intense exploration activity has led to a number of discoveries which could potentially lead to new developments. These comprise a diverse range of minerals such as iron ore, copper, gold, lead-zinc, uranium and coal.

Exploration Successes. The 1997 Law opened the extractive industries sector to both domestic and foreign private investors leading to foreign direct investment (FDI) in mineral and petroleum exploration and development of US$148 million in 2004 and US$191 million in 2005 of which US$40 million was for grass roots exploration. FDI for the sector constituted 68% of the total FDI for 2005. The boom in exploration has resulted in the discovery of an impressive pipeline of potential world class mineral projects that include Oyu Tolgoi (copper and gold), Tavan Tolgoi (coal), Ovoot Tolgoi (coal) Tsagaan Suvraga (copper and molybdenum), Tumurtei (iron ore), Ulaan (lead and zinc), Gatsuurt (gold), and Golden Hills (gold). The mining sector has the potential to increase output substantially over the next decade and is projected to double or even triple from 2005 levels by 2012 if the Oyu Tolgoi and Tavan Tolgoi projects get development approvals and are successfully commissioned.
**Government Mining Sector Strategy.** The Government has prepared a draft Private Sector Development strategy, aimed at accelerating economic growth through export-oriented, private sector driven economic development. This strategy highlights mining as a lead industry for private sector development. The strategy for large-scale mining is to encourage environmentally and socially sustainable mineral exploration, development, and production that contributes to economic development through exports and taxes. The Government has also recently adopted a strategy of State equity participation in mining which is generally not well accepted by the private sector. The Government is proposing to hold its equity within a new State owned holding company, Erdenes MGL LLC (Erdenes). To attract foreign investment with high technology and management resources in the mining sector, the Government needs to further develop and stabilize mining regulations that are responsive to investors’ concerns, and implement an internationally competitive fiscal regime and policy framework to effectively manage revenue from the sector.

**Artisanal and Small-scale Mining (ASM).** There were an estimated 67,000 full time and part time artisanal and small-scale miners in Mongolia in 2007. ASM gold production in 2007 has been estimated by the Swiss Agency for Development and Cooperation (SDC)-supported Sustainable Artisanal Mining Project at 5,200 kg with an estimated value of US$140 million. After agriculture, ASM is the largest generator of rural incomes, supporting an estimated 250,000 people, including the miners and their extended family members. Thus, close to 10 percent of the population derive direct or indirect cash benefits from ASM. However, income benefits from the sector must be balanced against potentially high environmental and community health costs. The miners generally have low levels of understanding of mining risks, engage in unsafe mining practices, and liberally use mercury and occasionally cyanide (for gold extraction) without understanding the risks for their own health and the natural environment.

**Strategy to Improve ASM.** The Government’s strategy towards ASM has been to discourage the sector through banning the use of mercury and cyanide in an attempt to reduce the harmful health, safety, and environmental impacts. In order to reduce negative impact of the artisanal miners and develop small and medium sized enterprises in the sector, the Government has recently approved a temporary regulation (with effect until 2015) aimed at coordinating artisanal mining activities and introduced a program for developing micro-mining sector enterprises. The passage of the regulation and program is the first step towards developing and improving the regulatory framework for artisanal miners leading to a systematic program of artisanal miner formalization. However, there is an ongoing and urgent need to pass enabling legislation and provide on-site training and extension services to support improved ASM mining practices and the adoption of new environmentally sound technologies, as well as training in environmental management and rehabilitation. The Government anticipates that this proposed Mining Sector Institutional Strengthening Technical Assistance Project will make a contribution towards achieving both the large and small scale mining strategies of the Government.

**Potential Macroeconomic Impacts.** The pending development of Oyu Tolgoi and Tavan Tolgoi, both world class deposits located in the South Gobi, present the State with particular challenges. These developments will likely increase Mongolia’s mineral exports to excess of 90 percent of total exports, and tax receipts from the mining industry will likely exceed 50 percent of total tax receipts. In addition these large new export industries will also create large balance of payments surpluses as well as increased government revenues, which are likely to impact on the value of
the Mongolian Tugrug. Recent engagement with the Government in this regard has primarily been on issues of policy and investment climate, and it is clear that the Government needs urgent assistance to manage the economic and physical development impacts of mining and to ensure that economic growth remains stable and the sector is effectively managed and monitored.

**Institutional Framework.** There is a growing recognition within the Government that the current institutional framework for mining sector management has developed in a fragmented manner and may not be the most efficient and effective. For example, for historical reasons the Mining Rescue Service is housed in the Ministry of Fuel and Energy, while mining inspections are undertaken by the State Specialized Inspection Agency, and licensing administration and other technical responsibilities lies with the Mineral Resources and Petroleum Authority of Mongolia (MRPAM). The separation of functions means that specialist expertise is split between agencies making it difficult for all to manage mining sector development issues and keep up with rapidly evolving mine technological developments. The Government is currently considering a number of functional re-organisations and has announced a proposal to reduce the number of Ministries. The new proposal includes merging of the mining components from the MoIT and the Ministry of Nature and Environment into a new single Ministry.

**Constraints to Realizing Mongolia’s Mineral Potential.**

**Mining Sector Development Constraints.** The rapid escalation of mineral development activity in Mongolia at a time of a sustained boom in world commodity prices has resulted in some pushback by the State toward private sector-led development. State equity participation requirements have been introduced and Erdenes has been established to hold State equity in “strategic” mineral deposits. A new Minerals Law was passed in 2006, however the regulations to support the law and provide details of due process and standards for mineral licensing, occupational health and safety standards, and environmental and social guidelines have not yet been prepared or promulgated. New tax measures, including increased royalty rates and a windfall profits tax on gold and copper production, have also been introduced. These measures are having a distortionary effect, particularly on gold production and export performance which has witnessed a dramatic fall in official gold sales to the Bank of Mongolia since the introduction of the tax, and a corresponding reduction in recorded production and government receipts.

**Mongolia’s Mineral Taxation System.** Amendments to the income tax law in 2006, reduced the tax rate for mining to 25% and abolished the six year tax holiday. Royalty rates were increased from 2% to uncommonly high levels by international standards to around 5% for copper, gold and other base metals from hard rock operations. Against the advice of the Bank, a highly damaging 68% windfall profits tax based on modest commodity price thresholds was also introduced in July 2006 which has resulted in a significant drop in gold sales to the central bank and a cooling of investment interest. The Mineral Law of 2006 provides for investment agreements for large projects that can stabilize tax rates for periods of between 15 and 30 years.

**High Effective Tax Rates.** A key objective of a sound mineral fiscal policy is to maximize the fiscal take over the long term. If the total tax burden is high, individual mines may pay more, but in the long run there will be fewer mines, thus fewer taxpayers, a smaller tax base, and a smaller contribution to the treasury. Given that there are presently very few mines in Mongolia, and that the country has a relatively untapped and largely unexplored mineral potential, a policy which
emphasizes attracting new investors who will discover and build more taxpaying mines would seem to be an appropriate strategic choice. Mongolia’s tax framework for mining has moved in a direction where the total tax burden (including the windfall profits tax and equity participation) is now at a very high level by international standards. This has primarily been a response to the government’s inability to capture the boom in commodity prices due to the structure of earlier Stability Agreements. With the current high commodity prices and a continuing demand for minerals world wide, Mongolia has yet to experience a substantial downturn in exploration activity and interest. However, this could change dramatically at such time as commodity prices fall and companies may find Mongolia globally uncompetitive and risky.

**2006 Amendments to the Legal and Regulatory Framework.** Over the last two decades the global trend has been for Governments to be less involved as the owner/operator of mines to being the manager/regulator of the sector. The stability of the overall legal/regulatory framework has been an important component in sustaining private sector expansion to date. The 2006 Mineral Law is in many ways retrogressive as it provides for the state to take participations of up to a 34% equity stake in private sector discovered “Strategic Deposits” and up to 50% equity in “strategic deposits” discovered by the State (meaning by former Soviet exploration activities). The involvement of the State in direct equity participation results in the State taking commercial investment risk. For a newly developing economy with many and varied calls on the State Treasury for investment in infrastructure and services, it is difficult to justify why the State should be increasing its exposure to such risk.

**High and Rising Mandatory State Equity Participation.** Given the greater appreciation of the risks involved in mineral investments and the level of technical sophistication, most countries do not take an equity interest in mining. Improvements in mining tax systems have prompted governments to focus on risk-free tax measures rather than on risk-prone equity as the primary means by which to reap financial benefits. This has led to increased focus by government on promoting sustainable private capital investment and regulating the minerals sector. Even when governments take equity participation in mining ventures, they very rarely seek operational roles. This is a result of the overall failure of mining companies nationalized after the price boom of the 1970s to cope with the volatility of the sector. Botswana and Namibia, both of which can be considered to be success stories as far as the role of Government in mining is concerned, opted strongly for private sector led mining and focused the role of Government on economic management and regulation of the mining sector. The revenue flows from the mining sector helped to finance public sector investment, which has supported overall economic growth, leading both countries to being rated in the top five “best in class” for the period 1990-1999 in the World Bank’s comparison of GDP growth of individual countries to the GDP growth in their respective regions (Source: IFC).

**Approaches to Taking Equity in Mining Projects.** There are many approaches to government equity, but three forms predominate and comprise paid (working) interest; free interest equity; and, more rarely, carried interest equity. If a government takes an equity stake, and pays for it

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3 Mongolia now has one of the highest effective tax rates for mining in the world. The current fiscal package has an effective tax rate (ETR) of 62 percent and a marginal tax rate of 80 percent (IMF). The ETR is the combined rate that takes into account the present value of all the tax and fee types and other State imposts paid by the mine.

4 The current law stipulates that the government may participate with up to 34 percent stake in a project that was not identified through state funds, and up to 50 percent stake in a project that was identified through state funds. While
through a working interest, the opportunity costs can be substantial. State revenues invested in the mine will be diverted from other possible uses, and will be put at risk. Not all mines are successful; some fail or do not generate sufficient profits to justify a distribution to shareholders.

**Risks to Be Considered.** Recent draft proposals to further amend the Minerals Law to provide for the State to acquire at least 34% state equity participation in strategic deposits discovered by private sector exploration; and at least 51% for deposits discovered with State exploration makes participation by the State mandatory and substantially increases its commercial risk. Such mandatory equity participation could compel the Government to participate in some very high risk and potentially loss-making projects which is highly inadvisable. This provision could also give some investors the opportunity to compel the government to participate in projects in which it does not wish to be involved—either because of excessive risk or inadequate financing. In any event mandatory equity participation which either fails to put a ceiling or that places a ceiling that investors consider excessively high on the level of State participation will constitute a serious disincentive to future privately financed exploration and development and loss of the expertise and technology that such investment brings.

**Other Development Challenges.** Mongolia has managed the transition from a centrally planned socialist economy to a market economy well. Since 1990 it has made good progress in undertaking fundamental economic reforms centered on price liberalization, privatization, and the establishment of market institutions. Despite early losses in GDP during the early to mid 1990s with the withdrawal of subsidies from the Russian Government, the benefits of the reform efforts can now be seen in the growth performance of the Mongolian economy and the accompanying structural changes in the economy. However, formidable challenges remain in managing Mongolia's "tyrannies of distance and isolation," delivering services equitably and cost effectively, and generating broad-based growth with jobs and income for Mongolians living in rural and urban areas, especially the poor. Mongolia's heavy dependence on the exports of a few key commodities—copper, gold, and cashmere—has made the economy particularly vulnerable to fluctuations in commodity prices and natural disasters. This makes it all the more urgent to ensure that one makes best use of the ongoing commodity boom period to meet Mongolia's development goals most effectively. The country faces the challenge of creating economic opportunities for its rural population and urban unemployed in an economy whose GDP growth over the next few years will depend largely on the mining sector, which traditionally has been an enclave activity in most countries and, given its capital-intensive nature, does not create many jobs. Meanwhile, progress in reducing maternal mortality rates, as well as in improving water and sanitation services, has been insufficient to meet the Millennium Development Goals. The recent World Bank Poverty Assessment (2006) for Mongolia found that rural herder households had the highest incidence of poverty (41.2 percent). Analysis of household survey (HIES-LSMS 2002) data found that the most pressing poverty challenges in Mongolia are related to widespread livestock mortality risks, attrition before upper secondary schooling, and the burden of heating costs on households.\(^5\)

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the law does not specify the basis upon which the State will take up its equity, the draft Oyu Tolgoi agreement presented to Parliament suggests that this is a paid carried interest based on development cost, with other concessions compensating the investors for the sunk cost of exploration.

\(^5\) A new HIES-LSMS is currently underway as a result of which more recent poverty estimates will become available towards the end of 2008.
Governance Context. Mongolia’s mining sector has the potential to contribute significantly to economic growth, but its successful development will to a large extent depend on the government’s ability to establish and maintain a competitive and stable regulatory and fiscal framework, prudently and transparently manage its mineral wealth to the benefit of all of its population, and ensure sound economic, environmental and social governance of the sector. According to Transparency International and the World Bank’s Governance Indicators, perceptions of corruption in Mongolia have worsened substantially since 2001, and perceptions of corruption as an obstacle to growth are more widespread in Mongolia than in a number of comparator countries. The 2006 World Bank Investment Climate Survey results suggest that corruption in Mongolia may be a symptom of rising inequalities, stemming from perceptions of lack of transparency and accountability in the public sector. The survey results indicate that unofficial payments required for obtaining exploration and mining licenses were high, and estimated at around 40 percent of the official fees. Twenty-six percent of firms reported being required to pay bribes to obtain access to electricity, water, and/or communications infrastructure. Mongolia’s ranking in the latest World Bank Governance Indicators (2008) has also fallen relative to other countries as compared to 2007 rankings.

Anti-Corruption Measures. The recent passage of the anti-corruption legislation, the implementation of the Asset and Income Declaration requirements for senior government officials and Parliamentarians, and the adoption of the Extractive Industries Transparency Initiative (EITI) are commendable steps by the Government in the right direction. However, much remains to be done, and the Government has stated its intention to continue to strengthen its public sector governance capacity and implement the anti-corruption law effectively, and promote transparency in government-business interactions. The Government has taken significant steps to implement EITI and has prepared the first EITI Reconciliation Report on payments and receipts for the year 2006. The 2006 reconciliation report, which has been made public and discussed by civil society, has identified a number of discrepancies and weaknesses in the recording and reporting of mining industry receipts, and identified several areas for the Government to address to improve systems for future reconciliations. The Government has also taken steps to determine the nature of the discrepancies and has prepared recommendations for actions to be taken prior to the next annual reconciliation. Preparations for the 2007 reconciliation process are under way. The proposed Project will provide ongoing support for implementation of recommendations arising from the EITI findings into the future and support the anti-corruption agenda through building effective policy and institutional capacity to manage mining revenue flows including through the further development and implementation of EITI. It will support the ongoing development of a transparent and efficient mineral licensing system as well as assist in the development of clearly articulated legislation and regulations relating to mining sector development and management, which are not subject to discretionary powers.

Potential Large Scale Mining Projects

The Oyu Tolgoi Project. Ivanhoe Mines is the holder of a mining lease for the Oyu Tolgoi (OT) Copper / Gold Deposit. OT is the largest undeveloped copper deposit in the world and is a high grade and potentially very profitable mining operation. In ground value of extractable copper and gold is in the range of $60-90 billion (depending on commodity price projections). The deposit was discovered by Ivanhoe Mines LLC and thus under the 2006 Mineral Law the State is eligible to take up to 34% equity interest.
Ivanhoe and the Government negotiated an investment agreement which was forwarded to Parliament for ratification in late 2007. This was later withdrawn by the Government following failure to have the agreement ratified and with the Parliament demanding increased State or Mongolian interest in the operation of not less than 51%.

The Government is preparing amendments to the 2006 legislation to increase local equity requirements and once this is passed they have advised that they will then re-commence negotiations with Ivanhoe for an investment agreement.

Concurrently with the OT agreement another investment agreement for a project called Tavan Tolgoi (TT) coking coal was also submitted. Here the Government initially decided it wanted 86% of the project and not the “up to 50%” provided for under the 2006 legislation. Some Parliamentarians have demanded that TT become 100% State owned although it is likely that a compromise will be found.

**Impacts of Proposed Amendments to the 2006 Minerals Law on Oyu Tolgoi**

The newly proposed amendments to the mineral law are that for Strategic Deposits there is a requirement that Mongolian interests (including the State) will have the obligation to take not less than 51% of the equity in any Strategic Deposit. Foreign investors will not be allowed to hold more than 49% of the equity in a company developing a Strategic Deposit. As such Ivanhoe are claiming that this is nationalisation of their assets into which they claim they have invested approximately US$700 million.

It also creates a great deal of uncertainty about how such a project can proceed. Total initial capital cost for OT will be approximately US$4 billion, with an eventual total capital cost of $7-8 billion. The State has no capacity to raise $2 billion of risk capital and Mongolia has a small private sector, also with limited capital raising capacity. This will likely result in the initial investor/discoverer and developer of the project being required to finance and carry the majority partners in the project. This is unlikely to occur. This could stifle or delay the development of these large projects and as a result defer Government revenue generation.

**Background on Oyu Tolgoi**

Ivanhoe Mines holds the license over Oyu Tolgoi, which means Turquoise Hill. It is commonly referred to as OT and is reportedly the largest undeveloped copper deposit in the world. The feasibility study for OT is nearing completion and the project is expected to cost more than US$4 billion.

- Rio Tinto bought 9.95% of Ivanhoe Mines for US$303 million in October 2006 and they have a right to acquire up to 40% through a combination of private placements and open market purchases. A key step is that they will pay an additional US$388 million when the investment agreement is concluded, to take their stake to 19.9% in Ivanhoe Mines.
- Rio Tinto would be the operator.
- Ivanhoe Mines holds other assets in Mongolia, China, Kazakhstan and Australia. OT is the largest holding.
• Ivanhoe Mines' Executive Chairman and founder is Robert Friedland, an explorer and developer with a controversial background.

Ivanhoe and Rio negotiated a draft investment agreement with the Mongolian government for TO in mid-late 2007. The agreement was submitted for consideration by the Mongolian parliament. The agreement was later withdrawn by the Government when a number of parliamentarians started calling for mandatory 51% State Equity participation. There have been recent moves to amend the 2006 Minerals Law to require 51% local equity ownership.

The original agreement terms are public and are as follows:

• a government 34% carried interest, leaving Ivanhoe Mines with 66%. Ivanhoe will lend the government its share of capital costs at an interest rate of around Libor+4%. The government will repay the loan with its dividends; there will be no repayment from taxes and royalties. Ivanhoe estimate that at $1.10 copper and $450 gold, the government will have repaid the loan and will start earning dividends in 2021.
• no windfall tax
• standard income tax of 25%
• standard royalty of 5%
• Ivanhoe Mines will have 6 board members on the OT board and the government 3, with no veto rights.

The feasibility study for OT works on the basis of an overall US$4 billion project cost to finance. The agreement indicates that a smelter and power plant will be constructed in addition to mine development. Rio will make a total investment of about US$1.5 billion (including US$400 million when the investment agreement is signed) and Ivanhoe Mines are therefore seeking financing of up to US$1.5 billion. Ivanhoe are looking at IFI/commercial bank financing as well as high yield bonds.

**Highlights of the history of Oyu Tolgoi:**

• The OT, or Turquoise Hill, copper/gold project, is located in the Gobi desert, approximately 550 km due south of Ulaanbaatar and 80 km north of the Chinese-Mongolian border.
• OT has a large low grade reserve which can be developed by open pit (proven and probable reserves of 930 million tonnes, (grade of 0.50% copper and 0.36 g/t gold, containing 8.9 billion pounds of recoverable copper and 7.6 million ounces of recoverable gold). The major prize, however is the Hugo Dummett underground deposit with indicated resources of 581 million tonnes (grade of 1.91% copper and 0.41g/t gold) and inferred resources of 1,162 million tones (grade of 1.08% copper and 0.23 g/t gold).
• Open pit centred production was forecast to commence in mid-2008, now end 2009.
• Full production, with an initial throughput of 70,000 tpd (25.5 million tonnes per annum (mtpa)), is expected at the beginning of 2011.
• Initial capital cost of $1.5 billion for the open-pit mine
• Estimated average copper recoveries over the initial life-of-mine are 90.0%; gold recoveries are 78.1%.
• An annual production rate in excess of 140,000 tpd (52.5 mtpa) is expected to be achieved by Year 7.
• An average annual production in excess of one billion pounds of copper and 330,000 ounces of gold for at least 35 years.
• The average pre-tax annual gross revenue over the initial 35 years would be $1.1 billion, peaking at $1.99 billion in Year 8.
• The Expanded Case estimates total cash cost after gold credits over the life of the project, at $0.40/lb. This total cash-cost figure includes the realization costs of treatment, refining, product transport and government sale royalties.
• Site cash costs at the mine gate (excluding realization costs) are estimated at $0.26/lb.

Background on the Tavan Tolgoi Coal Project

Tavan Tolgoi is not owned by Ivanhoe but they do hold other coal deposits in the vicinity and are concerned that they too could be declared as Strategic Deposits.

The Tavan Tolgoi Coalfield is located in south-central Mongolia. It covers an area of approximately 71,480 hectares of the Ulaan Nuur Valley, in the Gobi Desert, and is situated within the Omnogovi Aimag (South Gobi province). The project site is about 540km south of Ulaanbaatar, the national capital.

Transportation infrastructure is poorly developed in this area. The nearest rail line is the Trans-Mongolian Railway that crosses Mongolia in a general northwest-southeast direction and connects Ulaanbaatar to the Trans-Siberian Railway in the north and to Beijing in the south. The station on this rail line that is closest to Tavan Tolgoi is about 440km east-northeast of the project site.

Exploration in the Tavan Tolgoi area started in the early 1950s. At that time an exploration program was conducted by a joint Mongolian and Soviet team that was assembled as the Sovmongolmetal Corporation. That program included a certain amount of exploration by drilling, using rotary methods.

The next significant development, and the beginning of an extensive period of evaluations of the deposits of this area, commenced in 1974 and continued into 1975. At that time a program of trial mining was conducted. This work was carried out by a team that included both Mongolian and Bulgarian personnel. The work that had been completed to that time culminated in the preparation of a feasibility study in 1977. This study, "Feasibility Study for Detailed Exploration of Tavan Tolgoi Coking Coal Deposit, with Emphasis Towards Possible Coke-Chemical Production", was prepared for the Ministry of Coal Industry of the USSR. A major item in this report was the recommendation for continued exploration of this area with a view to significantly increasing reserves of coking coal; a target was the definition of a mineable reserve of coking coal in the range of 800 to 900 million tonnes.

The study of resources of the Tavan Tolgoi was carried out by Soviet geologists and established in 1984 at 6.4 bln tons, including coking coal of 1.8 bln tons.
In 1990 a feasibility study was completed by the Giproshakht Institute. This major study is titled "Feasibility Study of the Mining of the Tavan Tolgoi Coking Coal in the Mongolian Peoples Republic". The exploration work supporting this study not only included exploration shafts and cross-cuts but also about 3,000 exploration drillholes and numerous trenches. Samples from these various sources have been subject to a wide array of coal quality and other tests.

Small-scale coal mining has been a feature of this district for some considerable time, commencing in the 1960s. Two small pits were opened, with one being located in Seam IV and the other extracting coal from the top 20m of Seam VHI. The total production from these mines has been about a million tonnes, achieved over a period of more than thirty years.

Later there was a study made by Norwest and BHP in 1998-1999. According to preliminary estimates, the total capital cost of the TT mine development would be in excess of US$1 billion, particularly given the anticipated high infrastructure development costs.

The exploration license for Tavan Tolgoi was acquired in 1998 by BHP Billiton, however, BHP surrendered the license at the end of 1998 based on their assessment that it was not economically feasible to develop this mine. In October 1999 the license was acquired by MineInfo, a local company and then transferred to Energy Resources Co. Ltd., a local consortium consisting of Mongolian companies including MCS Holdings, Tengeriin Tsag, MineInfo, Altai Holding, Shunhlai Group, Tumen And, etc.

Apart from the major exploration license for the main Tavan Tolgoi deposit, there are 2 small blocks within the main deposit area which are owned by private Mongolian companies, including Ajnai Corporation and Eermel LLC (49%) and local government (51%). They are currently exporting coal to China by truck at reportedly extremely low prices. This attracted the attention of the government and for a period they stopped the exports because of discontent among local people, who complain that the mining operations and transporting by truck cause environment pollution. Exports have once again commenced from the mine.

Currently several parties have expressed their interest in Tavan Tolgoi including: Shenhua, Mitsui, Itochu, CVRD, BHP, Marubeni, Sino Steel, Rio Tinto, Mitsubishi, Severstal, AngloAmerican, Basic Element, and Peabody Energy.
Annex 2: Related Projects Financed by the World Bank and other Agencies

Partnerships in Sector Development

In April 2007 the ADB, EBRD, IFC, and World Bank signed an MOU with the Government with the objective of assisting the Government to deal with mining sector development issues. The MOU focused on the following four areas of support: (a) assessment of the infrastructure needed for the development of the mining sector; (b) development of mining regulations and capacity building in government agencies; (c) assistance in the legal and institutional establishment of a state-owned company (Erdenes) that would hold the Government’s equity participation in the development of mining projects at sites designated as “strategic deposits”; and (d) advisory services in relation to the selection of strategic investors for the development of the strategic deposits. This Project supports objectives (b) (c) and (d). In addition, IDA is leveraging parallel PPIAF and AusAID trust funds to support objective (a). In the area of ASM, SDC is the main development partner, assisting with regulatory development, providing staff development and training for MRPAM’s ASM Division as well as logistical support for site visits and the preparation and publication of educational materials. The support for ASM under the proposed Project is complementary to SDC assistance. Several other development agencies are involved particularly in the area of environmental management and training, mining safety and laboratory development, including the United Nations, the Netherlands and Germany (see Table 2). The Netherlands BNPP trust fund is a particularly important activity with respect to this project as it will support a Strategic Environmental and Social Assessment (SESA) which will identify regulatory and policy gaps which the Project should address. During Project implementation opportunities will be identified to collaborate with other interested donors to enhance Project activities.

Table 2: Donor Activities Relevant to the Project

<table>
<thead>
<tr>
<th>Donor</th>
<th>Activity</th>
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<tbody>
<tr>
<td>World Bank</td>
<td>Sustainable livelihoods project</td>
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<tr>
<td></td>
<td>Mongolia Country Governance and Anti-Corruption assessment including a strong mining sector governance focus</td>
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<tr>
<td></td>
<td>GAP Project - Management of Public Finances</td>
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<td></td>
<td>GAP Project - Strengthening Tax Administration</td>
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<td></td>
<td>GAP Project - Mining Cadastre Computerization</td>
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<td></td>
<td>PPIAF/AusAID Southern Mongolia Infrastructure Strategy</td>
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<td></td>
<td>EITI Multi-donor Trust Fund</td>
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<tr>
<td>Netherlands</td>
<td>BNPP Netherlands Environment Project including Strategic Environmental and Social Assessment (World Bank Executed)</td>
</tr>
<tr>
<td>Swiss Development Cooperation</td>
<td>Sustainable Artisanal Mining Project and support for sustainable use of natural resources</td>
</tr>
<tr>
<td>EBRD</td>
<td>Project assessment training for Erdenes on strategic deposits plus preliminary advice regarding the holding company structure and corporate systems (under MoU); Training and data management development in the Geological Information Center.</td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
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<tr>
<td>IFC</td>
<td>Legal advice on holding company structure for the government shareholding in mining (under MoU)</td>
</tr>
<tr>
<td>ADB</td>
<td>Mining sector fiscal assessments for OT Investment Agreement and support in structuring of priority infrastructure and downstream projects; strategic advice on the mining sector fiscal issues and the framework for structuring projects, selecting strategic partners, and negotiating agreements related to the minerals assets of the Government; assistance to Erdenes with technical training and advice on company structure for government shareholdings in mining (under MOU)</td>
</tr>
<tr>
<td>Germany (GTZ)</td>
<td>Capacity building of Mining Inspectors in SSIA and technical capacity in the Mining Department of MRPAM; support for the central geological laboratory</td>
</tr>
<tr>
<td>WHO</td>
<td>Artisanal Mining areas environmental and health studies, and training and material support for clinical toxicology and environmental health risk assessment along with laboratory training and equipment</td>
</tr>
<tr>
<td>UNFPA</td>
<td>Mobile services to artisanal miners and unregistered migrants in 7 aimags and UB, educational materials on health, water and sanitation</td>
</tr>
<tr>
<td>IMF</td>
<td>Toxic chemicals and mining, training publications and advocacy</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Assessment of environmental risks of mercury pollution in Selenge aimag soums</td>
</tr>
<tr>
<td>Australia</td>
<td>Joint Working Group on Mining and Energy Cooperation.</td>
</tr>
<tr>
<td>Japan</td>
<td>Two-step loan for environmental protection;</td>
</tr>
</tbody>
</table>

Running in parallel with this project is the Governance Assistance Project (GAP), which has as a number of complementary components. These include public expenditure improvement program, including management and accountability of fiscal transfers to aimag and soum governments. GAP also supports a Tax Administration improvement program in GDNT, but this is not specifically aimed at improving mining sector tax compliance. GAP also supports the establishment of a computerized mining cadastre system in MRPAM. The GAP project aims to clarify the operations of the Cadastre and then codify them into a Cadastre Management Software package which will reduce processing times and improve efficiency and transparency. The World Bank also has other projects aimed at reducing rural poverty such as the Sustainable Livelihoods Project and the Livestock Insurance Project. These projects deal with issues beyond the scope of the Mining TA project but are indirectly related given that rural livelihoods (particularly herders) are being disturbed by both large scale and ASM activities.

EBRD has agreed to finance activities in the Geological information center in association with this project including computing equipment and software in support of the development of a national GIS of geological data. It will also finance data digitization and document scanning into the GIS and document management system. EBRD is also financing some technical training of staff in Erdenes on financial modeling and in particular use of the MinEval software. EBRD has also offered to provide financing for international twinning of MRPAM staff into developed country Mining Departments and Mines Safety offices. This support has enabled this project to focus primarily on strategic, policy, and regulatory compliance issues related to the industry.

ADB has been assisting with training of Erdenes staff in Mining Software including Surpac. Additional funding is available to continue with such activities.
Southern Mongolia Infrastructure Strategy

In addition, there will be a parallel but closely linked activity, funded by the Public-Private Infrastructure Advisory Facility (PPIAF) and AusAID, to support the development of a Southern Mongolia Regional Infrastructure Strategy. The focus is on helping the Ministry of Finance, the Ministry of Industry and Trade, the Ministry of Fuel and Energy, and the Ministry of Roads, Transport and Tourism to prepare a number of option studies leading to the preparation of a strategic plan to integrate mining into the regional transport, energy and urban infrastructure in the South Gobi in anticipation of the Oyu Tolgoi, Tavan Tolgoi, Nariin Sukhait, and Tsagaan Suvraga mines. The program will also examine the potential for public-private partnership agreements for infrastructure development.

Development of a strategic plan to integrate mining into the regional transport, energy and urban infrastructure is extremely important for the future development, not only of the region, but of the country. The program will support consulting services for technical advisors to carry out a number of studies including transport, power, and urban infrastructure options, as well as address environmental and social issues. It will also examine financing needs and the potential for Public Private Partnership agreements.

The proposed main output is a Government-endorsed Southern Mongolia Infrastructure Strategy, which should be completed by April 2009, and which should set out publicly:

- the main infrastructure investments to be undertaken, a timetable for their implementation, and an indication of the public-private financing arrangements to be used;
- the envisaged social and environmental impacts and the Government’s plans for addressing them;
- the proposed legislative and institutional reforms which will be undertaken.

A secondary output will be a number of learning opportunities for key ministerial staff and decision-makers, including focused training, workshops on international experience, and study tours.

The proposed project is in three components

**Component 1: Policy Notes and Workshop on Broad Options for Infrastructure Development**

Over the next six months, a series of notes will be prepared on issues related to the development of infrastructure for proposed mining developments, and their associated environmental and social impacts. An overview of issues is attached. The notes will address:

- Financing issues – the resources available to the Government for national infrastructure development (including budgetary funds, donor loans, and potential for private financing), and the broad requirements for infrastructure outside South Gobi province;
- Water resource options (e.g. sites of aquifers, pipe water from the northern rivers), including costings, technical issues and PPP potential;
- Power options (e.g. size and technologies of power plants and timing of their development, fuel sources, transmission lines, options for exporting power, implications for Ulaanbaatar) including costings, technical issues and PPP potential;
• Transport options (road and rail), including costings, technical issues and PPP potential;
• Mining town development;
• Social issues associated with development of mines and towns in South Gobi;
• Policy and institutional reforms needed to embark on infrastructure PPPs in Mongolia;
• Social issues associated with the development of mines in South Gobi;
• Environmental issues and management.

The notes will be discussed in workshops in Dalanzadgad and Ulaanbaatar. The workshops will
be held in Mongolia following the mid-year elections, in July or August. The World Bank would
finance the workshop in Dalanzadgad. The Government will be asked to host the workshop in
Ulaanbaatar.

Following the workshops, the Government should identify its preferred options, to begin more
detailed work towards implementation.

**Component 2: Development of Government-Preferred Options**

Following the mid-year workshops, consultants will be hired to begin more detailed work on
chosen options – including legislative and institutional reforms, training, and pre-feasibility
studies. The precise scope will be dependent on the outcomes of the mid-year workshop.

The aim is to have a government-endorsed infrastructure strategy for Southern Mongolia by the
end of 2008. A draft of the strategy would be issued for public comment in December 2008, and
discussed at a workshop in January 2009.

**Component 3: Learning from International Experience**

During the year, a series of learning opportunities will be offered for staff of Government
ministries, focused particularly on private infrastructure investment. Video-conference facilities
at the World Bank will be used to allow ministerial staff to learn from international experts on
topics including procurement of independent power plants, or railway concessions. It is also
intended to hold a workshop in Ulaanbaatar on international experience with private
infrastructure investment.

**Detailed Scope of Work**

• To assist the Ministry of Finance in deciding between competing priorities in the allocation
of public funds.

  o Internationally, the countries investing the most in infrastructure (China and
    Vietnam), invest around 10% of GDP. In Mongolia, with a growing economy, the
    Government could plan to invest perhaps $300 million per year in infrastructure for
    the entire country, suggesting that the Ministry of Finance could authorize at most
    $150 million per year for infrastructure investment in southern Mongolia.

  o An indicative estimate of just some of the costs of infrastructure for Oyu Tolgoi and
    Tavan Tolgoi which will need to be developed in the next 4-5 years amounts to over
$1 billion: a 200 MW power plant for Oyu Tolgoi ($200 million) plus transmission line ($30 million); a 400 km railway line from the UB line to Tavan Tolgoi ($300 million), a 100 km railway from Tavan Tolgoi to the Chinese border ($75 million), and a 400 MW power plant at Tavan Tolgoi ($400 million). Additional investments will be required over the same period for roads, urban development, and water resources in South Gobi.

- Much of the infrastructure required for OT and TT could be financed by the private sector, freeing public funds for infrastructure investment elsewhere in the country. Planning for private infrastructure investment will require early decisions by the Government, and clear directions to line ministries.

- To address public concerns about the impacts of proposed infrastructure developments
  - One of the obstacles to concluding deals on OT and TT is public concern, reflected in Parliamentary concerns, that the Government does not have adequate plans concerning infrastructure or environmental and social impacts.
  - A consultative process to develop the Southern Mongolia Infrastructure Strategy will help to address these public concerns.
  - The World Bank will organize workshops in Dalanzadgad to discuss the Strategy and provide a forum for concerns to feed into the design of the Government’s Strategy.

- To introduce line ministries and other decision-makers to relevant international experience:
  - A series of learning opportunities will be offered, including workshops and training sessions at the World Bank office in Ulaanbaatar on aspects of infrastructure public-private partnerships (PPPs), and a small number of study tours for key decision-makers and ministerial staff.

**Proposed Outputs**

The principal output will be a Government-endorsed Southern Mongolia Infrastructure Strategy, setting out publicly:

- the main physical works to be undertaken, a timetable for their implementation, and an indication of the public-private financing arrangements to be used;
- the envisaged social and environmental impacts and the Government’s plans for addressing them;
- the proposed legislative and institutional reforms which will be undertaken.

A secondary output will be a number of learning opportunities for key ministerial staff and decision-makers, including focused training, workshops on international experience, and study tours.
Annex 3: Results Framework and Monitoring

Table A3.1 Results Framework

<table>
<thead>
<tr>
<th>PDO</th>
<th>Project Outcome Indicators</th>
<th>Use of Project Outcome Information</th>
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</table>
| The project development objective (PDO) for this first phase of support is to assist the Government to develop further the policy, fiscal, legal, regulatory and institutional framework for the mining and extractive sector that meets the needs of government, industry, and civil society. This includes the operation of Erdenes MGL LLC according to good international practice associated with a commercial entity. | **Macro-economic management**  
Annual budget decisions to replenish or withdraw from the newly established Sovereign Wealth Fund are made based on agreed macro-economic criteria  
Level of mining related transfers from national government to aimag and soum authorities is known and disclosed publicly.  
Mining pilot tax audits are completed and assessments raised | MOF assesses whether the government’s mineral revenue stabilization mechanism is indeed embedded in the budget processes and is likely to be effective and MOF refines the mechanism accordingly.  
MOF assesses whether funds are being transferred effectively with information fully disclosed publicly.  
MOF agrees with local governments on corrective actions as needed. |
| **Mining sector management more efficient and transparent**          | Clear authority and responsibilities for Government mining sector management institutions, especially regarding environmental and social aspects associated with mining activities.  
Mineral licensing procedures streamlined and processing times reduced.  
Companies and civil society express satisfaction (through surveys) that pieces of legislation and regulation reflect their concerns and needs as per the outcomes of the participatory process  
Geological information is digitized and published and readily available in user friendly digital formats |  
GDNT examines the accomplishments of the pilot audits and assessments and scales up the audit activity if needed  
MOF assesses whether the institutional structure is working effectively so that mining development takes place in a sustainable manner that is beneficial for Mongolia.  
MRPAM monitors and takes steps to reduce further processing times in case targets are not met  
Evidence of dissatisfaction may put at risk the effectiveness of the new regulations. If needed, Government takes further steps to reach out and monitor closely implementation of regulations  
MRPAM monitors and takes steps to ensure maximum use is made of available geological data |
**Intermediate Outcomes**

<table>
<thead>
<tr>
<th>Intermediate Outcomes</th>
<th>Intermediate Outcome Indicator</th>
<th>Use of Intermediate Outcome Monitoring</th>
</tr>
</thead>
</table>
| Improved effectiveness of key economic management institutions | • Sovereign Wealth Fund or alternative mineral revenue stabilization mechanism established  
• Preparation and adoption of good practice draft Model Mining Investment Agreements  
• Preparation, adoption and publication of a good practice policy statement on State equity participation in the mining sector  
• Establishment of an independent, local policy “Think Tank” which produces and disseminates professional quality mining sector economic and policy reports | Avoid Dutch disease and provide sustained sources of income for future generations  
Improved and stable investment climate.  
Erdenes operates efficiently and effectively and protects the interest of the state and provides benefits to the state  
Government policy initiatives in the mining sector are prepared in an informed manner taking into account all stakeholders voices |
| Improved effectiveness of key revenue collection agencies | • Income tax law on mining amended and supporting regulations drafted, enacted, and implementation started  
• GDNT tax audit staff trained and competent to carry out mining company tax audits  
• Options study prepared based on review of Double Taxation Treaties | Increased revenues flow to the national budget  
Tax audits are completed resulting in increased assessments  
GDNT ensures that companies use Double Taxation Treaties appropriately and not simply for tax avoidance purposes |
| Improved effectiveness of key extractive industry sector institutions and improved support for ASM | • Modern mining cadastre regulations are prepared, promulgated, implemented, and monitored  
• Modern company reporting requirements regulations are prepared, promulgated, implemented, and monitored  
• Modern occupation, health and safety regulations are prepared, | Improved capacity of the main government institutions to properly manage the sector in a sustainable way.  
Companies follow good international practice in reporting on their operations so that both authorities and civil society are well informed  
Health and safety performance improves for both LSM and, where it |
promulgated, implemented, and monitored

- Socioeconomic Impact assessment and social mitigation provisions including resettlement and compensation regulations are prepared, promulgated, implemented, and monitored.
- Modern mine closure & post closure regulations are prepared, promulgated, implemented, and monitored.
- Increased number of outreach and education programs for artisanal and small scale miners on technology, safety, and environmental issues

| Erdenes establishment, operation and management | Establishment of appropriate legal structure and preparation and adoption of a suitable corporate charter and reporting arrangements for Erdenes  
| Provision of management-related and governance-related training events to build capabilities needed within Erdenes |
| Erdenes is established with full legal standing and operates in line with good corporate practice and OECD Principles of Corporate Governance  
| Erdenes has sound management systems and procedures including public reporting so that Mongolian citizens see that they are benefitting from state ownership of equity in mining companies |

Risks of both LSM and ASM operations are reduced and mitigated and benefits are increased and enhanced so that overall impacts of mining operations for local communities on are improved. Mining communities are better prepared for mine closure when it takes place because mining companies plan for closure from an early stage and actively inform and consult with local communities ASM communities healthier as a result of improved mitigation of health and safety risks
<table>
<thead>
<tr>
<th>Project Outcome Indicators</th>
<th>Baseline</th>
<th>YR1</th>
<th>YR2</th>
<th>YR3</th>
<th>YR4</th>
<th>Frequency of Reporting</th>
<th>Data Collection Instruments</th>
<th>Responsibility for Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual budget decisions to replenish or withdraw from the newly established Sovereign Wealth Fund are made based on agreed macro-economic criteria</td>
<td>-</td>
<td>Review started</td>
<td>Review completed</td>
<td>Mechanism drafted and adopted</td>
<td>Budget for 2010-11 provides for allocations to the Fund that are based on macro criteria</td>
<td>Annual Report starts year 4</td>
<td>Annual Report</td>
<td>MoF</td>
</tr>
<tr>
<td>Level of spending towards basic public service delivery and investment programs of Aimag and Soum authorities is known and disclosed publicly.</td>
<td>0</td>
<td>Intergovernmental transfer mechanism clarified by the law.</td>
<td>Implementing mechanisms issued at Aimag and Soum levels.</td>
<td>Share of total revenues of Aimag and Soum governments, including those from mining-related sources, published regularly.</td>
<td>Breakdown of Aimag and Soum budgets by functional and economic classifications published regularly.</td>
<td>Mid-term and end of project</td>
<td>Survey</td>
<td>MoF, WB economists</td>
</tr>
<tr>
<td>Mining tax audits are completed and assessments raised</td>
<td>New mining tax law drafted</td>
<td>New tax law adopted</td>
<td>Training in mining tax auditing and audits commence</td>
<td>2 Audits completed</td>
<td>Mid Term and end of project reviews</td>
<td>Review</td>
<td>GDNT and WB Team</td>
<td></td>
</tr>
<tr>
<td>Clear authority and responsibilities for Government mining sector management institutions, especially regarding environmental and social aspects associated with mining activities.</td>
<td>ToR for institutional review including key benchmarks</td>
<td>Review completed</td>
<td>Responsibilities clarified and recommendations made</td>
<td>Institutional restructure implemented</td>
<td>Mid Term and end of project reviews</td>
<td>Review</td>
<td>PIU</td>
<td></td>
</tr>
<tr>
<td>Mineral licensing procedures streamlined and processing times reduced</td>
<td>4-6 months to issue licenses</td>
<td>3 months</td>
<td>2 months</td>
<td>&lt;2 months</td>
<td>Annual</td>
<td>Annual Report</td>
<td>Mining Cadastre</td>
<td></td>
</tr>
<tr>
<td>Increased availability and publication of digital geological information for investors and civil society</td>
<td>Policy prepared and adopted</td>
<td>Implementing Framework prepared and adopted</td>
<td>100,000 data points</td>
<td>200,000 data points</td>
<td>Annual</td>
<td>Annual Report</td>
<td>Mining Cadastre</td>
<td></td>
</tr>
<tr>
<td>Establishment of good practice internal management systems and standard operating procedures for state equity holding company Erdenes MGL LLC</td>
<td>-</td>
<td>Report prepared with recommendations</td>
<td>Financial systems operating well</td>
<td>Annual reports clearly detail sources and uses of funds</td>
<td>200 reports scanned</td>
<td>500 reports scanned</td>
<td>Annual</td>
<td>Annual Report</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>Intermediate Outcome Indicators</strong></td>
<td>Baseline</td>
<td>YR1</td>
<td>YR2</td>
<td>YR3</td>
<td>YR4</td>
<td>Frequency of Reporting</td>
<td>Data Collection Instruments</td>
<td>Responsibility for Data Collection</td>
</tr>
<tr>
<td>Sovereign Wealth Fund or alternative mineral revenue stabilization mechanism established</td>
<td>Development Fund reviewed</td>
<td>Implementing arrangements developed</td>
<td>Fund operational</td>
<td>Fund operational</td>
<td>Annual</td>
<td>Annual</td>
<td>MoF, BoM</td>
<td></td>
</tr>
<tr>
<td>Preparation, adoption and initial use of good practice Draft Model Mining Investment Agreements</td>
<td>-</td>
<td>Work started</td>
<td>Draft agreement completed and considered good practice by stakeholders</td>
<td>Draft agreement adopted</td>
<td>Agreement in use</td>
<td>One time survey</td>
<td>Survey of stakeholders</td>
<td>PIU</td>
</tr>
<tr>
<td>Preparation, adoption and publication of a good practice policy statement on State equity participation in the mining sector</td>
<td>Work started</td>
<td>Policy adopted and in line with good practice</td>
<td></td>
<td></td>
<td>Mid term and end of project</td>
<td>Expert judgment</td>
<td>WB Mining Team</td>
<td></td>
</tr>
<tr>
<td>Establishment of a policy “Think Tank” which produces good quality economic and mining sector policy issues and policy reports</td>
<td>Facility identified and equipment procured</td>
<td>2 policy reports produced including benefit sharing</td>
<td>4 reports (cum) including State Equity</td>
<td>6 reports (cum) including spin off benefits</td>
<td>Annual</td>
<td>Annual</td>
<td>PIU</td>
<td></td>
</tr>
<tr>
<td>Modern Mining cadastre regulations are prepared, promulgated, implemented, and monitored</td>
<td>Regulations issued</td>
<td></td>
<td>Companies confirm cadastre information has improved</td>
<td>Companies confirm cadastre processing times reduced</td>
<td>One time survey</td>
<td>Company q’aire</td>
<td>MRPAM</td>
<td></td>
</tr>
<tr>
<td>Income tax law on mining and supporting regulations drafted, enacted, and implementation started</td>
<td>-</td>
<td>Policy prepared</td>
<td>Amendment and regulations drafted and enacted</td>
<td>Tax returns lodged using new regulation</td>
<td>Experts consider tax returns accurate</td>
<td>Annual</td>
<td>Annual</td>
<td>GDNT</td>
</tr>
<tr>
<td>Options study prepared based on review of Double Taxation Treaties</td>
<td>-</td>
<td>Review completed</td>
<td>Options prepared &amp; decisions taken</td>
<td>Tax avoidance prevented</td>
<td>Tax avoidance prevented</td>
<td>Annual</td>
<td>Annual</td>
<td>GDNT</td>
</tr>
<tr>
<td>GDNT tax audit staff trained and competent to carry out mining company tax audits</td>
<td>0</td>
<td>3 staff trained</td>
<td>6 staff trained</td>
<td>8 staff trained and 2 staff lead tax audits</td>
<td>10 staff trained and 2 staff lead tax audits</td>
<td>Annual</td>
<td>Progress Report</td>
<td>GDNT</td>
</tr>
<tr>
<td>Category</td>
<td>Action</td>
<td>Result</td>
<td>Frequency</td>
<td>Responsible Authority</td>
<td>Agency</td>
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<td></td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<tr>
<td>Modern Company Reporting requirements regulations are prepared,</td>
<td>Regulations issued</td>
<td>Companies confirm in line with good practice</td>
<td>One time</td>
<td>Company q’aire</td>
<td>MRPAM</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>promulgated, implemented, and monitored</td>
<td></td>
<td></td>
<td>survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Occupational, Health and Safety regulations are prepared,</td>
<td>Regulations issued</td>
<td>Companies confirm in line with good practice</td>
<td>One time</td>
<td>Company q’aire</td>
<td>MRPAM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>promulgated, implemented, and monitored</td>
<td></td>
<td></td>
<td>survey</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Socioeconomic Impact assessment and social mitigation provisions</td>
<td>Regulations issued</td>
<td>Civil Society confirm in line with good practice</td>
<td>One time</td>
<td>Civil Society q’aire</td>
<td>MoNE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>including resettlement and compensation regulations are prepared,</td>
<td></td>
<td></td>
<td>survey</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>promulgated, implemented, and monitored</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MoNE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Mine closure &amp; post closure regulations are prepared,</td>
<td>Regulations issued</td>
<td>Stakeholders confirm in line with good practice</td>
<td>One time</td>
<td>Company and Community q’aires</td>
<td>MRPAM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>promulgated, implemented, and monitored</td>
<td></td>
<td></td>
<td>survey</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Increased number of outreach and education programs for artisanal and</td>
<td>2 including</td>
<td>4 (cum) including health and safety</td>
<td>Annual</td>
<td>Annual report of SAM</td>
<td>ASM Trainers</td>
<td></td>
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</tr>
<tr>
<td>small scale miners on technology, safety, and environmental issues</td>
<td>mercury use</td>
<td></td>
<td></td>
<td>project</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Adoption of appropriate legal framework for Erdenes including</td>
<td>Advice and strategy</td>
<td>Meets commercial reporting requirements</td>
<td>Annual</td>
<td>Report</td>
<td>Erdenes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>governance and oversight arrangements</td>
<td>prepared and adopted</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Preparation and Adoption of suitable corporate charter</td>
<td>Corporate charter</td>
<td>Charter in line with good practice</td>
<td>Annual</td>
<td>Annual Report</td>
<td>Erdenes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>prepared</td>
<td>adopted</td>
<td></td>
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</tbody>
</table>
Annex 4: Project Description

The Project consists of four components: (a) Strengthening the Capacity to Manage Mining Revenues and Develop Economic and Sector Policies, (b) Improving Regulatory Capacity to Manage Mining Sector Development, (c) Developing the Capacity for Management of State Equity and (d) Project Management. In addition, there will be a parallel but closely linked activity, funded development partners including a Southern Mongolia Regional Infrastructure Strategy funded by the Public-Private Infrastructure Advisory Facility (PPIAF) and AusAID (see Annex 2).

Project Description. The Project includes support for activities in four main agencies: Ministry of Finance (MoF), the General Department of National Taxation (GDNT), the Ministry of Industry and Trade (MoIT) and the Mineral Resources and Petroleum Authority of Mongolia (MRPAM). In addition there will be collaboration with the Ministry of Nature and Environment (MoNE). Project assistance would address a range of issues across these agencies, including development of mining sector policy and strategy; review of the institutional framework for mining; establishment of a proper legal and regulatory regime for mining, including the need for the Government to introduce a robust mechanism for the promulgation of regulations by Cabinet; management of macroeconomic impacts of large mining sector developments, including improved minerals sector tax collection and audit capacity; clarification and improvements in minerals sector benefit distribution; and capacity building for management of environmental and social impacts of mining (including artisanal and small-scale mining).

A core focus of all Project activities will be the development of human resources capacity within Government agencies. In addition to on-the-job training provided under each component, the Project will support formal training programs as well as training workshops and participation in targeted learning events and conferences. The Project will also support study tours and staff twinning or secondment programs for government staff into counterpart agencies in other countries.

The World Bank is currently engaged in a dialogue with the Government on a Country Assistance Strategy (CAS) for the period 2008-2011. This proposed project will be a critical element of the support that the World Bank intends to provide under the CAS platform on “Enhancing the development benefits of the mining economy”. It will also be a continuation of the Bank’s successful engagement in Mongolia’s mining sector over the past decade which included the provision of technical assistance (TA) to help draft the 1997 Mining Law, among other TA activities.

The specific components of the proposed project are as follows:

Component 1: Strengthening the Capacity to Manage Mining Revenues, and Develop Economic and Sector Policies (IDA US$4.1 million) The principal target groups for this component is the staff of the Ministry of Finance and Ministry of Industry and Trade, MRPAM and Erdenes MGL LLC who will be provided with support to refine economic and sector policy, financial planning and forecasting, to develop model contracts and agreements for future mineral and petroleum development, and to undertake a review of the institutional framework of
Government relating to the management of the mining sector, and especially mining revenues. Component 1 will support the following core activities:

**Strengthening Government’s capacity to design and implement mining sector-related policies**

The project will provide support to MoF, MoIT and MRPAM for development of a

- **Sustainable Mining Development Policy** that results in economically, environmentally and socially sustainable mining development that contributes to achievement of overall national sustainable development objectives and poverty alleviation and is in line with the medium-term budgetary framework with indicators that allow the tracking of progress towards achieving the intended results;
- **Mineral Revenue Sharing Policy** that establishes and clarifies the mechanisms for the sharing of mining related revenues between national government and Aimag/Soums where mining activities take place in order to help ensure that the funding needed for new infrastructure and public service delivery commitments is available to the level of government that is responsible for its provision (Center, Aimag, or Soum) in response to growing demands caused by population increases in areas neighboring mines. Preparation of the policy will be accompanied by scoping work on future measures to improve the planning, budgeting, procurement and implementing capabilities of Aimag and Soum and outcome monitoring arrangements
- **Minerals Taxation and Fiscal Policy** which promotes investment and at the same time is efficient in the collection of revenues throughout the commodity price cycle, gaining for government upside from mineral commodity price increases. The Policy will address the principles guiding the establishment of tax rates, import duties, deductions and concessions and the tax treatment of social expenditures, mine closure costs and rehabilitation costs. It will also cover policy issues related to determining product pricing and sales for tax purposes, ring fencing, accounting rules, tax stability, financial security and tax avoidance.
- **State Mining Sector Equity Participation Policy** which clarifies the nature, basis and role of State equity participation in the sector and in particular the role and functions of Erdenes MGL LLC.
- **Exploration Policy** which addresses concerns regarding the holding of exploration licenses for speculation rather than prospecting purposes and which will assist the government to ensure that investors and license holders contribute to increasing the knowledge base of Mongolia’s mineral resources and to limit the extent that licenses are used only as an instrument of financial speculation without substantial exploration activities taking place.
- **Independent Policy Think Tank(s)** which can provide policy analyses and advice to the Government and Parliament on new and emerging mineral policy issues and also foster information dissemination and informed public debate on responsible mining and other related economic issues, including assessing their impact on the well-being of the people of Mongolia, especially the poor. Efforts will be made to collaborate with other external

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6 The Mongolian National University has established a Center for Policy Studies in September 2007 and has been providing background research analyses for some private companies, NGOs that are operating in Mongolia. The University also houses the Center for Development Studies and the School of Social Studies that are involved in applied research on issues related to Artisanal Mining, population and demography, and other related subjects. There is also a Mining Institute in Mongolia located at the Mongolian University of Science and Technology that conducts technical, geological and economic studies on mining issues.
partners and NGOs in this regard including EITI information dissemination and civil society capacity building initiatives.

**Provision of Strategic Advice**
The project will provide support for MoIT, MoF and Erdenes for

- Engaging high level strategic advisors to assist the Government to determine the most appropriate strategies for mining industry development including *inter alia* advice on high level mining development policy, investment strategies, mining development financing, optimal processes for engagement of strategic investors.

**Financial Planning and Forecasting Capacity Improvement**
The project will provide support to MoF for

- a review of the structure and operating modalities of the existing Development Fund and preparation of an option study on the formulation and implementation of a new Sovereign Wealth Fund or alternative mineral revenue stabilization mechanism to stabilize and smooth revenue flows to the Government budget between periods of high and low commodity prices.
- preparation of legislation, operating guidelines and administrative arrangements for the establishment of the selected fund option or mechanism;
- preparation of policies and instruments to improve regional economic development impacts of mining projects and identify and address macro economic “Dutch disease risks” and exchange rate management challenges in the face of rapidly increasing trade and fiscal surpluses
- improvement of fiscal statistical data collection and reporting capabilities including information sharing between the MoF, MoIT, MRPAM and Bank of Mongolia which is critical in this regard;
- provision of training and development of staff in fiscal data analysis and forecasting.

**Developing Model Contracts and Fostering Mining Industry Development**
The project will provide support to MRPAM for

- development of model contracts and agreements (e.g., model investment agreement, model production sharing contracts, model shareholders agreement, etc.) consistent with prevailing laws and licensing procedures

**Communicating Industry Development Issues**
The project will provide support to MRPAM for

- development and implementation of a plan for communicating policy and industry initiatives and policy analysis to the public and investment community,

**Institutional Review**
The project will provide support to MoF for:

- a review of the mining sector institutional structure, that will take into account of the findings of the Strategic Environmental and Social Assessment, and provide recommendations for rationalization and consolidation of mineral sector management functions to reduce both overlap and fragmentation of authorities and responsibilities of different government institutions. It will also recommend ways to facilitate cross-institutional teamwork in addressing mining sector activities and operations.
Improving Tax Administration and Collection

The project will provide support to GDNT to

- prepare amendments to the present mineral fiscal legislation and regulations to address deficiencies identified in recent years
- review existing Double Taxation Treaties, especially as they relate to direct and indirect mining sector revenues and tax expenditures, and determine the cost/benefit to the State and make recommendations for amendment/updating or cancellation as required;
- review and address international tax issues such as product pricing, inter-affiliate transactions, ring fencing, futures contracts and tax avoidance strategies
- address any issues of concern such as avoidance of windfall profits taxes by gold producers and coal exports being sold at prices that are a small fraction of world market prices
- conduct risk assessments to determine matters to be scrutinized and its effect to the revenue;
- carry out full mining and petroleum company tax assessments and audits.

This project sub-component will provide staff training and development on basic principles, practices and techniques for mineral taxation assessment and audit. It will be implemented through a participatory approach and on-the-job training to develop staff capacity to carry out the above core activities as well as staff twinning into Tax Departments in other similar jurisdictions with significant mining sectors.

The key inputs for Component 1 will be consulting services for economic, policy and legal advisors, training and twinning costs, goods including basic core office equipment, technical literature, and incremental operating costs.

Component 2: Improving Regulatory Capacity to Manage Mining Sector Development (IDA US$3.0 million). The principal target groups for this component are the staffs of the Ministry of Industry and Trade (MoIT) and the Mineral Resources and Petroleum Authority of Mongolia (MRPAM). This project will provide support for the following core activities:

- **Regulatory framework and licensing functions**: support to MoIT and MRPAM for preparation and approval of clear, best practice regulations relating to mineral licensing resulting in a highly transparent system with clear approval and cancellation provisions that minimize discretionary actions,
- **Regulatory framework and safeguard functions**: support to MRPAM and MoNE for preparation and approval of clear, best practice regulations relating to occupational health and safety, the preparation of environmental impact reports and environmental monitoring and management plans, environment and social impact management and risk mitigation for both large and small scale mining areas, including responding to the concerns of the most vulnerable groups (including women and children) and introduction of a Socioeconomic Impact Assessment and formalization of public consultation procedures.
- **Institutional Roles and Responsibilities**: support to MoIT, MRPAM and MoNE as appropriate for amendments to regulations to clarify institutional roles and responsibilities in
line with any changes made to sector structure as a result of the mining sector institutional structure review and the SESA.

The project will also support capacity building to the appropriate institutions to support efficient and effective implementation of the regulation, especially regarding inspection, enforcement and audit functions, including inter alia

- **Mining Cadastre office and functions** through support to the MRPAM Mining Cadastre office for completion of the establishment and operation of a fully computerized mineral licensing system. This will occur in association with the completion of the regulations which will be codified into the software. The project will focus on systems development and improvements in the transparency and operations of the cadastre and build on the related accomplishments and outcomes of the mining sector sub-component of the ongoing IDA Governance Assistance Project. The project will also support an assessment of the extent to which mining-related compensation payments are being made and licensing conditions are being adhered to and sanctions for non-performance are being implemented.

- **Management and Mitigation of Environmental Risks** through support to MoNE and MRPAM to ensure that exploration and mining operations and site rehabilitation after mine closure are undertaken in compliance with environmental requirements and that sanctions for non-compliance are enforced.

- **Management and Mitigation of Social Risks** through support to MoNE and MRPAM for pilot activities aimed at improving the quality of life of disadvantaged groups in mining areas, in particular engaging with women and youth to establish support and networking groups and training programs, and aimed at reducing the dependency of communities on mining activities including tripartite partnerships (communities, government and private investors) to support diversification of economic activities in mining communities.

- **Management of Artisanal and Small Scale Mining Risks** through support to the Artisanal and Small-scale Mining (ASM) Division of the Mining Department of MRPAM to complement support provided by the Swiss Development Cooperation Small and Artisanal Mining Project. The support will include the development of environmental guidelines for ASM operations and rehabilitation of ASM areas together with outreach and extension services to support ASM miners to improve their mining, safety and environmental practices. The support will also start the process of formalizing the ASM sector through registration or licensing of artisanal and small-scale miners and establishment of a database of artisanal and small-scale miners including their GPS locations and activities.

- **Management of data regarding strategic deposits** through support to the Geology Department to improve management of reserve and resource data, particularly with respect to strategic mineral deposits and in particular to convert reserve and resource information from FSU categorization to classifications suitable for reporting to international stock exchanges such as JORC or 43-101. This will be by a combination of staff training and development as well as mentoring by internationally accredited resource geologists.
• **Compilation and reporting of geological data** through support to the Geological Information Center to put in place the systems to provide for a substantial increase in the scale and scope of data digitizing of its very large stores of geological information and to prepare a policy for information management and sharing with other government agencies for land use planning and the private sector for mineral exploration purposes. The project will help finance the systems for scanning and digitizing equipment and appropriate data management software. The project will also support the establishment of a national geological stratigraphic database and preparation of a strategic plan for geological mapping for the next decade taking into account priorities based on both commercial and scientific interest.

This Project component will be implemented through a participatory approach and on-the-job training. The key inputs will be consulting services for policy, legal and technical advisors, training costs, goods including basic core office equipment as well as specialist scanning, digitizing, data storage and server hardware, specialist and database software, technical literature, and incremental operating costs.

**Component 3: Developing the Capacity for Management of State Equity in the Mining Sector (IDA US$1.4 million).** The project will support the Ministry of Finance, Ministry of Industry and Trade and State Property Commission to build the capacity and institutional framework for the management of State Equity holdings through the State owned Holding Company, Erdenes MGL, LLC by providing support for the following core activities:

- Development of Erdenes in a manner consistent with the national development strategy;
- Development of Erdenes technical capacities for management of its shares in the mining sector held on behalf of the State;
- Establishment of the corporate entity including legal structure, corporate governance, financial and fiduciary arrangements consistent with the OECD Principles of Corporate Governance
- Support the training and development of the company’s Directors (including any independent Directors) and officers in international best practice with respect to corporate financial management and reporting arrangements
- Assist the company to prepare for listing on the Mongolian Stock Exchange pursuant to its obligations under Clause 5.6 of the Minerals Law 2006.
- Provision of support and advice to Erdenes and the Government on matters relating to State mineral sector investment strategies and project financing issues;
- Training and staff development in project evaluation, feasibility studies, mineral market assessment, economic evaluation and financial modeling;

The key inputs will be consulting services for corporate development, legal and technical advisors, training costs, goods including basic core office equipment, technical literature, and incremental operating costs.

**Component 4: Project Management (IDA US$0.8 million).** The principal target group for this component is the Project Implementation Unit (PIU) situated in the Ministry of Finance. The PIU staff will be supported to monitor, supervise, and provide technical and administrative management control of the Project. The project will finance a Project Coordinator, Procurement
Specialist, and Financial Management Specialists dedicated to the Mining Sector Institutional Strengthening Technical Assistance Project. Ad hoc international advisors may also be required from time to time to monitor implementation of specific specialist activities. The key inputs will be staff salaries for project management and specialist consultants, goods including basic core office equipment, and incremental operating costs.
### Annex 5: Project Costs

#### Table A.5 Project Costs by Component

<table>
<thead>
<tr>
<th>Project Cost By Component and/or Activity</th>
<th>Local US $million</th>
<th>Foreign US $million</th>
<th>Total US $million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening the Capacity to Develop and Refine Revenue Management, Economic and Sector Policies</td>
<td>0</td>
<td>3.74</td>
<td>3.74</td>
</tr>
<tr>
<td>Improving Regulatory Capacity to Manage Mining Sector Development</td>
<td>0</td>
<td>2.70</td>
<td>2.70</td>
</tr>
<tr>
<td>Developing the Capacity for Management of State Equity</td>
<td>0</td>
<td>1.27</td>
<td>1.27</td>
</tr>
<tr>
<td>Project Management</td>
<td>0</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td><strong>Total Baseline Cost</strong></td>
<td>0</td>
<td><strong>8.45</strong></td>
<td><strong>8.45</strong></td>
</tr>
<tr>
<td>Physical Contingencies</td>
<td>0</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>Price Contingencies</td>
<td>0</td>
<td>0.45</td>
<td>0.45</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td>0</td>
<td><strong>9.30</strong></td>
<td><strong>9.30</strong></td>
</tr>
</tbody>
</table>

**Total Financing Required**  
9.30 9.30
Annex 6: Implementation Arrangements

**Project implementation period**
The project will be implemented over a period of three and one half years (2008-2011). The project completion date is to be December 31, 2011.

**Implementing Agency**
The Ministry of Finance will be responsible for the implementation of the Project. The MoF will manage the project on behalf of beneficiaries in four agencies, being: the MoF, MRPAM, General Department of National Taxation, and the Ministry of Industry and Trade.

**Project management**
The MoF will create and maintain Project Implementation Unit (PIU) within the Ministry which will be responsible for the implementation of the project. The Manager PIU reports to the State Secretary for Finance and will:

(i) be responsible for the execution of the Project based on the Project Implementation Manual;

(ii) manage procurement activities including all contracting for consultant services and purchases of goods, project contract monitoring, reporting and evaluation;

(iii) financial management, record keeping, management of the Designated Account, disbursements; and financial reporting;

(iv) maintenance of communication and coordination between the MoF and the various beneficiary government agencies and other stakeholders involved in the project.

The PIU is composed of a minimum of:

(a) the Project Manager, responsible for the overall management of project activities and compliance with its objectives, and for ensuring proper coordination among the various government agencies;

(b) the Project Accountant, responsible for budget preparation and follow-up, financial management including operation of the Special Account, disbursement, financial reporting and financial management of the Small Grants Program.

(c) the Procurement Specialist responsible for carrying out procurement activities consistent with procedures approved by IDA, for managing ongoing contracts, and reporting on the progress of procurement activities and deliverables under contract.

The MoF, MRPAM, GDNT and MoIT will each have one or more technical officers responsible for technical completion of relevant project components and sub-components and be the in-house champions in their organization for component implementation and ensure the achievement of contractual objectives and deliverables by consultants.

**Accounting, financial reporting and audits.** A financial management assessment has been carried out during appraisal, and procedures to comply with Bank norms have been agreed with the MoF. A financial management system will be established based on the system used by previous Technical Assistance projects in MoF such as the GAP project. The PIU will maintain (i) records of accounts including records of all receipts and payments; and (ii) an asset register of
all goods procured under the project. A monthly financial report including bank reconciliation will be prepared along with statements of expenditure and summary sheets as required by IDA for replenishment of the Designated Account and provided to the Manager PIU and the State Secretary for Finance. A quarterly summary financial report will be included in the quarterly progress reports of the project in a form satisfactory to IDA. The PIU will retain all records of payments and receipts and make such records available for annual audits or such internal audit as may be required by the Government and the World Bank. Statements of expenditure will be audited annually by independent auditors under terms of reference satisfactory to IDA. The audit reports will be submitted to IDA not later than six months after the end of each calendar year.

**Procurement.** The PIU will manage all procurement activities for the project on behalf of all of the beneficiary agencies. All procurement activities will be consistent with World Bank/IDA Procedures as laid down in the “Guidelines: Procurement Under IBRD Loans and IDA Credits” and comply with all legal covenants of the financing agreement. Procurement of training activities will be subject to prior review and such activities will be approved by the relevant Executive within each beneficiary agency. In such cases where an agency has given responsibility for training to an institutional Training Committee the approval of the Chairman of the relevant Training Committee will be required for each training activity.

**Monitoring and evaluation.** The PIU will be responsible for monitoring and evaluation of project implementation according to the indicators and benchmarks included in the Project Implementation Manual, the Project Appraisal Document, and the financing agreement. Not later than 45 days after the end of each quarter, the PIU will submit to IDA quarterly progress reports covering all project activities, including a procurement progress report and a financial summary report. Bi-annual reviews, the first one to take place six months after effectiveness, will provide detailed analysis of implementation progress toward development objectives, and will include an evaluation of financial management as well as a post-review of procurement matters.

**Project Oversight.** The project will be supervised by a Project Steering Committee comprised of representatives of each of the beneficiary agencies.

Membership of the Steering Committee will be as follows:

- State Secretary for Finance (Chairman) or Alternate
- A Senior Officer from the Ministry of Finance appointed by the State Secretary
- Chairman of MRPAM or Alternate
- Chairman of State Property Committee or Alternate
- Director of GDNT or Alternate
- Executive Director of Erdenes or Alternate
- State Secretary for Industry and Trade or Alternate
- State Secretary for Nature and Environment or Alternate
- Manager PIU
• Other ad hoc members as appointed by the Chairman with the endorsement of the Committee during evaluation of tenders relating to specific entities.

The Steering Committee will act as the Tenders Board for the project and will be responsible for signing resolutions for the award of contracts and supervision of procurement activities by the PIU. The Steering Committee will approve all contracts for consultant services and goods in excess of a threshold of US$50,000 and will review a list of all contract awards by the PIU at each of its regular scheduled meetings. The Steering Committee will approve all Short Lists, Requests for Proposal and Evaluations for contracts in excess of the threshold. Evaluations of tenders may be carried out by procurement sub-committees appointed by the Steering Committee comprising staff of the PIU supplemented by technical staff from the relevant beneficiary agencies and functional groups. All contract awards below the threshold will be executed by the State Secretary for Finance following completion of evaluation reports by the procurement sub-committee, and the results reported to the Steering Committee at its next regular meeting. A register of training activities supported by the project will also be presented to each Steering Committee meeting. The Steering Committee will meet as required to ensure timely achievement of project procurements and activities and not less than quarterly throughout the project duration. The Steering Committee will review the quarterly progress reports as submitted to IDA. Minutes of the steering committee meetings will be taken, and a copy of the minutes signed by the Chairman will be provided to the Task Team Leader at the IDA within 14 days of the meeting.
Executive Summary

1. The Financial Management Team (FM team) has conducted an assessment of the adequacy of the project financial management system for the Mongolia Mining Sector Technical Assistance Project. The assessment, based on guidelines issued by the Financial Management Sector Board on November 3, 2005, has concluded that the project meets the minimum Bank financial management requirements, as stipulated in BP/OP 10.02. In the FM team’s opinion, the project will have financial management arrangement acceptable to the Bank and, as part of the overall arrangements that the borrower has in place for implementing the operation, provide reasonable assurance that the proceeds of the IDA grant/credit will be used for the purposes for which they are provided. Financial management risk is the risk that World Bank loan/grant proceeds will not be used for the purposes intended and is a combination of country, sector and project specific risk factors. Taking into account the risk mitigation measures proposed under the project, the FM risk rating proposed for this project at the appraisal stage is Moderate.

2. Funding sources for the project include blended IDA Grant and Credit comprising 45% grant and 55% credit. The IDA proceeds will directly flow to a project Designated Account (DA) to be set up at commercial bank acceptable to the Bank and managed by a PIU to be established and located within the Ministry of Finance.

Country Issues

3. Country Financial Accountability Assessment (CFAA) of November 2002, Accounting and Auditing ROSC of 2008, and our current experience and understanding of the country found the overall fiduciary environment is weak and public sector financial accountability system does not function well, and corporate governance remains inadequate in Mongolia. Given the existing weaknesses in the financial accountability framework, a ring-fenced control should be maintained for Bank financed projects until the systemic weaknesses have been adequately addressed. The Bank and Government of Mongolia (GOM) is currently working together to integrate the Bank financed project into the Government Financial Management Information System (GFMIS) which would eliminate the need to ring-fence the FM arrangements for Bank projects. However, this is still at planning stage and the timing of this roll-out is still undetermined. Therefore, this assessment is still prepared under current conditions and the use of ring-fenced controls still applies for the project. Once projects are rolled into GFMIS, thus using country systems, this project’s FM arrangement will be revised accordingly.

Summary Project Description

4. The overall objective of the project is to assist the GOM to further develop the policy, fiscal, legal, regulatory and institutional framework for the mining and extractive sector that meets the needs of government, industry, and civil society. This includes the operation of Erdenes MGL LLC according to good international practice associated with a commercial entity. For the detailed project description, please refer to the Annex 4 – Detailed Project Description in the PAD.
Audit Arrangements

5. The Bank requires that project financial statements be audited in accordance with standards acceptable to the Bank. In-line with other Bank financed projects in Mongolia, the GOM will appoint an independent external auditor, acceptable to the Bank, to conduct annual audits of the project accounts in accordance with International Standards on Auditing, under terms of reference satisfactory to the Bank. The audit will be financed from the IDA proceeds. The auditors will: (a) express an opinion on the annual financial statements; (b) determine whether the Designated Account has (i) been correctly accounted for, and (ii) been used in accordance with the financing agreements; and (c) determine the adequacy of supporting documents and controls surrounding the use of Statement of Expenditures (SOEs) as a basis for disbursement. The auditors will also furnish a separate Management Letter, which will: (a) identify any material weakness in accounting and internal control as well as asset management; (b) report on the degree of compliance of financial covenants of the Financing Agreement, Grant Agreement and Project Agreements; and (c) communicate matters that have come to the attention of the auditors which might have a significant impact on the implementation of the project.

6. The annual audit report of project financial statements will be due to the Bank within 6 months after the end of each calendar year. This requirement is stipulated in the financing agreement. The responsible agency and timing are summarized as follows:

<table>
<thead>
<tr>
<th>Audit Reports</th>
<th>Submitted by</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project financial statements</td>
<td>PIU</td>
<td>June 30 of each calendar year</td>
</tr>
</tbody>
</table>

Risk Assessment and Mitigation

7. The following risks with corresponding mitigating measures have been identified during the assessment:

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Rating</th>
<th>Incorporated Risk Mitigating Measures</th>
<th>Residual Risk Rating</th>
<th>Conditions of Negotiations, Board or Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inherent Risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Country level</td>
<td>High</td>
<td>Maintain ring-fenced controls for the project</td>
<td>Substantial</td>
<td></td>
</tr>
<tr>
<td>• Entity Level</td>
<td>Moderate</td>
<td>The MoF has long term experience with designing, managing and implementing the donor funded projects. In</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>Project Level</td>
<td>Substantial</td>
<td>Detailed financial management manual (FMM) will specify sufficient internal controls to be in place to monitor the project from financial management perspective.</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td><strong>Control Risk</strong></td>
<td></td>
<td><strong>Budgeting</strong></td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>• Project Level</td>
<td>Substantial</td>
<td>Project annual plan, which is consistent with the timing of project activities will be prepared, reviewed and monitored by the PIU under the oversight of Steering Committee.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accounting</strong></td>
<td>Substantial</td>
<td>a) A FMM will be developed for Bank review, which includes the project accounting procedures.</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>• Accounting</td>
<td></td>
<td>b) A capable project financial officer will be recruited with proper qualification and experience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Internal</td>
<td>Substantial</td>
<td>c) Relevant financial management training will be provided to the newly recruited financial officer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Internal</td>
<td>Substantial</td>
<td>d) An accounting software may be installed and utilized for the project. If not, appropriate manual accounts and ledgers will be used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Internal</td>
<td>Substantial</td>
<td>The internal controls will</td>
<td>Moderate</td>
<td></td>
</tr>
</tbody>
</table>
| Control | be specifically designed for the project and documented in the project FMM, which will at least include but not be limited to the following:
a) Regular bank reconciliation and periodic cash count  
b) Proper authorization and approval procedures for payment request. 
c) Appropriate segregation of duties. 
d) Bank’s no objection for significant project activities 
e) Annual audits by external independent audit firm. |
|---|---|
| • Funds Flow | Moderate | a) The flow of funds is direct and simple to support the project smooth implementation. 
b) The review and approval procedures and related service standards will be documented in the FMM to make the reviewing and funds delivery process more efficient. |
| • Financial Reporting | Substantial | a) The PIU will adopt project financial reports with proper format and content. 
b) Quarterly Financial Monitoring Reports (FMR) will be prepared and submitted to the Bank for review on regular basis as specified in | Moderate |
**Fund Flow and Disbursement Arrangements**

8. Funds flow for the IDA proceeds will comply with the requirements of the Bank and MoF. One Designated Account will be opened at a commercial bank acceptable to the Bank and managed by the PIU. The Designated Account (DA) would disburse against all eligible project expenditures. The ceiling of the DA will be discussed and agreed to between the Bank and borrower during project negotiation and specified in the Disbursement Letter. As noted in paragraph 3 above, Bank financed projects will possibly move into the Treasury Single Account system within the Government Financial Management Information System (GFMIS). Once this happens, the DA arrangement for this project will be revised accordingly.

9. Further advance will be made from the DA to an operating account (OA) to be opened at a commercial bank acceptable to the Bank and managed by the PIU. The OA is used to finance small expenditures relating to incremental operating costs and training. The OA is maintained in Mongolian Tugrug and the maximum ceiling of OA should be limited to equivalent to US$20,000. Uses of the advance should be reported and reconciled with the DA on a monthly basis. The OA outstanding balance should be reported as a separate item within the DA reconciliation statement that is submitted together with the DA withdrawal applications.

10. The funds flow will be as follows:

```
World Bank
   `-- Approval by MoF
       `-- DA at the PIU
           `-- Operating Account
               `-- Contractors, Supplier and Beneficiaries
```

11. Four disbursement methods: advance, reimbursement, direct payment and special commitment are available for the project. The supporting documents for disbursement will be
statement of expenditures (SOE) or records like contracts and invoices. The use of records will be established as per the Disbursement Side Letter as follows:

- **For requests for reimbursement**
  a) Statement of Expenditures (SOE) for the expenditures against the contracts indicated in the table below:

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contracts Less than US$ Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>50,000</td>
</tr>
<tr>
<td>Firm Consultant</td>
<td>100,000</td>
</tr>
<tr>
<td>Individual Consultant</td>
<td>50,000</td>
</tr>
<tr>
<td>Training, Incremental operating costs</td>
<td>All</td>
</tr>
</tbody>
</table>

b) The list of payments against the contracts, and records evidencing eligible expenditures, e.g., copies of receipts, supplier invoices, for the contracts subject to the Bank prior review indicated in the table below:

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contracts equivalent to or more than US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>50,000</td>
</tr>
<tr>
<td>Consulting firm</td>
<td>100,000</td>
</tr>
<tr>
<td>Individual consultant</td>
<td>50,000</td>
</tr>
</tbody>
</table>

- **For reporting eligible expenditures paid from the Designated Account**
  a) Statement of Expenditures (SOE) for the expenditures against the contracts indicated in the table below:

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contracts Less than US$ Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>50,000</td>
</tr>
<tr>
<td>Firm Consultant</td>
<td>100,000</td>
</tr>
<tr>
<td>Individual Consultant</td>
<td>50,000</td>
</tr>
<tr>
<td>Training, Incremental operating costs</td>
<td>All</td>
</tr>
</tbody>
</table>

b) The list of payments against the contracts, and records evidencing eligible expenditures, e.g., copies of receipts, supplier invoices, for the contracts subject to the Bank prior review indicated in the table below:

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contracts equivalent to or more than US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>50,000</td>
</tr>
<tr>
<td>Consulting firm</td>
<td>100,000</td>
</tr>
<tr>
<td>Individual consultant</td>
<td>50,000</td>
</tr>
</tbody>
</table>

c) A Designated Account reconciliation statement.

- **For requests for direct payment**: records evidencing eligible expenditures, e.g., copies of receipts, supplier invoices
12. The Bank IDA proceeds would be disbursed against eligible expenditures (taxes inclusive) as in the following table:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Credit Allocated (expressed in SDR)</th>
<th>Amount of the Grant Allocated (expressed in SDR)</th>
<th>Percentage of Expenditures to be Financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Consultants' services and Training and Workshops under Parts 1, 2 and 4 of the Project</td>
<td>1,930,000</td>
<td>2,470,000</td>
<td>100%</td>
</tr>
<tr>
<td>(2) Consultants' services, and Training and Workshops under Part 3 of the Project</td>
<td>860,000</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>(3) Goods</td>
<td>270,000</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>(4) Incremental Operating Costs</td>
<td>90,000</td>
<td>100,000</td>
<td>100%</td>
</tr>
<tr>
<td><strong>TOTAL AMOUNT</strong></td>
<td><strong>3,150,000</strong></td>
<td><strong>2,570,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

13. Retroactive financing is requested for this project. The ceiling amount for retroactive financing under this project would total approximately SDR 572,000 (US$930,000) being 10% of the project proceeds and applies for expenditures incurred on or after April 1st 2008. The disbursement plan for retroactive financing will be prepared by MoF and submitted to the Bank for review and approval. The amount and date of expenditures eligible for retroactive financing will be determined and approved by the task team leader and the Bank’s Loan Department.

14. The PIU will be directly responsible for the management, maintenance and reconciliation of the DA and OA activities of the project. The PIU will retain disbursement supporting documents for one year after the receipt of the last audit report. These documents will be made available for review by the auditors and Bank supervision missions. If the auditors or the Bank find any disbursements not justified by supporting documentation or are made for ineligible expenditures, the Bank may withhold further deposits to the DA until the Borrower has: (a) provided the accepted supporting documents; b) refunded the amount involved to the Bank; or (b) submitted evidence of other eligible expenditures that offset the ineligible expenditures.
Financial Management and Reporting Arrangements

Implementing Agencies

15. The project will be supervised by a Project Steering Committee comprised of representatives of each of the beneficiary agencies. Membership in the Steering Committee will comprise of State Secretary for Finance (Chairman) or Alternate, Chairman of MRPAM or Alternate, Director of GDNT or Alternate, State Secretary for Industry and Trade or Alternate, Director of Fiscal Policy and Coordination Department of MoF, Manager of PIU and other ad hoc members as appointed by the Chairman with the endorsement of the Committee during evaluation of tenders relating to specific entities. The State Secretary for Finance will be the Project National Director or shall appoint an alternate as National Project Director from within the membership of the Project Steering Committee.

16. The MoF will establish and maintain a PIU within the ministry to be responsible for the implementation of the project.

17. The PIU is at least composed of:

(a) the Project Manager, responsible for the overall management of project activities and compliance with its objectives, and for ensuring proper coordination among the various government agencies;

(b) the Financial Officer, responsible for budget preparation and follow-up, financial management including operation of the Designated Account, disbursement and financial reporting; and

(c) the Procurement Specialist responsible for carrying out procurement activities consistent with procedures approved by IDA, for managing ongoing contracts, and reporting on the progress of procurement activities and deliverables under contract.

The Project Manager reports to the Project National Director and will be responsible for: (i) execution of the project based on the Project Implementation Manual; (ii) managing procurement activities including all contracting for consultant services and purchases of goods, project contract monitoring, reporting and evaluation; (iii) project financial management, accounting and record keeping, management of the Designated Account, disbursements; and financial reporting; (iv) maintenance of communication and coordination between the MOF and the various beneficiary government agencies and other stakeholders involved in the project.

The MoF, MRPAM, GDNT and MOIT will each have one or more technical officers responsible for technical completion of relevant project components and sub-components and be the in-house champions in their organization for component implementation and ensure the achievement of contractual objectives and deliverables by consultants.

18. The PIU will be responsible for overall coordination of the fiduciary aspects of the project including financial management, accounting, and auditing. In particular, it will be at least responsible for, but not limited to the following:
Designing and establishing a computerized financial management system including assigning chart of accounts;
Maintaining up-to-date accounting records and ledgers as well as asset management;
Preparing project financing plan on a monthly, quarterly and annual basis;
Conducting variance analysis on project financial position and performance and advice the PIU manager to take further actions;
Recording transactions for all project activities;
Managing and maintaining Designated Account and its reimbursement;
Preparing monthly bank reconciliation statements in a timely manner;
Preparing SOEs, withdrawal applications and supplier records;
Ensuring that a proper internal control system is in place to achieve accountability at all level;
Preparing quarterly Project Financial Monitoring Reports as part of Project Progress Report and submitting them to the Bank;
Preparing annual financial statements in accordance with consistently applied accounting standards acceptable to the Bank;
Submitting audit reports;
Properly filing and maintaining all accounting forms and supporting documents; and
Such other tasks assigned by Project National Director.

Staffing and Training

19. Adequate project accounting staff with educational background and work experience commensurate with the work they are expected to perform is one of the factors critical to the successful implementation of project financial management. The PIU proposes to hire a capable financial officer with advanced education degree in finance and working experience, who will be responsible for maintaining the financial management system of the proposed project. The recruitment should be completed before project effectiveness.

20. To ensure the Financial Officer to be recruited will have good understanding of Bank’s policy and requirements as well as project specific financial management procedures and guidances, the Bank will provide FM training to the newly recruited Financial Officer before the project effectiveness.

Budgeting

21. In accordance with cost table prepared for the project, the PIU will prepare an annual work plan and budget which will identify the detailed project activities to be undertaken and the role of different parties in implementation. The annual work plan and budget will be submitted to the Project Steering Committee for approval, and thereafter to the Bank for no objection. The annual work plan and budget will be in consistent with the agreed format of FMR.
22. The PIU is required to conduct regular variance analysis in FMRs during project implementation to explain reasons for differences between planned (budget) and actual and take necessary actions to make sure the project can be implemented as planned.

**Accounting Policies and Procedures**

23. The administration, accounting and reporting of the project will be set up in accordance with Bank requirements. The Bank requires borrowers to prepare financial statements in accordance with acceptable accounting standards. The Bank does not mandate a format of annual financial statements. However, where a borrower prepares financial statements on a modified cash basis, the Bank encourages the adoption of formats laid out in the International Public Sector Accounting Standards (IPSAS), Financial Reporting under the Modified Cash Basis of Accounting in order to monitor and fully reflect the non-cash transactions and payables. PIU will adopt the cash basis of accounting for its preparation of the financial statements. Consistent with IPSAS requirements, the financial statements will include the following:

- Balance sheet of the project
- Statement of sources and uses of fund by project components
- Statement of implementation of financing agreement
- Statement of designated account
- Notes to the financial statements

24. As the PIU will centrally manage and handle the project financial management, they will be responsible for recording the project accounts, preparing project financial statements and retaining all documentation supporting disbursements as well as processing the withdrawal applications during the life of the project. As implementing agencies, the MoF, GDNT, MOIT, MRPAM and Erdenec MNG LLC will be responsible for providing all eligible and sufficient supporting documents against the payments for respective components that made by the DA.

25. To strengthen financial management capacity and achieve consistent quality of accounting work, the task team has suggested that a project financial management manual (FMM) be prepared. The FMM will provide detailed guidelines on financial management including internal controls, accounting procedures, fund and asset management, withdrawal application procedures, financial reporting and auditing arrangement and so on. As agreed with the PIU, the FMM will be finalized before project effectiveness. This FMM should be periodically updated based on significant changes in project implementation and financial management practices

**Information system**

26. The Project is encouraged to use fully computerized accounting system. Accounting software suitable for the business and nature of proposed project should be installed and, in all cases, should include modules for preparing bank reconciliation, general ledger and financial statements. It would help the PIU in improving the reliability, effectiveness and quality of the
financial management systems, and enable the system to avoid the inherent risks associated with manual accounting systems and over-dependence on spreadsheets.

**Internal Control and Internal Auditing**

27. There is no Internal Audit department within the MoF and for the project. In order to mitigate the risks in the area of internal control, regular oversight by Project Steering Committee and MoF, Bank’s periodic supervision and yearly external audits will serve as the mechanism to ensure that financial management controls are functioning appropriately. In addition, proper authorization for payment request, segregation of duties and other internal control mechanisms will be defined and included in the FMM. The procedures in the FMM must be fully and adequately complied with.

**Financial Reporting**

28. The PIU will prepare Interim Financial Monitoring Reports (FMRs) for the project in accordance with agreed formats as part of project progress report. The FMRs will be submitted to the Bank within 45 days after the end of each quarter. The FMRs shall include but not be limited to (a) Description of Project Progress; (b) Project Balance Sheet; (c) Sources and Uses of Funds by Disbursement Components; (d) Uses of Funds by Project Activities; (e) Procurement progress report and (f) Output Monitoring Report.

29. The PIU will agree with the Bank on the content and format of FMRs according to project design and cost structure. As agreed with the MoF, the draft of FMR format will be submitted to the Bank for review and comments by 30 May 2008.

**Financial Covenants**

30. No specific financial covenants are applicable to the project except for those standard financial covenants like project audit and interim financial reports.

**Financial Management Action Plan**

31. The following time-bound actions are proposed:

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible person</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Finalized FMM and hiring of capable financial officer.</td>
<td>PIU</td>
<td>Before project effectiveness</td>
</tr>
<tr>
<td>2. FMR format submitted to the Bank for review</td>
<td>PIU</td>
<td>30 May, 2008</td>
</tr>
<tr>
<td>3. Relevant training will be provided to PIU staff</td>
<td>World Bank</td>
<td>Once recruited</td>
</tr>
</tbody>
</table>
Supervision Plan

32. The supervision strategy for this project is based on its FM risk rating, which will be evaluated on regular basis by the FMS and in consultation with relevant task team leader.
Annex 8: Procurement Arrangements

A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank’s “Guidelines: Procurement under IBRD Loans and IDA Credits” dated May 2004 (revised October 2006), “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” dated May 2004 (revised October 2006), and the provisions stipulated in the Financing Agreement. Description of various items under different expenditure categories is presented below. For any contract to be financed by the IDA credit and PHRD grant, different procurement methods or consultant selection methods, the need for prequalification, estimated cost, prior review requirement, and time frame should be agreed between the Borrower and the World Bank, and documented in the Project Procurement Plan. The procurement plan will cover the procurement activities during the project implementation, but it will be updated annually or as required to reflect the actual Project implementation needs and match the institutional capacity for procurement.

2. Procurement of Works: No civil works would be required and financed under the Project.

3. Procurement of Goods: A total amount of US$0.43 million for IDA credit would be required for procurement of goods. The goods would include office equipment, specialized hardware and software, vehicles for the PIU and ASM field work and support services. The procurement will be carried out using Bank’s Standard Bidding Documents for all ICB procurement.

- **International Competitive Bidding (ICB).** Any contract for goods estimated to cost US$100,000 equivalent or more would be procured under ICB procedures specified in the Procurement Guidelines.

- **National Competitive Bidding (NCB).** Any contract for goods estimated to cost below US$100,000 would be procured under NCB procedures acceptable to the Bank.

- **Shopping.** Any contract for goods with cost estimate of less than US$50,000 equivalent per contract would be procured under shopping procedures as specified in Para. 3.5 Of the Procurement Guidelines.

- **Direct Contracting.** Equipment including standard software with proprietary nature and obtained only from one source or which meet other circumstances as specified in Para. 3.6 of the Procurement Guidelines would be procured on the basis of direct contracting.

4. Selection of Consultants and Training. A total amount of US$ 9.48 million would be required for consultants services and training.

The consulting services would be needed for development of mining sector policy and strategy; review of the institutional framework for mining; establishment of a proper legal and regulatory regime for mining. Most services would be provided by consulting firms and some would be provided by individual consultants.
• **Selection of Consulting Firms**: Any consulting contract expected to cost more than US$200,000 equivalent per contract will use the Quality and Cost Based Selection (QCBS) or Quality Based Selection (QBS) in conformity with Paragraphs 2.1 Through 3.4 of the Guidelines. Most consulting services are estimated under US$200,000 equivalent per contract under this project. The Selection Based on Consultants Qualifications (CQ) would be used for these contracts. For the selection of auditors, Least Cost Selection (LCS) would be used. Under the circumstances described in paragraph 3.10 of the Consultants Guidelines, consultants may be selected and awarded on a sole-source basis, subject to the World Bank’s prior approval.

• **Selection of Individual Consultants**: Individual consultants would be selected and awarded in accordance with the provisions of Paragraphs 5.2 through 5.3 of the Consultants Guidelines. Under the circumstances described in Para. 5.4 of the Consultants Guidelines, individual consultants may be selected and awarded on a sole-source basis, subject to the World Bank’s prior approval.

• **Training and Workshops**: A total amount of US$ 1.6 million would be required for training and workshops. Detailed programs will be developed by the PIU during Project implementation and included in the Project annual work plan for the World Bank’s review. Actual expenditures incurred in accordance with the approved detailed programs will be used as the basis for reimbursement.

5. **Incremental Operating Cost**: A total amount of about US$ 0.30 million would be required for the Project operational cost. These costs are largely related to office supplies, translation and printing of training materials, logistics cost for workshops, etc. The implementing agency would follow its own procedures which have been found to be satisfactory.

B. **Assessment of the Agency’s Capacity to Implement Procurement**

8. The Project would be implemented by the Ministry of Finance (MOF). Procurement activities would be handled by the PIU to be established under MOF. The assessment covers project organization structure and functions, past experience, staff skills, quality and adequacy of supporting and control system, legal and regulatory framework. The overall risk for procurement is average.

9. The following action plan has been agreed to address these concerns: (i) the terms of reference and qualifications for the procurement officers require the World Bank’s prior review; (ii) procurement training for the PIU staff would be provided by the World Bank Ulaanbaatar Office before start up of the Project; (iii) procurement plan should be updated annually; and (iv) the format of the procurement monitoring report and procurement filing system would be agreed and be in place before start up of the Project.

C. **Procurement Plan**

10. The Borrower has developed an overall procurement plan for Project implementation, which provides the basis for the procurement methods. The plan should be agreed by the Borrower and the World Bank team. The procurement plan should be available at the MOF and
MOF procurement website and should also be available in the project’s database and on the World Bank’s external website. The plan will be updated in agreement with the World Bank annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

D. World Bank Prior Review

11. All contracts in excess of US$50,000 for goods and all direct contracting contracts regardless of contract value, contracts for consultant services in excess of US$100,000 for firms and in excess of US$50,000 for individuals and all contracts awarded under single source selection will be subject to prior review by the World Bank. All other contracts will be subject to ex-post review by supervision missions; the post review sampling ratio would be one out of five contracts.

E. Supervision Plan

12. In addition to the World Bank’s prior review, the capacity assessment of the Implementing Agency recommended at least two supervision missions per year to visit the Project to carry out ex post reviews of procurement actions.

Table 1: Total Project Costs by Expenditure Category (US $)

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>IDA Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goods</td>
<td>434,500</td>
</tr>
<tr>
<td>2. Consultants Services and Training</td>
<td>8,561,300</td>
</tr>
<tr>
<td>3. Incremental Operating Cost</td>
<td>304,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,300,000</strong></td>
</tr>
</tbody>
</table>

Table 2: Thresholds for Procurement Methods and Prior Review

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contract Value Threshold (US$ thousands)</th>
<th>Procurement Method</th>
<th>Prior Review Threshold ((US$ thousands))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goods</td>
<td>&gt;100</td>
<td>ICB</td>
<td>&gt;50</td>
</tr>
<tr>
<td></td>
<td>&lt;100</td>
<td>NCB</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>&lt;50</td>
<td>Shopping</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct Contracting (DC)</td>
<td>All DC contracts regardless of value</td>
</tr>
<tr>
<td>2. Consultants Services</td>
<td>&gt;200</td>
<td>QCBS/QBS</td>
<td>&gt;100</td>
</tr>
<tr>
<td></td>
<td>&lt;200</td>
<td>CQ</td>
<td>&gt;100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;50 (for individual consultants) and all single source contracts</td>
</tr>
</tbody>
</table>
Annex 9: Economic and Financial Analysis

Economic Analysis:

NPV=US$ [N/A] million; ERR = [N/A] %

Economic Indicators: The project provides technical assistance and, as such, does not lend itself easily to quantitative investment analysis or to the calculation of Net Present Value (NPV) or Economic Costs of Return (ECR). As noted in Annex 1, mining has been a major contributor to the formal economy in Mongolia and in recent years has accounted for about twenty percent of government receipts, one-third of GDP, and about two thirds of exports. With the recent commodities price boom, in 2007 mining receipts accounted for about 40% of taxes and about 70% of exports with copper accounting for about 34% of total exports and gold about 24%. With regard to the impact of the project in the next three years, the main economic indicator which can be projected and compared with present values is the annual investment for exploration and development by mining companies. Recent changes to government policy are likely to have a negative impact on exploration expenditure but have yet to be fully reflected in exploration and development expenditures. A general decline in both is expected in the near term. The project aims to stabilize and improve the investment climate for exploration and development. Exploration expenditure is an important indicator to industry health since it is essential to the long term stability of the sector to contribute to the national economy. If the project is successfully implemented, the exploration spending by private investors is expected to stabilize and potentially increase over the next five years.

2. Financial (see Annex 5):

NPV=US$ [N/A] million; FRR = [N/A] %

FRR: The project should result in increased fiscal revenues over the longer term from the sector but any estimates must be considered highly speculative. Some increases in mineral tax revenues may be expected from improved fiscal provisions and increased capacity to audit the sector in the final year of the project.

Other Project Benefits: The additional benefits to Government and communities of additional mining exploration and mine development could range from US$ 1-2 million from a modest exploration venture to tens of millions of dollars benefiting local communities and hundred of millions of dollars benefiting the national economy from just one additional world class mining development.

Funding of Sector Institutions: The recurrent funding and staffing for MRPAM and Ministry of Nature and Environment will need to be monitored to ensure that adequate funds are available to ensure effective participation by counterpart staff.
Annex 10: Safeguard Policy Issues

1. **Project Category.** The project has been classified by the World Bank as Category B, as defined in the Bank’s Operational Policy 4.01 on Environmental Assessment. As technical assistance, the proposed Project will not finance any direct exploration or exploitation of mineral resources. However, the Project is being implemented in a sector that is known to be controversial with respect to environmental and social issues.

2. **Environmental Impacts.** The environmental problems associated with mining in Mongolia relate primarily to pollution management and physical disruption of pasture lands and water resources by both artisanal and larger mining operations. Many ongoing operations are not managed in an optimal way leading to environmental damage and production losses. In addition, despite the fact that the sector’s financial contribution to the economy is substantial, little has been done to systematically assess and address the costs of possible environmental damage from the sector’s ongoing and planned activities. This is mostly due to paucity of available data, uncertainty about the long-term impacts of mining activities, lack of coordination across responsible agencies, and a general lack of awareness of the fact that many of the negative impacts frequent in Mongolia could be offset by utilizing better production methods.

3. **Environmental Regulatory Arrangements.** In the past decade, the Government has evolved from being predominantly the owner and operator of mines to being a manager and regulator. This transformation required setting in place a legal framework adequate to guarantee environmentally sustainable growth of the sector. The cornerstones of this framework include the Mineral Law of 1997, the Law on Environmental Protection of 1995 and its amendments of 2005, the Law of Environmental Impact Assessment of 1998, and the 2002 Land Law.

   a. **Mineral Law.** The 1997 Mineral Law was designed to accommodate GoM’s limited institutional and financial capacity; it was amended in 2006, however the validity of those amendments is being challenged in the Constitutional Court. As it is, the Mineral Law provides a framework that takes into account some of the key environmental and social impacts of mining. However, the Law does not formalize public involvement in the permitting process, and lacks provisions to ensure sufficient funding for ongoing and future rehabilitation.

   b. **Environmental Impact Assessment Law.** The permitting procedures under the 1998 Law of Environmental Impact Assessment require that exploration license holders prepare environmental protection plans, which provide for measures to ensure that pollution of the environment does not exceed prescribed maximum limits, and also an environmental impact assessment (Articles 29 and 30), and an environmental monitoring program. The final report is not available to the general public for review, although it is a public document. During operations, all instances of adverse environmental impacts resulting from exploration or mining activities are to be recorded in annual reports, and amendments to the environmental protection plan are to be proposed accordingly. Public hearings are not compulsory, and

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license holders may request the local administrative body to organize a public debate (Article 33). Both exploration and mining license holders are obliged to deposit an amount equal to 50 percent of their environmental protection budget in a special bank account established by the governor of the relevant soum or district (Articles 29 and 30 respectively). The deposits are to be refunded upon implementation of the environmental protection plan.

c. The rights and obligations of a license holder expire upon the termination of the license, except for their obligations regarding environmental restoration and mine closure (Article 44). Post-mining rehabilitation measures need to be described in a separate environmental protection plan. Where licenses are to be extended, exploration-holders have to submit to the governor of the soum or the district a revised or new environmental protection plan prior to expiration of the existing license term (Article 31). License holders who apply for surrendering part of a licensed area or the entire license area are required to attach a certificate from the governor of the soum or district to the application stating that they have complied with the environmental protection plan for the surrendered area (Articles 45 and 46).

d. Environmental Protection Law. The 1995 Law on Environmental Protection (and related-amendments of 2005) guarantees the right to live in a healthy and safe environment, ensure that social and economic development is ecologically balanced, and that natural resources are properly used. The polluter-pays-principle is expressed in Article 4 and awards citizens the right to present a claim against violators for compensation of damages to their property and health resulting from adverse impacts on the environment caused by the violator. Article 34 provides for fees and payments for environmental pollution and adverse environmental impacts.

e. Land Law. The 2002 Law on Land regulates the ownership, use, and protection of state-owned land. Of significance to mining is the establishment of “special needs” lands that is land under special government protection, reserve rangelands, and hay land for government fodder reserves—by aimags, the Capital City, soums, or duuregs where mining is not allowed. In many instances, exploration and mining licenses, and active mines are within special needs lands; however, these mineral properties were granted before the designation of the special needs area, but this is by no means uniformly so. The Law on Land also requires that land that has been damaged from digging for mining purposes is to be restored (Article 52.1.2). Accordingly, annual land protection and rehabilitation plans need to be developed and assessed by the citizens’ representatives of the soums and bags, who may take measures to stop the development and/or enforce compliance (Article 57).

4. Weaknesses in Environmental Regulation. Significant gaps in the existing regulatory framework remains, including: (a) lack of socioeconomic impact assessment of any mining activities; (b) public input into the permitting procedure is not formalized and is primarily up to the discretion of the proponent; (c) limited transparency of the permitting processes and limited enforcement of sanctions; (d) the legal provision for depositing 50 percent of the funds required for rehabilitation on an annual basis has not resulted in the expected higher level and quality of environmental protection primarily due to lack of institutional capacity to ensure the implementation of rehabilitation measures, and also the lack of willingness and capacity of
mining operators to come up with the remaining 50 percent of the funding necessary to complete the environmental protection work once mining has ceased; (e) inability of MNE to compensate any rightful mineral license holders who are deprived of their rights to explore and mine if their area is incorporated into a new protected area because of lack of funding available to make such compensation; and (g) unregulated compensation for land use in mining.

5. **Institutional Framework.** Key institutions involved in oversight and management of the mining sector, including environmental aspects, are:

   a. **MRPAM, GMIA, SSIA.** To strengthen the stability of the mining institutional setting and improve the overall performance of the sector, including in regard to environment, GoM has established a mandated autonomous lead agency—the Mineral Resources and Petroleum Authority of Mongolia (MRPAM)—with an independent regulatory agency—the Geological and Mining Inspection Agency (GMIA) to facilitate the implementation of the new mineral law. Since 2003, GMIA is a division of the consolidated State Specialized Inspection Agency (SSIA). Its 12 officers are now linked to aimag mine inspection agencies reporting directly to the prime minister’s office. The rationale for the consolidation was to establish inspection and enforcement independence from the regulatory functions. However, expected improvements in monitoring and enforcement have not materialized largely due to lack of appropriate coordination among enforcement agencies within SSIA and relevant line ministries.

   b. **Ministry of Nature and Environment.** The Ministry of Nature and Environment (MNE) is responsible for developing and enforcing environmental and natural resources policies. MNE is divided into five departments and two agencies. Since February 2003, the Environmental Protection Agency has been integrated into the SSIA, and Capital City governors are responsible for developing and implementing measures for environmental protection, monitoring any activities of local business entities, and coordinating activities at the local level. Local administrative bodies have the responsibility to ensure and monitor compliance by (exploration and mining) license holders of their obligations with respect to environmental protection, health, and safety regulations. The soum governor has retained the responsibility of organizing and implementing legislation and issuing permits. State chief inspectors are assigned to the aimags as well as the Capital City, while state inspectors/rangers are appointed at the soum and duureg level. The basic duties of state inspectors are monitoring, inspection, information collection, supervision, and instruction of rangers. They can require the elimination of adverse impacts or the suspension of activities with adverse impacts on the environment, and impose administrative penalties on environmental legislation violators.

6. **Institutional Weaknesses.** The overall institutional framework remains weak due to (a) lack of an appropriate structure to ensure the timely enforcement of rules and procedures for

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8 Mining, with its regulated activities like licensing, a land contract, and taxes, is considered an element of a modern, sedentary social arrangement applied to a pastoralist social setting that is unaware of the intangible property, and where regulation of the use of natural resources was traditionally done by common management. The provision of lease agreements between mining companies and suitable local governments could legitimize the use of land certificates as already practiced by some local governments.
local government and land user permissions/contracts, governors’ approval of environmental submissions, and notifications and enforcement of sanctions for license violations; (b) poor coordination among the Ministries of Nature and Environment, Finance, the State Professional Supervision Agency, and local administrative bodies; (c) weak and/or nonexistent compensation schemes for land acquisition due to mining expansion and social programs to benefit communities living near mining areas; (d) the strong need to ensure an appropriate level of public education, and information disclosure, particularly at the local level.

7. **Social Impacts.** The current institutional and legal framework does not particularly safeguard communities living near mining development areas. Development programs are often undertaken as “add-on” measures by the mining company, with the view to establishing a positive relationship with the local communities, but with minimal socioeconomic expenditure. As a result, important social issues remain largely unresolved, including the complex issues of land use, financial contributions to the local community, and the role of informal mining.

8. **Large Scale Mining (LSM).** Despite mining companies could be a valuable component of a diversified rural livelihood economy, the reality is that small industrial cities built to serve the needs of large mining enterprises were set up as new urban centers with no appreciable local rural recruitment. Companies strongly prefer to recruit in the capital city or other regions, or even in China and Russia if the companies are Chinese or Russian-owned, but almost never recruit in rural soums. The soums get scant revenue, merely land use tax and water use fees, while Ulaanbaatar gains the gold (Mongol Bank), royalties (government), jobs, stronger banks (seasonal loans), mine engineering support etc.

9. Unless a mining area can diversify into a broadly based economy, it remains vulnerable to the rollercoaster of commodity prices and sharp economic decline, with the ultimate closure of the mine as the former main employer and sole engine of economic prosperity. As yet, only Nalaikh (coal), Mardai (uranium), and Bugant (gold) are severely depressed towns due to closure of large mines in Mongolia. Partnerships between GoM and the mining companies need to be established for the development of socioeconomic programs in the mining areas, with the view to diversify the economic activities in such areas and ensure sustainability of the respective community after the mine closure.

10. **Artisanal Mining (ASM).** Most small-scale miners are engaged in placer gold mining. The small-scale miners are a complex mix of ex-herders, ex-farm workers, urban poor, elderly, and students, albeit in separate informal groups. Although almost entirely illegal, informal placer gold mining has proved to be a major and effective stimulus to rural livelihoods and rural economies, with a strong emphasis on poverty alleviation. Informal mining gives seasonal or regular employment and additional cash income for rural people, reduces migration to urban centers, and dampens the effects of catastrophic climatic events.

11. **Conflict between ASM and LSM.** Overall, tens of thousands of small-scale miners are engaged in placer gold mining and represent a major source of conflict with placer mining companies. For a period, this enabled effective resource partitioning with minimum conflict between the two parties, and the presence of informal miners was tolerated if their activities were confined to the waste tailings. Rather quickly, this tacit understanding broke down, triggered by
a number of factors. Some inefficient companies, such as Mongol Gazar Ltd, reclassified their waste tailings as valuable future reserves. The ASM legal/regulatory framework would need to include provisions on how to deal with such conflicts, including clear rights/boundaries for each parties.

12. **Legal/regulatory framework for ASM.** Mongolia currently lacks a legal/regulatory framework for artisanal mining. Such a framework would include elements such as the establishments of miners' associations, the generation of a cadastre system at the soum level, restriction of informal mining to specific areas, and the limitation of the size of artisanal mining concessions. Special focus will be given to alternative technologies (retorts and gravity separation equipment) to minimize the use and loss of mercury to the environment; and increased awareness of ASM safety hazards and mitigation measures to help address the considerable but largely unnecessary environmental impacts and damage to livelihoods of rural people.

**Environmental and Social Impact Assessment.** Over the past two years, the Bank has conducted an overall review of the status of environmental and social issues and policies in the mining sector in to identify institutional and regulatory gaps that should be addressed to strengthen existing compliance monitoring with regulations, and to investigate whether additional resources and standardized procedures might be needed to mitigate any identified risks. Based on the findings of the completed review—and in collaboration with the World Bank and MNE Team implementing the activities financed by the Netherlands-Mongolia Trust Fund for Environmental Reform—the Project will give particular attention to (i) institutional strengthening actions to deal with environmental and social impacts associated with the growth and development of the mining sector (including artisanal and small scale mining); (ii) measures to overcome existing and projected policy, institutional and budgetary constraints that result in limited enforcement and implementation capacity; (iii) ways to improve public participation and monitoring processes. In addition, the project will also benefit from the findings of a Strategic Environmental and Social Assessment (SESA) -- also to be co-financed by financed by the Netherlands-Mongolia Trust Fund for Environmental Reform -- for the Southern Gobi Region; this exercise is intended to help frame a vision for a sustainable natural resources management in the context of the planned mining developments in the region.

13. **Project Support to Address Environmental and Social Issues.** In the context of assisting GoM to build and strengthen the regulatory framework and capacity to manage mining sector exploration and development, the proposed Project would: i) support MRPAM capacity building efforts to regulate, manage, and audit mineral developments, including *inter alia* environmental and occupational health and safety aspects; ii) help address the capacity, regulatory and institutional needs of line ministries (i.e. MNE) and agencies (i.e. SSIA) whose mandate relates to the mining-social and environment/natural resources management nexus. Environment and social capacity building activities are intended to be complementary and/or to those that World Bank and other multilateral and bilateral donors are developing and/or implementing as part of their respective environmental and social programs.

14. Furthermore, the project would support GoM to implement the new regulatory framework for artisanal and small scale mining and establish extension services for education and training of artisanal and small scale miners, including best practice techniques related to
environmental, health, and social impacts. Project activities will also address the institutional challenges, through an assessment of institutional capacity, to identify the gaps and areas for intervention. Actions, such as training programs (including on the job training), workshops and knowledge sharing, will be considered for improving the institutional response to the development of the mining sector, the project creating the platform for a more collaborative framework between relevant organizations.
Annex 11: Governance Context of Mongolia

Overall, Mongolia's governance is better than in several countries in the region in terms of political and civil freedoms and constraints on the executive. An electoral democracy has been established and maintained since the beginning of the transition. The freedom of association is well established. Nonetheless, many problems with governance remain, especially concerning corruption, conflicts of interest, as well as political fragmentation and current instability of government. Furthermore, although Mongolia has experienced significant economic growth in recent years, public discontent with public policies is strong.

Mongolia is experiencing a mining sector boom which brings new opportunities as well as major risks. Mongolia has a range of potential world-class mineral deposits, and has attracted considerable investment in exploration in recent years. For the past several months, investment agreements concerning two major deposits have been negotiated but haven’t been concluded by the legislature due to rental politics around it. Thus, the country is at a critical juncture with regard to allocating newly emerging rents from the mining sector. In mid-2006 major changes to the mining regime were adopted (new Law on Minerals and Windfall Tax). The government is already benefiting from a major expansion of revenues as a consequence of the Windfall Tax. Therefore, the country is facing emerging economic and political risks that can be expressed by the economic concentration, symptoms of Dutch disease, poor decision-making over the public expenditures, failures in attracting and finding agreement with appropriate external investors, worsening governance through increasing rents and commitment for populist policies and increasing concentration of wealth and political power. If these risks materialize, the benefits from mining would not translate into shared and sustainable growth.

The country is facing new development challenges including rapid rural-urban migration and environmental degradation. The capital city Ulaanbaatar has grown from about a quarter to nearly half the total national population in recent years, rapidly increasing pressure on land and water, utilities, and services and contributing to increasingly hazardous levels of air pollution. In rural areas, pastureland is being degraded due to a combination of desertification and overgrazing. Forest and wildlife is being lost to illicit harvesting; in some areas at alarming rates. In particular placer gold mining is contributing to environmental damage (lack of surface rehabilitation; and illegal use of mercury and other chemicals in some areas). Enforcement of existing environmental laws and regulations has been weak across all levels of government; and in a number of areas (migration/urbanization; land management) effective policies either have yet to be developed or remain to be implemented.

Available indicators and surveys of businesses and public opinion suggest that corruption has been worsening and is a major hindrance to development. Pressure from reform-oriented MPs, and bottom line stakeholders resulted in the adoption of an Anti-Corruption Law and the establishment of an Anti-Corruption Agency which has been equipped with sufficient resources and legal powers to function.

Public discontent has been growing, including greater nationalism as well as demand for better governance. Feelings that Mongolia is not receiving its ‘fair share’ from the mining sector are
widespread, fuelling nationalist and/or socialist-style demands for significant state-ownership of mining operations. At the same time, there is a great deal of discontent with the political class that is perceived as self-serving.

The political system is currently undergoing a period of fragmentation. It appears likely that this fragmentation will continue beyond the 2008 elections; although its precise nature will evolve. In the context of political fragmentation, parliament has assumed a very direct role in policy formulation and decision-making, repeatedly overriding the government in adopting populist and patronage related policy measures. Examples are the substantial expansion of social protection (child money program and money for newly-weds), changes in the mining regime, and changes in procurement rules. Parliament has little access to policy analysis capacity; which appears to reinforce policies that are not well thought out.

Mongolia is in a situation of rapidly expanding government revenues and the state is poised to take major stakes in new mining operations. While leakage from the budget has been reduced by PFM reforms, decision-making on spending priorities continues to pose problems. Furthermore, there are many unanswered questions regarding the proposed government equity engagement; including fiscal risks and risks of poor corporate governance. The sudden influx of greater funds into public coffers, and the demands and risks associated with expanding state equity ownership greatly affect political economy dynamics.

Despite 15+ years of a democratic system, horizontal and vertical accountability are hampered: by a lack of transparency and the fact that existing legal rules still favor secrecy, by weaknesses of civil society capacity and organization, as well as problems with regard to establishing independent media. Mongolia’s Audit Office (and aimag branch offices) have some capacity, but its potential impact cannot be realized as long as parliament and local khurals have insufficient incentives and capacity to hold the government to account. The judiciary is not sufficiently independent and has been affected by corruption and politicization. The policy-making process remains nontransparent in important respects. A Law on State Secrets restricts public access to government documents. Draft laws scheduled for consideration by parliament are now mostly available to the public (through the website of parliament) and the 2007 draft budget was the first to be available for public discussion; but this is not yet institutionalized through legal rules. Parliamentary votes are difficult to access ex post, and hence the voting record of an MP is not monitorable by citizens. There are no live transmissions of parliamentary debates.

Patronage links are embedded in political parties, regional networks, and business conglomerates. Politics and economic opportunities are closely linked. Conflicts of interest are substantial in the public sector, and are not legally regulated. There are strong traditions of personalized interaction, and mutual and family obligations.
Annex 12: Project Preparation and Supervision

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<tr>
<th>Event</th>
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<th>Actual</th>
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<tbody>
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<td>05/22/2007</td>
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<tr>
<td>Initial PID to PIC</td>
<td>04/07/2008</td>
<td>03/13/2008</td>
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<tr>
<td>Initial ISDS to PIC</td>
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<tr>
<td>Appraisal</td>
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<tr>
<td>Negotiations</td>
<td>05/12/2008</td>
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<tr>
<td>Board/RVP approval</td>
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<td>Planned date of effectiveness</td>
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<td>Planned date of mid-term review</td>
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<tr>
<td>Planned closing date</td>
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Key institutions responsible for preparation of the project:
- Ministry of Finance
- General Department of National Taxation
- Ministry of Industry and Trade
- Mineral Resources and Petroleum Authority of Mongolia

Bank staff and consultants who worked on the project included:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graeme Hancock</td>
<td>Senior Mining Specialist, Task Team Leader</td>
<td>COCPO</td>
</tr>
<tr>
<td>Sudarshan Gooptu</td>
<td>Lead Economist</td>
<td>EASPR</td>
</tr>
<tr>
<td>John Strongman</td>
<td>Consultant/Mining Advisor</td>
<td>COCPO</td>
</tr>
<tr>
<td>Adriana Eftimie</td>
<td>Consultant/Mining Specialist</td>
<td>COCPO</td>
</tr>
<tr>
<td>Allison Berg</td>
<td>Operations Officer</td>
<td>COCPO</td>
</tr>
<tr>
<td>Giovanna Dore</td>
<td>Environmental Specialist</td>
<td>EASRE</td>
</tr>
<tr>
<td>Ian Nightingale</td>
<td>Procurement Specialist</td>
<td>EAPCO</td>
</tr>
<tr>
<td>David I</td>
<td>Senior Financial Management Specialist</td>
<td>EAPCO</td>
</tr>
<tr>
<td>Martin Serrano</td>
<td>Lawyer</td>
<td>LEGES</td>
</tr>
</tbody>
</table>

Bank funds expended to date on project preparation: (US$000)
1. Bank resources: 180
2. Trust funds: 180
3. Total: 360

Estimated Approval and Supervision costs: (US$000)
1. Remaining costs to approval: 25
2. Estimated annual supervision cost: 120
Annex 13: Documents in the Project File

1. Mission Reports and Aide Memoirs
2. Correspondence With Government
3. Minutes of the Safeguard Consultation Meeting
4. Minutes of the Quality Enhancement Review Meeting
5. Minutes of the Decision Meeting
6. Environmental and Social Assessment
7. Draft Country Assistance Strategy
Annex 14: Statement of Loans and Credits

<table>
<thead>
<tr>
<th>Project ID</th>
<th>FY</th>
<th>Purpose</th>
<th>IBRD</th>
<th>IDA</th>
<th>SF</th>
<th>GEF</th>
<th>Cancel.</th>
<th>Undisb.</th>
<th>Orig.</th>
<th>Frm. Rev'd</th>
<th>Difference between expected and actual disbursements</th>
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</thead>
<tbody>
<tr>
<td>Total:</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tbody>
</table>

MONGOLIA
STATEMENT OF IFC’s Held and Disbursed Portfolio
In Millions of US Dollars

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Committed</th>
<th>Disbursed</th>
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</thead>
<tbody>
<tr>
<td>IFC</td>
<td>IFC</td>
<td>Loan</td>
<td>Loan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equity</td>
<td>Equity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quasi</td>
<td>Quasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partic.</td>
<td>Partic.</td>
</tr>
</tbody>
</table>

Total portfolio: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Approvals Pending Commitment

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic.</th>
</tr>
</thead>
</table>

Total pending commitment: 0.00 0.00 0.00 0.00
Annex 15: Country at a Glance

Mongolia at a glance

<table>
<thead>
<tr>
<th>POVERTY and SOCIAL</th>
<th>Mongolia</th>
<th>East Asia &amp; Pacific</th>
<th>Low-Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population, mid-year (millions)</td>
<td>2.6</td>
<td>1,900</td>
<td>2,403</td>
</tr>
<tr>
<td>GNI per capita (Atlas method, US$)</td>
<td>880</td>
<td>1,883</td>
<td>650</td>
</tr>
<tr>
<td>GNI (Atlas method, US$ billions)</td>
<td>2.3</td>
<td>3,539</td>
<td>1,662</td>
</tr>
</tbody>
</table>

Average annual growth, 2000-06

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (%)</td>
<td>1.2</td>
<td>0.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Labor force (%)</td>
<td>2.6</td>
<td>1.3</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Most recent estimate (latest year available, 2000-06)

| Poverty (% of population below national poverty line) | 36       |
| Urban population (% of total population)             | 57       |
| Life expectancy at birth (years)                    | 67       |
| Infant mortality (per 1,000 live births)            | 39       |
| Child malnutrition (% of children under 5)          | 15       |
| Access to an improved water source (% of population) | 62       |
| Literacy (% of population age 15+)                  | 98       |
| Gross primary enrollment (% of school-age population) | 93       |
| Male                                                  | 92       |
| Female                                               | 94       |

KEY ECONOMIC RATIOS and LONG-TERM TRENDS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (US$ billions)</td>
<td>1.2</td>
<td>2.1</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Gross capital formation/GDP</td>
<td>29.9</td>
<td>41.5</td>
<td>36.0</td>
<td></td>
</tr>
<tr>
<td>Exports of goods and services/GDP</td>
<td>40.5</td>
<td>70.8</td>
<td>73.8</td>
<td></td>
</tr>
<tr>
<td>Gross domestic savings/GDP</td>
<td>22.0</td>
<td>37.2</td>
<td>40.3</td>
<td></td>
</tr>
<tr>
<td>Gross national savings/GDP</td>
<td>26.8</td>
<td>45.4</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td>Current account balance/GDP</td>
<td>-3.1</td>
<td>5.0</td>
<td>17.1</td>
<td></td>
</tr>
<tr>
<td>Interest payments/GDP</td>
<td>0.7</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total debt/GDP</td>
<td>45.3</td>
<td>63.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total debt service/exports</td>
<td>10.6</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present value of debt/GDP</td>
<td></td>
<td>46.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present value of debt/exports</td>
<td></td>
<td>60.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(average annual growth)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>4.5</td>
<td>7.1</td>
<td>8.4</td>
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<tr>
<td>GDP per capita</td>
<td>3.3</td>
<td>5.5</td>
<td>7.1</td>
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</tr>
<tr>
<td>Exports of goods and services</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>(% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>47.1</td>
<td>22.7</td>
<td>21.1</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>22.1</td>
<td>38.8</td>
<td>43.9</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5.4</td>
<td>4.6</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>30.8</td>
<td>37.5</td>
<td>34.9</td>
<td></td>
</tr>
<tr>
<td>Household final consumption expenditure</td>
<td>63.6</td>
<td>48.8</td>
<td>45.0</td>
<td></td>
</tr>
<tr>
<td>General govt final consumption expenditure</td>
<td>14.4</td>
<td>14.0</td>
<td>14.7</td>
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</tr>
<tr>
<td>Imports of goods and services</td>
<td>48.5</td>
<td>75.1</td>
<td>69.5</td>
<td></td>
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</tbody>
</table>

(average annual growth)

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>-2.0</td>
<td>9.6</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>5.7</td>
<td>0.6</td>
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<tr>
<td>Manufacturing</td>
<td>4.3</td>
<td>-21.9</td>
<td>21.8</td>
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<tr>
<td>Services</td>
<td>6.9</td>
<td>12.1</td>
<td>8.0</td>
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</tr>
<tr>
<td>Household final consumption expenditure</td>
<td>-</td>
<td>-</td>
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<td></td>
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<tr>
<td>General govt final consumption expenditure</td>
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<td></td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>-</td>
<td>-</td>
<td></td>
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</tr>
</tbody>
</table>

Note: 2006 data are preliminary estimates.
This table was produced from the Development Economics LDB database.
* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.
Mongolia

PRICES and GOVERNMENT FINANCE

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic prices (% change)</th>
<th>Consumer prices</th>
<th>Implicit GDP deflator</th>
<th>Government finance (% of GDP, includes current grants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>36.6</td>
<td>8.9</td>
<td>21.2</td>
<td>42.8</td>
</tr>
<tr>
<td>1987</td>
<td>6.9</td>
<td></td>
<td>9.4</td>
<td>11.9</td>
</tr>
<tr>
<td>1988</td>
<td>2.9</td>
<td></td>
<td>3.9</td>
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TRADE

<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>1986</td>
<td>716</td>
<td>175</td>
<td>52</td>
<td>67</td>
<td>1,140</td>
<td>62</td>
<td>88</td>
<td>174</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1987</td>
<td>1,140</td>
<td>306</td>
<td>270</td>
<td>212</td>
<td>1,684</td>
<td>326</td>
<td>435</td>
<td>420</td>
<td></td>
<td></td>
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<tr>
<td>1988</td>
<td>1,060</td>
<td>1,059</td>
<td>1,060</td>
<td></td>
<td>1,060</td>
<td>1,060</td>
<td>1,060</td>
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BALANCE of PAYMENTS

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<tbody>
<tr>
<td>1986</td>
<td>825</td>
<td>1,684</td>
<td>-1,269</td>
<td>-2</td>
<td>-13</td>
<td>-10</td>
<td>-35</td>
<td>0</td>
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<tr>
<td>1987</td>
<td>479</td>
<td>573</td>
<td>-93</td>
<td>-13</td>
<td>-87</td>
<td>-93</td>
<td>-71</td>
<td>181</td>
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<tr>
<td>1988</td>
<td>1,470</td>
<td>1,541</td>
<td>104</td>
<td>-37</td>
<td>222</td>
<td>34</td>
<td>-24</td>
<td>459</td>
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EXTERNAL DEBT and RESOURCE FLOWS

<table>
<thead>
<tr>
<th>Year</th>
<th>Total debt outstanding and disbursed (US$ millions)</th>
<th>IBRD (US$ millions)</th>
<th>IDA (US$ millions)</th>
<th>Total debt service (US$ millions)</th>
<th>IBRD (US$ millions)</th>
<th>IDA (US$ millions)</th>
<th>Composition of net resource flows</th>
<th>Total flows (US$ millions)</th>
<th>Composition of total flows (US$ millions)</th>
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</thead>
<tbody>
<tr>
<td>1986</td>
<td>533</td>
<td>0</td>
<td>0</td>
<td>53</td>
<td>0</td>
<td>0</td>
<td>Official grants</td>
<td>53</td>
<td>Official grants 61%</td>
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<tr>
<td>1987</td>
<td>1,327</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>0</td>
<td>0</td>
<td>Official creditors</td>
<td>45</td>
<td>Official creditors 34%</td>
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<tr>
<td>1988</td>
<td>1,205</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Portfolio equity</td>
<td>0</td>
<td>Portfolio equity 0%</td>
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</table>

Note: This table was produced from the Development Economics LDB database.
Map section