I. Basic Information
Date prepared/updated: 06/09/2008
Report No.: AC3727

1. Basic Project Data

<table>
<thead>
<tr>
<th>Country: Mexico</th>
<th>Project ID: P106589</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name: Information Technology (IT) Industry Development</td>
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<tr>
<td>Task Team Leader: Eloy Eduardo Vidal</td>
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<tr>
<td>Estimated Appraisal Date: January 21, 2008</td>
<td>Estimated Board Date: July 15, 2008</td>
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<tr>
<td>Managing Unit: CITPO</td>
<td>Lending Instrument: Specific Investment Loan</td>
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<tr>
<td>Sector: Information technology (100%)</td>
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<tr>
<td>Theme: Other financial and private sector development (P)</td>
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<td>IBRD Amount (US$m.): 80.00</td>
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<tr>
<td>IDA Amount (US$m.): 0.00</td>
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<td>GEF Amount (US$m.): 0.00</td>
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<td>Other financing amounts by source:</td>
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<td>Borrower 0.00</td>
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<td>Financing Gap 0.00</td>
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<td>Environmental Category: B - Partial Assessment</td>
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<td>Simple [X] Repeater [ ]</td>
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<tr>
<td>Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)</td>
<td>Yes [ ] No [X]</td>
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2. Project Objectives
The objective of the Project is to assist the Government of Mexico to implement an alternative strategy for PROSOFT to foster the creation of jobs in Mexican IT Companies by improving their competitiveness and efficiency through access to: (a) a larger supply of trained personnel; (b) technologies, quality standards and global marketing networks of multinational corporations; and (c) private debt finance.

3. Project Description
The project is designed in response to a strong demand from State Governments, and strongly reinforces previous efforts made by the Secretaríâ¿a de Economíâ¿a through the PROSOFT program. The project would cost US$80.0 million, financed by the Bank.

The project would include the following components with Bank financed amounts in parenthesis:

A. Human Skills Development (US$38.3 million)
This component would help the IT/ITES industry to compete globally by increasing the quantity, and improving the quality of skilled manpower. The Project would support establishing the MĂ©xico Federal Institute for Remote Services and Technology (MexicoFIRST), using a PPP approach that would bring together leading corporations, industry organizations, global standards bodies, academia and government entities. MexicoFIRST will facilitate the design of courses and skill development programs for niche specializations in areas having good market potential, and in line with industry requirements. It would complement existing university programs.

B. Strengthening of IT Clusters (US$9.0 million)

This component will help existing IT Clusters and associations in promising States having high potential in the IT/ITES sector.

C. Financing of the IT Industry (US$2.9 million)

This component will create the “Financing of IT Companies Accreditation Program” (FIT). This program will seek to reduce the information asymmetry between Financing Intermediaries (FI) and enterprises and thus facilitate credit to the sector. Business schools and other training centers would be invited to participate in the FIT program.

D. Supporting Infrastructure (US$10.1 million)

This component would finance technical assistance to prepare feasibility studies, design, and bidding specifications based on a PPP model for IT Parks in selected locations (US$0.9 million); and the Federal Government portion of the investment required for each PPP for the IT Parks. (US$9.2 million).

E. Outsourcing of Government Services (US$2.7 million)

This component would finance technical Assistance to review the legal and regulatory framework of PPPs for Government services and to propose and draft new changes and regulations and/or rules to simplify the implementation of PPPs (US$0.3 million); technical assistance to carry out feasibility studies, design and bidding specifications preparation for PPPs to outsource selected Government services to IT companies (US$1.0 million); training of Government officials on the design and implementation of PPPs for e-government (US$0.9 million); and technical assistance and equipment to support the creation of an Integration Competency Center to help government agencies and private sector players to adopt a flexible, agile and highly modular approach to e-government (US$0.6 million).

F. Strengthening of the IT Legal and Regulatory Framework and Institutions ($6.1 million)
This component would include technical assistance to draft changes and/or improvements to the IT legal and regulatory framework (US$1.2 million); awareness raising campaigns for specific programs such as the Trustmark Seal Program and other improvements of sector laws and regulations and their enforcement (US$1.1 million); tailor-made professional training for legislators, judges, public servants, law enforcement officers, technical experts in trials, and professors and lawyers in general on IT issues, regulations and enforcement best practices (US$1.9 million); creation of a Dispute Settlement Center within the Mexican Software Consortium (US$1.0 million); and support the creation and/or strengthening of local Masters programs in IT Law, training professors of Law on IT issues, regulations and enforcement best practices (US$1.0 million).

G. Strengthening of PROSOFT and Project Management ($3.6 million)

This component would create an International Consultative Commission in PROSOFT to advice SE on new developments in the global IT industry to formulate new policies for the sector. It would also finance operational costs of the Team (“Direccion de Economia Digital”) in Secretaria de Economia to manage, implement, monitor and evaluate the Project.

4. Project Location and salient physical characteristics relevant to the safeguard analysis
Mexico

5. Environmental and Social Safeguards Specialists
   Mr Gunars H. Platais (LCSEN)

<table>
<thead>
<tr>
<th>6. Safeguard Policies Triggered</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP 4.01)</td>
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<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Physical Cultural Resources (OP/BP 4.11)</td>
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<td>Indigenous Peoples (OP/BP 4.10)</td>
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<td>Involuntary Resettlement (OP/BP 4.12)</td>
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<td>Safety of Dams (OP/BP 4.37)</td>
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<td>Projects in Disputed Areas (OP/BP 7.60)</td>
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II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts: The key environmental and social impacts and benefits which may results from activities financed under the Project include:
- Environmental benefits from economies of scale by the provision of common wastewater and solid waste management facilities; and environmental planning.
- Socioeconomic benefits derived from higher living standards, the establishment of knowledge-based companies, innovation, increased employment and academic opportunities, networking of research organizations and private industry, and the development of industries like real estate, retail, lifestyle and recreation.
- Noise and vibration during construction activities may be caused by the operation of pile drivers, earth moving and excavation equipment, concrete mixers, cranes and the transportation of equipment, materials and people.
- Soil erosion may be caused by exposure of soil surfaces to rain and wind during site clearing, earth moving, and excavation activities. The mobilization and transport of soil particles may, in turn, result in sedimentation of surface drainage networks, which may result in impacts to the quality of natural water systems and ultimately the biological systems that use these waters.
- Air quality may be impacted during construction by emissions of fugitive dust caused by a combination of on-site excavation and movement of earth materials, contact of construction machinery with bare soil, and exposure of bare soil and soil piles to wind. During operation, emissions may be generated from kitchen stacks; air conditioning and central heating systems; fuel storage tanks (if present); and diesel motor vehicles. Specific emissions related to the semiconductor and electronics manufacturing (in case such a plant is built within the IT parks) include greenhouse gases, toxic, reactive, and corrosive substances (for example, acid fumes, dopant, cleaning gases, and volatile organic compounds [VOCs]), resulting from diffusion, cleaning, and wet-etching processes.
- Non-hazardous solid waste generated at construction sites may include excess fill materials from grading and excavation activities, scrap wood and metals, and small concrete spills. Other non-hazardous solid waste generated during operation includes office, kitchen, and domestic wastes.
- Hazardous solid waste that may be generated includes spent solvents and oily rags; empty paint cans; chemical containers; used lubricating oil; used batteries (such as nickel-cadmium or lead acid); and lighting equipment, such as lamps or lamp ballasts. Specific facilities, such as semiconductors (i.e. chip) and electronic manufacturing, -that might be built in the IT parks- may include special hazardous wastes, such as those generated from spent cleaning solutions, sludge from wastewater treatment, spent epoxy material (printed circuit board [PCB] and semiconductor manufacturing), spent cyanide solutions (electroplating), and soldering fluxes and metals residue (printed circuit board assembly [PCBA]).
- Hazardous materials include the potential for release of petroleum based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. These materials may be encountered during decommissioning activities in building components or industrial process equipment.
- Wastewater discharges may include sanitary wastewater with effluents from domestic sewage, food service, and laundry facilities serving site employees. Miscellaneous wastewater from laboratories, medical infirmaries, water softening etc. may also be discharged to the sanitary wastewater treatment system. Process wastewater from a number of semiconductor and PCBA manufacturing steps (if these are built within


IT parks) may include organic compounds, particularly non-chlorinated solvents (e.g. pyrrole-based, amine-based, fluoro / ether-based resists, isopropyl alcohol, and tetramethylammonium hydroxide) from cleaning, resist drying, developing, and resist stripping; metals and cyanides from metallization and CMP processes; acids and alkalis from spent cleaning solutions, process operations such as etching, cleaning, and metallization, among others; and suspended solids from film residues and metallic particles (derived from photolithography, metallization, backgrinding, and dicing processes).

- Energy consumption in semiconductor manufacturing involves significant energy use.
- Involuntary physical or economic resettlement during land acquisition to develop the IT parks that may include: loss of shelter; loss of assets or access to assets; or loss of income sources or means of livelihood, whether or not the affected persons must move to another location.
- Indigenous peoples, although unlikely to be encountered in the outskirts of the cities, where the subprojects will be developed, should be considered during the EA. Impacts to these vulnerable groups include loss of identity, culture, and customary livelihoods, as well as exposure to disease. In addition, indigenous populations might have limited capacity to defend their interests in and rights to lands, territories, and other productive resources, and/or restricts their ability to participate in and benefit from development.
- Archaeological findings may be encountered and potentially damaged during excavation activities of construction works. Culturally sensitive areas (i.e. where cultural practices or artefacts are evident) may become impacted both by construction and operation works, by modifying the religious or cultural value of a certain area.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
See above.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
As part of the EIA process, Environmental Management Plans (EMPs) will need to be prepared and implemented. Effective implementation of EMPs will ensure that the appropriate mitigation measures have been employed to avoid and/or minimize any potential impacts resulting from the proposed activity. The DDE should agree with SEMANART and other federal environment agencies on the supervision of the EMP within the overall plan for the project. Accordingly, the supervision arrangements for the EMP should summarize key areas on which supervision will focus (critical risks to implementation of the EMP, how such risks will be monitored during implementation and agreements reached with the Proponent. If identified as a requirement of the subproject through the screening process, a Resettlement Action Plan, Indigenous Peoples Plan, and/or a Physical Cultural Resources Management Plan, or a combination of these, is prepared alongside or as an integrated part of the EMP.
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described. A detailed 2-day training course will be delivered within the first month of appraising the Project (see Table 6). The target audience will be the Secretariat of Economy (SoE); Direction of Digital Economy (DDE); SEMANART; and Municipalities that will be part of the lending process. It will be the responsibility of the DDE to ensure that short refresher trainings on a demand basis are provided to staff within the stakeholder groups. This could be a 1-day presentation briefly outlining the procedures of the ESMF.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people. The ESMF has been designed under the assumption that IT industry projects that involve IT Parks are to be implemented by the Direction of Digital Economy (DDE) within the Secretariat of Economy - as is the case of the specific project that is used as a practical application of the Framework. However, the recommendations and guidelines contained in this report would apply to any project implementing unit responsible for directly implementing the mechanisms and recommendations outlined in the ESMF. Other agencies at the federal and state level and municipal level will also play a key role in the implementation and monitoring of the ESMF. These institutions include:

- Secretariat of Environment and Natural Resources (SEMANART)
- Labor and Social Prevision Secretariat
- State Economic Development Agencies
- Municipal Land-Use Authorities
- Municipal Construction Authorities

In regards to resettlement issues, the principal agency that overlooks the fair compensation (monetary and in kind) of resettled communities is the Secretariat of Agrarian Reform (Secretaría de Reforma Agraria) which administers the communal lands (ejidos) that cover close to 50% of the Mexican territory.

The National Commission for the Development of Indigenous Peoples (Comisión Nacional para el Desarrollo de los Pueblos Indígenas - CDI) is the federal institution in charge of promoting and overseeing all issues related to indigenous communities. However, in many cases communities are not exclusively indigenous and are therefore looked after in broader terms by the Social Development Secretariat (Secretaría de Desarrollo Social - SEDESOL). SEDESOL would be at the forefront of the resettlement issue in the event that the lands are not communal (ejiditarias, in which case it would be the Secretaría de Reforma Agraria).

In terms of archeological resources, all matters are regulated and administered by the National Institute of Anthropology and History (Instituto Nacional de Antropología e Historia). However, it is important to mention that the EIA process does not require an archeological survey as part of the baseline studies for an EIS and these are still voluntary. However, if this agency is aware of or suspects archeological resources in the project area, it may stop all development works until the area has been surveyed.
### B. Disclosure Requirements Date

**Environmental Assessment/Audit/Management Plan/Other:**
- Was the document disclosed *prior to appraisal?*: Yes
- Date of receipt by the Bank: 01/10/2008
- Date of "in-country" disclosure: 01/21/2008
- Date of submission to InfoShop: 06/09/2008

For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors

**Resettlement Action Plan/Framework/Policy Process:**
- Was the document disclosed *prior to appraisal?*: Yes
- Date of receipt by the Bank: 01/10/2008
- Date of "in-country" disclosure: 01/21/2008
- Date of submission to InfoShop: 06/09/2008

**Indigenous Peoples Plan/Planning Framework:**
- Was the document disclosed *prior to appraisal?*: Yes
- Date of receipt by the Bank: 01/10/2008
- Date of "in-country" disclosure: 01/21/2008
- Date of submission to InfoShop: 06/09/2008

**Pest Management Plan:**
- Was the document disclosed *prior to appraisal?*
- Date of receipt by the Bank
- Date of "in-country" disclosure
- Date of submission to InfoShop

*If the project triggers the Pest Management and/or Physical Cultural Resources, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.*

If in-country disclosure of any of the above documents is not expected, please explain why:

### C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

**OP/BP/GP 4.01 - Environment Assessment**
- Does the project require a stand-alone EA (including EMP) report?: Yes
- If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?: Yes
- Are the cost and the accountabilities for the EMP incorporated in the credit/loan?: Yes

**OP/BP 4.10 - Indigenous Peoples**
- Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?: Yes
- If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?: Yes
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Sector Manager? Yes

**OP/BP 4.12 - Involuntary Resettlement**
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared? Yes
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan? Yes

**The World Bank Policy on Disclosure of Information**
Have relevant safeguard policies documents been sent to the World Bank’s Infoshop? Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs? Yes

**All Safeguard Policies**
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? Yes
Have costs related to safeguard policy measures been included in the project cost? Yes
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? Yes
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? Yes

**D. Approvals**

<table>
<thead>
<tr>
<th>Signed and submitted by:</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Team Leader:</td>
<td>Mr Eloy Eduardo Vidal</td>
<td>06/09/2008</td>
</tr>
<tr>
<td>Environmental Specialist:</td>
<td>Mr Gunars H. Platais</td>
<td></td>
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<tr>
<td>Social Development Specialist:</td>
<td></td>
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<tr>
<td>Additional Environmental and/or Social Development Specialist(s):</td>
<td>Mr Philippe Dongier</td>
<td>06/09/2008</td>
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<table>
<thead>
<tr>
<th>Approved by:</th>
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<tbody>
<tr>
<td>Regional Safeguards Coordinator:</td>
<td>Ms Laura E. Tlaiye</td>
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<tr>
<td>Comments:</td>
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<tr>
<td>Sector Manager:</td>
<td>Mr Philippe Dongier</td>
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