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SOCIAL DEVELOPMENT PAPERS

Conflict Prevention & Reconstruction

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**Landmine Clearance Projects:
Task Manager's Guide**

Jacques Buré
Pierre Pont

The Working Papers Series disseminates the findings of work in progress to encourage discussion and exchange of ideas on conflict and development issues. Papers in this series are not formal publications of the World Bank. The findings, interpretations, and conclusions are those of the authors and do not necessarily reflect the views of the World Bank Group, its Executive directors, or the countries they represent. The papers carry the names of the authors and should be cited accordingly. The series is edited by the Conflict Prevention and Reconstruction Unit in the Social Development Department of the Environmentally and Socially Sustainable Development Network for the World Bank. To request copies of the paper or more information on the series, please contact the CPR Unit at cpr@worldbank.org. Papers are also available on the CPR Unit's website: <http://www.worldbank.org/conflict> under publications.



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Foreword

Land mines destroy not just lives, but livelihoods. Even after armed conflict has stopped, land mine contamination kills and maims innocent people, obstructs emergency assistance, and hampers economic and social development. The removal of land mines is often essential to restart development and rebuild shattered communities, and the lingering threat to physical and human capital makes their removal a priority for humanitarian and development agencies alike. Since the end of the Balkan crisis, financial support for land mine clearance has been a growing activity for the World Bank and an important component of its evolving agenda on conflict and development. However, because land mine clearance is expensive and involves complex political and security issues, it requires special attention and approaches.

The Conflict Prevention and Reconstruction (CPR) Unit in the World Bank's Social Development Department has been active in addressing issues related to the effective removal of land mines in post-conflict economic recovery. The CPR Unit follows closely the work of the United Nations specialized agencies on mine action and is a member of the Mine Action Working Group of the United Nations Mine Action Service (UNMAS).

This guide complements *Demining— Operational Guidelines for Financing Land Mine Clearance*, which the Bank issued in February 1997, bringing together our experience in addressing this problem. The guide is also available in electronic format, together with background material, on a companion CD-ROM available on request from the CPR Unit (see Annex D for the list of documents included in the CD-ROM).

This Guide describes suggested good practice for use by task managers in the design and implementation of land mine clearance projects financed by the World Bank. It is not a statement of Bank operational policy, and the analysis, views, and opinions expressed herein are the sole responsibility of the authors.

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Ian Bannon
Manager
Conflict Prevention and Reconstruction Unit

ACRONYMS AND ABBREVIATIONS

GICHD	Geneva International Center for Humanitarian Demining
GCC	General clauses of contract
ICB	International competitive bidding
ICBL	International Campaign to Ban Landmines
ICRC	International Committee of the Red Cross
IDPs	Internally displaced persons
IMAS	International Mine Action Standards
IMSMA	Information Management System for Mine Action
ISO	International Organization for Standardization
NMAP	National Mine Action Plan
NGO	Non-governmental organization
PAD	Project Appraisal Document
PIU	Project implementation unit
PIP	Project implementation plan
RPA	Regional Procurement Adviser
SOP	Standard operating procedures
TOR	Terms of reference
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
UNMAS	United Nations Mine Action Service
UNOPS	United Nations Office for Project Services
UXO	Unexploded ordnance
WFP	World Food Programme

LANDMINE CLEARANCE PROJECTS: TASK MANAGER'S GUIDE

I. INTRODUCTION

1. In an area where landmine contamination is suspected, people are not free to move, economic development cannot take place, and little emergency assistance can be provided. Thus the threat that the land may still be polluted with landmines causes social and development disruption, preventing the return of internally displaced persons (IDPs) and the resumption of normal human activities. An international response to the humanitarian crisis caused by the global proliferation of antipersonnel landmines from 1997 to 1999 was orchestrated by the UN, the International Committee of the Red Cross (ICRC), the International Campaign to Ban Landmines (ICBL),¹ and a core group of concerned states. The response was based on the Ottawa Treaty (see full text in Annex A), a strong legal instrument that commits signatory governments to a series of measures, including the eradication of landmines and the cessation of their use within 10 years.² As of May 2003, some 134 countries had ratified the Treaty (the list of countries that are party to the Treaty are listed on the companion CD-ROM to this guide).

2. Mine Action is the generic term used to describe the activities that aim to reduce the social, economic, and environmental impacts of landmines. It is a broad concept that includes mine awareness, victim assistance, landmine clearance, and advocacy in support of a global ban on landmines and stockpile destruction. Typically, many organizations collaborate in Mine Action programs: the UN and other international agencies, bilateral donors, and local nongovernmental organizations (NGOs) (the United Nations policy paper is included on the companion CD-ROM to this guide). When the Bank participates in such programs, it generally concentrates its efforts on landmine clearance, relying on NGOs and UN agencies to address mine awareness and mine victim assistance.

3. The World Bank's conflict agenda supports financing landmine clearance to make available land and infrastructure that are required for a development activity agreed with a

¹ The International Campaign to Ban Landmines received the 1997 Nobel Peace Prize jointly with Jody Williams. Addressing the Nobel Committee on December 10, 1997, Jody Williams pointed out that landmines do not recognize that peace has been made; they are eternally prepared to take victims. The desire to ban landmines was not new. In the late 1970s, the ICRC, along with a handful of NGOs, pressed the world to look at weapons that were particularly injurious or indiscriminate. One of the weapons of special concern was landmines. In the 1990s, 1,000 organizations were working together in 60 countries to achieve the common goal of a ban of antipersonnel landmines.

² Each country adhering to the Ottawa Treaty is obliged never under any circumstances to: (a) use antipersonnel mines; (b) develop, produce, otherwise acquire, stockpile, retain, or transfer antipersonnel mines to anyone, directly or indirectly; or (c) assist, encourage, or induce anyone to engage in an activity prohibited to a State Party under the Treaty. In addition, each State Party undertakes to ensure the destruction of all antipersonnel mines in accordance with the provisions of this Treaty. When ratifying the Treaty, a country commits itself to eradicate the presence of mines on its territory within 10 years. The depository of the Ottawa Treaty is the United Nations Secretary General.

borrower. In February 1997, the World Bank issued *Demining—Operational Guidelines for Financing Landmine Clearance* to clarify for task managers and other operational staff the circumstances under which the Bank can finance the removal of landmines (see Annex B for the full text of the guidelines). The clearance of landmines and unexploded ordnance (UXO) covers a wide range of technical activities, including mine field survey and marking, mine detection, demining, and landmine destruction. It is a highly specialized area, dominated by United Nations and NGO specialists who often have a military background and extensive field experience (Annex C provides definitions of technical terms and descriptions of the organizations that are most active in landmine clearance.). Most Bank task teams have no experience in managing landmine clearance programs. This guide complements the Bank's guidelines by focusing on the key issues in landmine clearance that are important to Bank staff: how to start, who the Bank's interlocutors/partners are, how to address landmine clearance in a project, and what legal and procurement issues may arise. It also provides suggestions for task managers to use in discussions with counterparts when a project has a landmine component.

Box 1: Landmines: Basic Facts

- The most common landmines are priced from \$3 to \$40 on the international arms market.
- Between 1996 and 2002, an average of 15,000 people worldwide were killed or injured by landmines annually.
- More than 60 countries had landmine incidents in 2001.
- A typical 10-person manual clearance team can demine no more than 500 square meters each day.
- The use of demining dogs improves productivity dramatically, but the cost of a trained demining dog can reach \$25,000.
- For every hour spent sowing landmines, over 100 hours are required to demine them.
- One accident occurs for every 1,000 to 2,000 mines removed.
- In Mozambique, the monthly salary of a local deminer is \$300.
- In Bosnia, over the 1996-2000 period, the average cost for landmine clearance per square meter was \$1.80 (involving 20 organizations).
- In Croatia, landmine clearance financed by the Bank cost about \$3 per square meter in 1997. After three years of competitive bidding, this price dropped to \$1.80 per square meter in 2001.

II. BANK GUIDELINES ON LANDMINE CLEARANCE

4. ***Comparative Advantage of the Bank.*** Governments of countries affected by landmines have the primary responsibility for eradicating landmines that threaten their citizens and economy. World Bank support for landmine clearance is based on the recognition that landmine contamination is a significant obstacle to the reestablishment of normal development activities for many affected countries. Demining operations financed by the Bank are carried out most often during the post-conflict emergency reconstruction phase. They do not address long-term economic, sectoral, or institutional reforms and do not include conditions linked to macroeconomic policies. The Bank has a comparative advantage in the following areas:

- The setting of priorities based on socioeconomic analysis;
- The establishment of effective institutions, with full ownership of the project and the ability to set priorities among the various requests for landmine clearance;
- The development of a procurement system for the demining work, increasing both safety and productivity;
- The introduction of economic concepts (e.g., cost effectiveness, measurable outputs, results-oriented incentives) in landmine clearance activities, significantly increasing their impact; and
- Convening power to help set the agenda of Mine Action in a country in conjunction with United Nations specialized agencies (UNMAS, UNDP) and other donors, and to help organize overall resource mobilization for reconstruction.

5. ***World Bank Guidelines on Landmine Clearance.*** In February 1997, the Bank issued a set of operational guidelines for financing landmine clearance. Among the provisions of the guidelines are the following:

- (a) Landmine clearance must be an integral part of a development project or program to be adopted by the borrower. The Bank seeks to support development activities rather than landmine clearance per se.
- (b) The financing of landmine clearance should be justified on economic grounds, taking into account the availability of resources.
- (c) Implementation must be carried out under the control of civilian institutions.
- (d) The legal agreements for the project include a covenant under which the borrowing country undertakes not to lay new landmines anywhere in the country that would in any way undermine the execution or development objectives of the project.

6. In addition, the guidelines stipulate that the borrower is responsible for evaluating alternative landmine removal methods, making a choice among them, and implementing the chosen method. The borrower should obtain competent independent technical, financial, and legal advice on all aspects of project design and implementation. Under no circumstances should the borrower act solely on the basis of Bank staff suggestions regarding the technical aspects of demining. Bank staff should exercise utmost caution in discussing technical matters with the borrower.

III. COMPLYING WITH BANK GUIDELINES IN A PROJECT

7. This section is organized according to the Bank's usual project cycle, presenting information to help staff at every stage of the process. Section IV provides checklists that staff and borrowers can use to help ensure that they cover all the important points when preparing a landmine clearance project.

Building Partnerships

8. Demining operations financed by the Bank are carried out most often during the post-conflict emergency reconstruction phase. According to OP 2.30, *Development Cooperation and Conflict*, at such times "the Bank works, within its mandate, in close partnership with bilateral and multilateral agencies, particularly the United Nations; government authorities; and civil society and private sector entities." Of these agencies, the United Nations has the most extensive knowledge about landmine clearance issues. Bank staff should coordinate with the specialized agencies of the United Nations in New York and its Resident Coordinator in the field.

- The United Nations Mine Action Service (UNMAS) is the focal point for landmine action in the United Nations, with particular responsibility for Mine Action in peacekeeping and humanitarian emergency contexts;
- The United Nations Development Programme (UNDP) has primary responsibility for assisting governments in building sustainable national capacities for long-term landmine Action efforts; and
- The United Nations Office for Project Services (UNOPS) has operational responsibility for carrying out most of the UNMAS and UNDP programs in the field.

9. Collaboration with NGOs and donors is also an important aspect of devising an assistance strategy and building a program whose design and development objectives all can agree on.

Composition of the Bank's Team

10. When a post-conflict reconstruction project is expected to include a demining component, someone familiar with Bank procedures and with landmine projects should be designated as a member of the Bank project team. This person will be responsible for discussing with Bank counterparts the impact of the potential presence of landmines on the project; consulting with United Nations agencies, aid agencies, NGOs, and the donor community on coordination and information management; and entering all inputs and findings into the various documents the project team will have to prepare. This person's expertise should be largely in project management, partnership, and knowledge of Bank requirements and past experience rather than in military-related technical demining operations (sample TORs are included on the companion CD-ROM).

Scoping and Prioritization

11. Gathering information and establishing priorities for landmine clearance during project preparation is essential. The first challenge in preparing a landmine clearance program is to develop information and provide it to the local communities and potential investors who intend to reuse the land. Thus, in the early stages of a project, general and technical surveys are carried out in known at-risk areas to reduce the area of land where the presence of landmines is suspected (see Box 2). These surveys are followed by socioeconomic impact studies and priority setting.

Box 2: The Three Phases of Landmine Clearance

General survey (or general mine action assessment). This phase entails gathering, evaluating, analyzing, and disseminating sufficient information to complete the strategic planning for a national Mine Action program, as well as listing indicators of socioeconomic impact. The scope and extent of a general survey depend on the availability of existing information and the urgency of the need for planning information. Area reduction through general survey costs ten times less than using demining methods, but only the land that was not contaminated can be returned to safe use.

Technical survey. A technical survey involves detailed topographical and technical investigation of known or suspected mined areas identified during the general survey or by other means. Area reduction through technical survey costs from two to five times less than using demining, but only the land with a low density of landmines can be returned to safe use.

Demining. Demining is the process of clearing contaminated land by detecting and removing or destroying all mines and UXOs.

12. **General Survey.** The general survey is fast and inexpensive. It should be carried out as soon as possible after hostilities have ceased in order to draw a countrywide map of areas suspected to contain landmines and to mark these areas (see Box 3 and the sample general survey included on the companion CD-ROM). It provides an assessment of the potential presence of landmines and can also be used as the basis of indicators for monitoring the effects that landmine clearance efforts will have on the socioeconomic revitalization of the affected areas. In most instances, the United Nations has the mandate to carry out this survey,³ but a good general survey requires the commitment of the government as well as complete cooperation and understanding between the government and international agencies. The structure governing the survey should be flexible and independent. In addition, care must be taken to keep the information unbiased by special interests (for example, the information might be used by the government as a political instrument to attract international grants or by landmine clearance companies as a marketing tool).

³ Bank staff should collaborate with ICRC, ICBL, UNHCR, UNDP, and UNMAS to have a general survey completed rapidly.

Box 3: IMAS General Survey

The United Nations technical guidelines term the first phase of information gathering the “general survey.” Four general principles apply:

- The general survey is usually an element of a National Mine Action Program and should therefore be controlled by the national Mine Action authority;
- The general survey is not a “snapshot” of the situation on a particular date, but a continuous process;
- All actors operating within a mine-affected country should assist in the general survey; and
- Information collected during the general survey should not be restricted or classified as sensitive unless absolutely necessary.

13. **Technical Survey.** The technical survey is implemented in priority reconstruction areas that are identified as potentially hazardous during the general survey stage. The technical survey is particularly useful when there is no immediate need to clear all the land. The objective in such circumstances is to accurately identify, record, mark, and fence the outer edge of the hazardous area—the only area that will be demined later—and release the remaining land for productive use. The process by which the initial area identified as contaminated is reduced to a smaller size is known as “area reduction” (see Box 4).

Box 4: Area Reduction

Area reduction involves limited clearance, such as the opening of access routes and the destruction of mines and UXO that represent an immediate and unacceptable risk. However, the main purpose is to collect more reliable information on the extent of the hazardous area. In most situations, the size of the hazardous area is reduced by a factor of five to ten after a technical survey. This means that much of the land can be reused by local communities once the technical survey is completed. The cost per square meter of a technical survey is about one-fifth of the cost of demining operations.

14. **Information Dissemination and Socioeconomic Analysis.** Mine Action management is as much about information management as it is about demining per se. Bank staff should ensure that information about landmines is disseminated to local communities as soon as it is available—for example, visible and permanent marking of the areas contaminated or potentially contaminated by mines, maps, posters, and general mine awareness material.⁴ Once the surveys are under way, the partners—the Bank, other development institutions, and the government—should carry out socioeconomic impact studies to target the more specific needs of the population.

⁴ The Geneva International Center for Humanitarian Demining (GICHD) can provide guidance on the management of, and funding and training for, useful software called Information Management System for Mine Action (IMSMA).

15. **Setting Priorities.** With the information that has been gathered, the development partners should assist the government in setting priorities for landmine clearance activities. Many countries set their priorities in a National Mine Action Plan (NMAP)⁵ covering an average of about 10 years. Because funds are limited, it is usually impossible to demine all contaminated areas under a single project. Bank staff should work to ensure that (a) adequate selection criteria are established (see Box 5), with the main criteria the economic and social benefits of the project to be implemented in the area concerned after it has been cleared; (b) the selection process is not biased by pressures from the political level or from landmine clearance companies; and (c) the areas on the priority list are still suspected of containing landmines at the time their clearance is requested. If a cost-benefit analysis is available, the tasks offering the best cost-benefit ratio should be given priority. In practice, however, it is rarely possible to carry out a cost-benefit analysis during the early stages of a project, and tasks must be ranked according to their technical and institutional feasibility. The government and local authorities should have ownership of the prioritization process; and once the priority list is established, all actors involved in landmine clearance should follow it.

Box 5: Selection Criteria

Selection criteria vary from one project to another depending on the goals the government sets for its National Mine Action Program. The criteria are unrelated to the number and size of mined areas; they depend on the perception of risks and the need to reuse the land. There are three core parameters for setting criteria:

- The types of areas to which landmines are blocking access, including services and livelihoods;
- The number of victims; and
- The nature of the contamination—landmines and UXO.

16. **Selection Considerations.** The areas selected for clearance under a particular project must have been assessed as contaminated by landmines, and also as sites for highly beneficial and urgent development projects. Judgment will likely be required in weighing the relative value of different benefits and estimating the likelihood that these benefits will be achieved and sustained. The selection process may need to take into account such factors as the extent of economic specialization (the more trade and movement of people, the greater the risk), people's access to alternative resources (another area of land, for example), the extent of poverty (the poorer the people, the more risks they will take), and the relative risks for men and women, given their roles in society. Also, once a parcel of land is on a priority list and is scheduled for demining, the beneficiaries should indicate that they will utilize the land as soon as it is free of landmines.

17. **Timing.** All actors naturally tend to assume that landmine clearance will be implemented as a prerequisite to any investment in an area affected by landmines. However, in most cases, the lack of capacity and of information makes it difficult to carry out demining before other operations begin. For example, IDPs often return home regardless of the threat posed by the

⁵ A sample National Mine Action Plan is included on the companion CD-ROM.

presence of landmines.⁶ Therefore, landmine clearance activities must be carefully scheduled to be compatible with other projects financed by the Bank or carried out by the government and other organizations. Bank staff sometimes ask how long it will take to clear the land. The Ottawa Treaty provides a partial answer by suggesting that landmines be cleared within a 10-year period following the date when a country ratifies the Treaty. Ten years could be too short a period to complete such work, but it provides a useful target. Bank staff should concentrate on what can be realistically achieved as a priority—for example, the general survey and the prioritization of areas to be demined. If landmine clearance cannot be achieved before the other investments, coping strategies should be considered.

Project Preparation

18. Early in project preparation, Bank staff should make clear to the government that as part of the legal agreements for a Bank-financed project, the government will be expected to undertake “not to lay new landmines anywhere in the country that would in any way undermine the execution or development objectives of the project.” If the government has ratified the Ottawa Treaty, it has already agreed not to use landmines (the Ottawa Treaty is included on the companion CD-ROM and comments on the Treaty in Annex A); and by ratifying the Treaty, it has signaled its commitment to the kind of work a mine clearance project entails. The Bank should not invest in landmine clearance projects unless the government has demonstrated full commitment to and ownership of the program.

19. ***Institutional Issues.*** The design of a landmine project presents a major challenge because few countries have in place an institution responsible for Mine Action. In addition, the Bank’s requirement that landmine clearance must be carried out under the responsibility of civilian authorities usually implies a transfer of responsibility from military personnel to a civilian project implementation unit (PIU) responsible for the implementation of the project. The PIU will become a focal point and should develop rapidly into a professional, highly specialized, and productive unit. The PIU should be tightly linked to a strong line ministry, since former military personnel are often reluctant to share information. The line ministry must manage the access to all relevant information, and the status of the PIU must be made public. As a result, the project will need to devote substantial effort and resources to capacity building.

20. ***Choice of Agent.*** Bank staff sometimes ask where to advise the borrower to look for appropriate demining expertise. They should be aware that, although the Bank requires that landmine clearance in Bank-financed projects be carried out under the responsibility of civilian authorities, this requirement does not preclude collaboration with the military in areas such as maps, surveys, and landmine removal, or the employment of former military personnel. Armies are among the best sources of information on the location of minefields. Military personnel are generally not familiar with humanitarian demining standards, but with only three months of training a soldier can become a certified deminer able to comply with humanitarian standard

⁶ Time concerns are closely associated with refugee and IDP issues. The main agencies dealing with IDP return are UNHCR, WFP, UNICEF and ICRC; the main NGOs are Médecins Sans Frontières (Doctors Without Borders), Care and Oxfam. Consultation with these agencies can supply vital information about the socioeconomic environment in which war-affected people are living.

procedures (see Box 6). Furthermore, when hostilities are over, military personnel often constitute a large reservoir of relatively inexpensive and underemployed labor.

Box 6: Humanitarian Procedures

In July 1996, an international conference in Denmark proposed the formulation of international standards for humanitarian mine clearance programs. Following up on this proposal, a UN-led working group developed the International Standards for Humanitarian Mine Clearance Operations, which were released in March 1997. The revision of these standards by the United Nations Mine Action Service (UNMAS) and the Geneva International Centre for Humanitarian Demining (GICHD) led to the adoption of a first series of International Mine Action Standards (IMAS) in September 2001. Additional IMAS and technical notes are still under development.

21. **Commercial Approach.** Because of preexisting structures or institutions, or demands by the donor community, the Bank may occasionally agree to use direct contracting or force account mechanisms for procurement of demining work. However, since 1996 the Bank has promoted the use of competitive mechanisms to increase efficiency. Competition lowers the cost of technical survey and demining work; encourages the borrower to provide a solid description of the objectives of the project; and promotes the issuance of standard operating procedures (SOPs) by contractors (and, as allowed, NGOs), thus increasing safety and productivity (see Box 7). It also serves to improve planning and reporting by making them a contractual obligation. Commercial demining is particularly appropriate when: (a) local capacity to undertake landmine clearance is weak or nonexistent; (b) landmine clearance is required in some high-priority areas immediately after the end of hostilities; and (c) project developers do not consider local landmine clearance standards to be reliable.

- **Local or foreign firms.** Worldwide, the number of demining firms or NGOs able to bid is limited. Local landmine clearance companies are usually owned by the government or, if private, may have very strong ties to the government. Foreign landmine clearance companies are often financed through grants provided by their countries of origin under direct contracting arrangements. The use of foreign landmine clearance companies or NGOs can have several benefits, especially in the immediate post-conflict period when there is no local landmine clearance capacity. Foreign companies usually have wide experience and are accustomed to working in accordance with international standards. They can begin working almost immediately, and they can help strengthen local capacity by building in-country knowledge and experience.
- **Contracting basis.** The basis for competitive bids should be the surface area of land rendered accessible, rather than the number of landmines themselves or the time spent by the contractor in performing the task. This approach has proven to be a very efficient way of reducing costs and maximizing efficiency.

- **Quality control.** To ensure the quality of the demining operation, the clearance firm should monitor contractors' procedures rather than carry out ex-post sampling. In addition, it should have in place a board of inquiry in case accidents occur.

Box 7: Standard Operating Procedures

Standard operating procedures (SOPs) describe the protocols that a landmine clearance firm would use to survey and demine land, and the process by which it would monitor quality. Different SOPs are needed for different tasks—for example, for manual demining (depending on the type of landmine) or for demining using dogs. The SOPs, which may differ from one firm to another, are key to ensuring safety during clearance operations. SOPs should comply with International Mine Action Standards. World Bank bidding documents ask prospective bidders to attach a preliminary description of the SOPs to their offer.

Project Appraisal

22. During appraisal, Bank staff evaluate the suitability of the proposed project or component for Bank financing. They record their findings in the Project Appraisal Document (PAD). It is likely that a given project will address only the first phase of a larger National Mine Action Program. Therefore, the objectives outlined in the PAD should be based on a set of practical measures that will be implemented over a limited period of time.

23. **Government Ownership.** The government's readiness to establish a strategy and priorities is the first element that the PAD should discuss. The PAD should describe how the presence of landmines hampers investments and what actions will be the most appropriate for eradicating this threat (general survey, technical survey, mine awareness, or demining work). It should also report on whether and to what extent the country has renounced the use of landmines.

24. **Sequencing and Timing.** If general and technical surveys have not been carried out, they should be financed as part of the project. In addition, because landmine clearance is a prerequisite for many recovery projects, the PAD must remain realistic when it comes to the timing of interventions.

Economic Justification

25. The Bank requires that the financing of landmine clearance be justified on economic grounds. It is not easy to apply standard economic evaluation methods to landmine clearance because the benefits are difficult to appraise (see the socioeconomic study on the companion CD-ROM). It is also hard to avoid subjectivity. For example, what value should be placed on the psychological benefit of living in an area freed of landmines? Do the benefits derive from the demining activities alone, or are there other associated factors? Is the presence of landmines the only impediment to the productive use of a particular piece of land?

26. **Costs.** One straightforward approach is to justify landmine clearance as a land preparation operation, since the landmines must be removed if the development project is to be implemented and local communities are to benefit from the overall project goals. The cost of landmine clearance operations can be estimated, according to the type of land and the demining techniques used. Such an approach allows for a quantitative justification for landmine clearance; however, if it is a purely mathematical calculation that does not refer to the unquantifiable element of danger from exposure to landmines, it does not provide an accurate picture of the overall situation.

27. **Benefits.** When working out a cost-benefit analysis, Bank staff should therefore concentrate their efforts on evaluating the benefits of the demining project. It is likely that they will have to fill gaps in the data by making assumptions about the type, accessibility, and future use of the land. They will probably want to note also the unquantifiable benefits from landmine clearance for individuals, families, and communities. The main data needed to evaluate benefits are as follows: (a) the records of landmine accidents; (b) the economic costs of death and injury (the consequences of injury can be broken down into two or three categories depending on the type of impairment); (c) an estimate of the impact of the demining program on future accidents/incidents (a subjective parameter to which economic rate of return is proportional); and (d) knowledge of the economy of the region or area. Bank staff should then divide the benefits into various categories, such as the gain in productivity due to the reduction in loss of human life, the saving in medical costs, the improvement in welfare, and the benefits from the use of the land. Sensitivity analysis should focus on the estimated human welfare losses from landmine accidents.⁷

28. **Value of Analysis.** Such a cost-benefit analysis may be open to criticism because of the many assumptions that Bank staff will have to make. Although some oversimplification will be unavoidable, the cost-benefit analysis provides a useful tool for establishing priorities and ensuring that investments are cost-effective.

Procurement

29. Procurement arrangements for demining activities are standard, and bidding documents have been developed for the technical survey and demining work (see the companion CD-ROM for details). Landmine clearance activities should be based on the area to be cleared, not on the number of landmines removed or on the time spent to remove them. The establishment of a clearly measurable output for landmine clearance activities makes it possible to obtain results-oriented contracts, which will significantly increase the transparency of landmine clearance activities and thus reduce their costs to society. In addition, this allows for the procurement of contracts on a competitive basis, which is conducive to lowering the costs without reducing quality. These results-oriented contracts require strong supervision from the employer. The borrower should have in place an implementation agency to: (a) collect data and provide

⁷ For more details on the application of cost-benefit analysis to demining, see “Socioeconomic Approaches to Mine Action” (UNDP/GICHD), and “The Socio-Economic Impact of Mine Action in Afghanistan” by William Byrd (SASPR) and Bjorn Gildestad (Nordic Consulting Group). Information is also available on the companion CD-ROM.

technical advice on bidder capacity and on the quality of contractor work; (b) procure and supervise the work; and (c) define insurance and emergency rescue arrangements during contract implementation. It must be remembered that in low-income countries, the use of foreign contractors rather than local capacity results almost automatically in greater labor, transportation, and equipment costs. On the other hand, foreign contractors might carry out the works more rapidly, to the benefit of IDPs and local communities.

Technical Assistance

30. Technical assistance to the borrower is a key element in establishing a National Mine Action Program, and the UN provides this expertise in most cases. Technical assistance associated with Bank projects is primarily for procurement, institution building, and supervision rather than for demining expertise per se. Bank staff should not base the PAD on the assumption that donors will finance technical assistance; instead, they should include specific provisions and funding for technical assistance in the PAD. One additional source of financing is the World Bank's Post-Conflict Fund, which provides grants for testing and piloting different approaches and partnerships, especially in new areas such as landmine clearance, awareness and capacity building (the example of Sri Lanka is included on the companion CD-ROM).

Previous Experience

31. The PAD should also outline the lessons learned from previous experiences. If there is no previous experience related to the areas for which the project is being prepared, the PAD can set out the lessons learned more broadly by the Bank (see Box 8) and the demining community. In some countries the Bank might also have set up procedures to respond to the risks caused by the presence of mines (see for example the procedure for Afghanistan on the CD-ROM attached to this guide)

Box 8: Experience Gained from Bank-Financed Landmine Clearance Projects

- Projects should include coordination and adequate division of tasks among participating institutions.
- In the immediate post-conflict period, the focus should be on information collection and mapping as a prerequisite to well-planned and prioritized landmine clearance.
- The competitive approach to demining in priority areas has often proved to be more productive than any other methods used. However, demining remains very costly and should be reserved for productive areas.
- Clear technical specifications and close monitoring and supervision arrangements are the keys to the proper implementation of mine-clearing programs.
- Landmine clearance institutions must be developed, priorities defined, and procedures established, even if this activity may delay implementation of the overall program. Since the pace of the landmine component is different from that of other components, the benefits of a single project comprising different components, as opposed to separate projects, should be considered.

Project Implementation Plan

32. The borrower prepares the Project Implementation Plan (PIP), which should cover the following aspects:

- The nature and extent of the landmine/UXO threat at the appraisal stage;
- The objectives of the government regarding capacity building, landmine clearance, mine awareness, and mine victim assistance, as well as the status of stockpile destruction and the implementation of the Ottawa Treaty;
- Legal arrangements for the landmine clearance program, such as publication in the local gazette of the legal status of the Mine Action authority in charge, and eligibility of demining firms;
- Implementation arrangements—for example, how it will be ensured that the activities are carried out in accordance with International Mine Action Standards (IMAS),⁸ what the quality assurance arrangements will be, how priority areas will be identified/approved;
- The role of the various actors and coordination mechanisms (the Bank, UN agencies, donors) and potential areas for collaboration with these organizations; and
- Monitoring and evaluation indicators (see Box 9) and mechanisms.

33. The demining community often limits its monitoring to output indicators, but in addition, the PIP should include outcome indicators, and other indicators as appropriate. Documenting the long-term impact of the project may be difficult, because assessing prosperity or security is a subjective exercise. The PIP should determine when outcomes will be attributed to Mine Action intervention or to other factors—for example, do changes in accident rates stem from a mine awareness program or did the local people learn on their own how to avoid the minefields in their vicinity? (A sample PIP is included on the companion CD-ROM.)

⁸ The IMAS are available on the companion CD-ROM.

Box 9: Sample Monitoring and Evaluation Indicators

Outcome indicators: use of cleared land, use by the people who were supposed to use it.

Impact indicators: percentage of IDPs resettled, percentage of community infrastructure rehabilitated, number of mine-related incidents

Input indicators: flow of funds, timely delivery of equipment, recruitment of headquarters and field personnel, training of personnel.

Output indicators: size of area certified free of explosives, number of landmines/UXO cleared and destroyed.

Progress indicators: plans and schedules followed; size of areas surveyed, marked, and cleared; deployment of trained demining units; information management system and quality assurance mechanism in place.

34. **PIP and PAD.** The task team should include the most important elements of the PIP in the PAD.

Project Implementation and Supervision

35. The success of a landmine clearance project depends in large part on the partnership between the Bank supervision team and the PIU during implementation. Although the main objectives will have been set at the appraisal stage and during negotiation, the implementation of the project will most likely require adjustments to the procurement and supervision arrangements, based upon initial testing in the field.

Procurement Arrangements

36. The task team leader and the PIU should discuss the format of the bidding documentation for the surveys and demining works. In a Bank-supported project, procurement for landmine clearance can be conducted in two ways:

- **Subcontract.** Landmine clearance can be procured as a subcontract to a larger repair/reconstruction civil works contract. This approach is used primarily with large civil works contracts. The main contractor maintains full responsibility over timing and quality of the demining activities, and procurement requirements are driven by the characteristics of the main civil works (see sample contract included on the companion CD-ROM). Insurance and penalty mechanisms should be carefully designed to ensure that the main contractor returns the land free of landmines.

- **Stand-alone contract.** For large reconstruction programs, landmine clearance may be needed at many different sites, and it is usually better to use a stand-alone works contract. Because the technical capability of the bidders is critical to ensuring satisfactory implementation of a task of such a specialized nature, nationwide prequalification of bidders is recommended. (The local United Nations agency or relevant technical agency can usually help draw up a list of prequalified bidders.) To help ensure transparency and competition, international competitive bidding (ICB) should generally be used to procure stand-alone landmine clearance contracts.

37. **Procurement Documentation.** From a procurement point of view, the technical survey and demining work should be considered as a service. However, since this activity is similar to civil works, procurement documents for landmine clearance should be based on the World Bank Civil Works Standard Bidding Document, modified to take into account the specific nature of landmine clearance. The main modifications to this document are as follows:

- Qualification criteria (Instruction to Bidders, clause 4) (see Box 10);
- Evaluation of bids process (Instruction to Bidders, clause 29);
- Allocation of risks between the employer and the contractor (General Clauses of Contract—GCC, clauses 10-12);
- Contractor’s insurance requirement (GCC, clause 13);
- Quality control (GCC, clauses 33-36);
- Cost control (GCC, clauses 37-39);
- Progress payment clause (GCC of the modified bidding document, clause 32); and
- Termination of contract (GCC, clause 59).

38. In addition, the contractor must issue SOPs to describe how the work will be organized.

Box 10: Sample Qualification Criteria Specific to Landmine Clearance

- Annual volume of contractor demining works of at least 1.5 times the volume of the proposed works;
- Experience over the last 3 years as prime contractor in the performance of a minimum number of works (2-3) of a nature and complexity equivalent to the work proposed in the project under consideration;
- An accident record of not more than 1 casualty per 2,000 landmines cleared and destroyed on average over the last 3 years;
- Provision of an outline of plans for the timely acquisition (own, lease, hire, etc.) of the essential equipment required for the performance of the work; and
- The availability of suitably qualified technical staff—with at least 3-5 years of experience in landmine and UXO survey and clearance operations—to work on key elements of the contract.

39. **Insurance.** Accidents may occur during landmine clearance operations. According to the Bank’s guidelines, insurance arrangements to address the consequences should be reflected in contracts, and justifiable insurance premiums can be included in the project cost. This issue was discussed extensively within the Bank during review of the first demining work contracts, and standard clauses on responsibility and insurance were developed (see Box 11 for minimum insurance coverage).

Box 11: Sample Minimum Insurance Coverage (used in Croatia in 2001)

- Personal injury or death of contractor’s employees: \$50,000 in case of death and \$100,000 in case of injury, per occurrence, with the number of occurrences unlimited.
- Loss of or damage to property used in connection with the contract: up to the full replacement value of the property.
- Personal injury or death of third-party persons (including the employer’s personnel) caused by the contractor’s acts or omission: \$50,000 in case of death and \$100,000 in case of injury, per occurrence, with the number of occurrences unlimited.
- Loss of or damage to third-party property (including the employer’s property and any of the facilities that the employer has accepted) caused by the contractor’s acts or omission: up to the full replacement value of the property.

40. **Role of Regional Procurement Adviser.** As in all Bank-financed projects, Bank staff responsible for supervising a mine clearance project should work closely with the Regional Procurement Adviser on procurement processes and documentation. (Sample contracts and various TORs are included on the companion CD-ROM.) According to the Bank’s guidelines, all procurement and contracting arrangements must be cleared by the Procurement Policy Adviser, OPCPR.

Supervision Arrangements

41. During the execution of landmine clearance contracts, as for civil works contracts, on-site supervision is recommended to ensure that the contractor is performing tasks in accordance with operating standards. On-site monitors, themselves supervised by technical advisers, should be present each day to monitor the work. This approach makes the contractor accountable for the works, and it is considered safer and cheaper than the alternative—conducting random landmine clearance sampling on areas that a contractor has declared cleared after the work has been done.

42. **Standards.** UNMAS, through the IMAS Standards, supports these principles and provides additional details regarding the supervision that should be carried out by a “Quality

Assurance and Control” body before and during the work.⁹ IMAS specifies that clearance quality should also be certified in a second stage—this one more expensive—that involves inspecting a sample of cleared land (around 5 percent of the cleared land checked randomly). The International Organization for Standardization (ISO) has developed general principles and procedures for this second stage of inspection and sampling, published in ISO 2859. Bank project staff should discuss supervision with counterparts and ensure that the bidding documents reflect the agreed arrangements. It is recommended that the Bank finance day-to-day supervision only and leave the second stage (random checking) to the government. As in any Bank-financed project, Bank and country staff are responsible for ensuring that sufficient means are available for day-to-day monitoring of the work.

43. **Accidents.** Any accident related to a landmine that occurs during contract implementation must be investigated. Such an investigation, usually led by United Nations technical experts, is intended to determine whether the accident was due to the contractor’s failure to adhere to the agreed SOPs. If it was, the employer may impose contract penalties, including termination. The investigation report may also affect the contractor’s eligibility for future tenders, if it has a record of a high number of casualties.

44. **Fraud and Corruption.** Local managers of the landmine clearance coordination structure, generally former military personnel, are often selected on the basis of their knowledge of landmine clearance issues; and since the landmine clearance community in a developing country is usually very small, there is a high probability that persons within the coordination structure and the contracting industry know each other reasonably well. There is also a relatively high risk that they are involved on both the organizational and contracting sides. Therefore, Bank staff, with the help of the Regional Procurement Adviser as necessary, should be careful to monitor possible conflicts of interest between the members of the governmental demining organizational structure and the contracting industry (see Box 12). Any allegations of corruption that surface during procurement reviews should be referred to the Investigations Unit of the Bank’s Department of Institutional Integrity for follow-up, including investigation where appropriate.

⁹ IMAS notes the need for assurances that the demining organization has cleared the land in accordance with its contractual obligations and that the land is safe for its intended use. It recommends monitoring the demining organization’s capability (staff, equipment, and procedures) and observing how this capability is being applied. External monitoring complements the demining organization’s own internal quality management system; it does not replace the demining organization’s responsibility for using safe, effective, and efficient operational procedures.

Box 12: Some Fraudulent Behavior and Remedies

The contractor knows there are no landmines in the area, tenders a low bid, and makes a big profit when awarded the contract. This situation might result from collusion with the PIU or the bodies that set priorities. Bank staff should focus on the list of priorities, request that the contracts designate priority areas only, and organize pre-bid site visits.

The contractor claims to have cleared the land and asks for payment, but in fact the land is not cleared. There might be collusion with the supervision team or site monitors who certified the works. Bank staff should ensure turnover of the site monitors, from one site to another, so that the same site monitor does not always work with the same firm, and should conduct random inspections.

Alleging that it is difficult to demine the land because vegetation has grown, the contractor makes a claim for compensation. Bank staff should ensure that (a) the description of the work reflects this possible difficulty, (b) a starting date for the work is specified, and (c) different prices are established for easy, medium, and difficult terrain. The PIU should negotiate with the contractor, and it may cancel the contract if warranted.

Collusion among bidders. This situation may be addressed by establishing lower barriers to entry and using ICB with foreign contractors.

45. ***New Landmines.*** If new landmine-laying activity takes place in the country during project implementation—for example, members of former warring factions continue to lay landmines—the task team leader should designate the project as “at risk” and recommend whether or not to suspend disbursement. In addition, the Regional Vice President should notify the Board.

IV. CHECKLISTS

Checklist for Project Identification

46. The objectives at project identification should remain broad, but the Bank's task team should cover the following key areas:

- The commitment of the government and its position regarding the Ottawa Treaty—is there a risk that landmines will be used in the country in the near future?
- The role and involvement of United Nations agencies.
- The status of the general survey and assessment of the population's knowledge regarding the presence of landmines.
- Assessment of the requirements for financing the setup of a central landmine clearance agency.
- The magnitude of the problem, including how and when IDPs plan to return to their land; the behavior of returnees regarding minefields; the percentage of land affected; the most contaminated areas; and data on landmine accidents. These factors should be assessed in coordination with UNHCR, the Red Cross, and the Ministry of Health.
- The role that various partners intend to play in the overall demining program. The synergies and areas of responsibility among partners (World Bank, UN, NGOs, donors) should be determined. Local counterparts and the potential for local support should be identified, including identifying the institutions that would set the policy and the ones that would implement it.
- Potential gaps between the commitments of the government and its capacity to implement the necessary measures resulting from these commitments (e.g., decision capacity of the person in charge of the project, which Ministry will be in charge, bureaucratic snags, status of the landmine clearance agency). These potential gaps should be assessed, with special attention to timing. How much of the landmine action program can be completed on schedule (e.g., before the IDPs return) should also be determined. In addition, the basis for prioritization (economic grounds or rule of thumb) should be addressed.
- The critical activities that would need to be financed under the project should be identified.
- The various possibilities to set up priorities for the areas to be demined and the way to disseminate information to the public.

Checklist for Project Appraisal

47. The main actions to be carried out by the task team during appraisal are as follows:

- Discuss the basis for prioritization with the government.
- Assess indigenous demining capacity.
- Establish monitoring indicators (e.g., how many square kilometers of technical survey are to be completed by the closing date).
- Design the procurement of goods, works, and services and decide whether to encourage local/foreign contractors to bid. Identify the capacity of the demining firms to carry out the works. Draft a list of potential bidders when possible.
- Ensure technical assistance financing.
- Discuss which line ministry will be in charge and develop, in conjunction with the government, the TOR for the project implementation unit (PIU) and various supervision arrangements (see sample TORs on the CD-ROM attached to this guide).
- Discuss—with the government, UNMAS, UNDP, UNOPS, and others—the IMAS requirements and the need to adapt these standards to the local context.



ANNEX A. THE OTTAWA TREATY

The Ottawa Treaty is an element of the international humanitarian response to the crisis caused by the global proliferation of antipersonnel mines (as of May 2003, 147 countries had signed the treaty and 134 had ratified it).

Negotiated in 1977, the treaty came into force in March 1999. Each country adhering to the Ottawa Convention obliges itself, never, under any circumstances, to: (i) use antipersonnel mines; (ii) develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, antipersonnel mines; and (iii) assist, encourage or induce, in any way, anyone to engage in an activity prohibited to a State Party under this Convention. In addition, each State Party undertakes to ensure the destruction of all antipersonnel mines in accordance with the provisions of this Convention. On ratifying the Treaty, a country commits to the eradication of landmines from its territory within 10 years. The depository of the Ottawa Treaty is the UN Secretary General.

Compliance with the Treaty

Each State Party to the Treaty must provide the Secretary General of the UN with an annual report on the actions it has taken to comply with the provisions of the treaty. This report should include the total number and the type of antipersonnel mines it has stockpiled, the progress of its mine-destruction programs, the total number and the types of mines retained for training purposes, the location of all mines under its jurisdiction and the measures it has taken to prevent and suppress violations of the treaty.

The World Bank and the Treaty

World Bank staff members are required to follow the Bank's operational guidelines when a request is made for the financing of activities related to mine clearance. Although the Bank does not refer specifically to the Ottawa Convention in its guidelines, it stresses under "Conditionality, Board Presentation, and Supervision" that any legal agreement for a project involving landmine clearance must include a covenant under which the government undertakes not to lay new landmines anywhere in the country that would in any way undermine the execution or development objectives of the project. It also stipulates that the regional staff must indicate to the Board whether and to what extent the country has renounced the use of landmines. Thus, while the guidelines do not refer to the Treaty, they represent an important tool in its implementation.

International Response beyond the Ottawa Treaty

The Ottawa Treaty is a key measure for addressing the mine contamination problem. However, long after the cessation of hostilities or the arrival of peace, large numbers of people continue to live in mine-affected areas and are under daily threat from these weapons. For the majority of these people, medical, rehabilitative and economic needs remain largely unmet. Initiatives from governments, NGOs and UN Agencies have led to an unprecedented and concerted effort to address public health and humanitarian assistance under the concept of Victim Assistance.

ANNEX B. WORLD BANK OPERATIONAL GUIDELINES FOR FINANCING LANDMINE CLEARANCE
(ISSUED ON FEBRUARY 7, 1997)

1. A number of member countries have recently asked the Bank to consider financing landmine clearance. Dealing with demining presents many delicate issues for the Bank, but it is clear that once hostilities have ceased and peace has been restored in a project area, removal of landmines may be essential to reestablishing normal development activities and undertaking productive investment. Financing landmine clearance is similar in many ways to financing other types of land preparation for development activities (clearing stumps for cultivation or landslides on roads); however, because of the particular political and safety factors generally associated with demining, requests to finance such activities merit special attention and approaches. This memorandum sets out guidelines for staff to follow in considering such requests.

Eligibility

2. To be eligible for Bank financing, landmine clearance must be an integral part of a development project or a prelude to a future development project or program to be adopted by the borrower. The Bank may support landmine clearance to make available land and infrastructure that are required for a development activity agreed with the borrower. It is this development activity that the Bank seeks to support, rather than landmine clearance per se. This development activity should be identified no later than at the appraisal stage of the landmine clearance and should be documented, even though it may be financed by the Bank or other sources at a later stage.

3. The following are examples of the types of landmine-related activities for which the Bank may provide financing in the context of a project.

(a) *Capacity building*: support for the development of national or local demining centers to create or expand capacity to implement the demining components of projects in priority sectors (transport, agriculture, reintegration of displaced people and refugees, etc.). Such centers typically include facilities for lodging, training, and equipping deminers; capacity for mine awareness training; and a mine information center that conducts mine surveys and disseminates updated information on the status of mine clearance in specific targeted areas. The Bank's Institutional Development Fund may finance setting up institutional capacity and training personnel in demining.

(b) *Area demining programs*: financing of a demining program in particular areas of a country as a component or first phase of a development project or program that aims to (i) reintegrate displaced populations and reactivate the local economy, and (ii) carry out additional development activities (repatriation assistance to refugees, Quick Impact Projects to rehabilitate agriculture, reconstruction of health and education facilities, etc.) that may be funded by the Bank, UNHCR, UNICEF, or other agencies.

(c) *Sector demining programs*: support for demining programs targeted at specific sectors; for example, demining of agricultural land as part of a larger agricultural rehabilitation program or demining of roads and bridges as part of a transport project.

Economic Justification

4. The financing of landmine clearance activities must be justified on economic grounds and must take into account the scarcity of financial resources.

Implementation Responsibility

5. Landmine clearance in Bank-financed projects must be carried out under the responsibility of civilian authorities. However, this requirement does not preclude collaboration with the military (e.g., on maps, surveys, removal of mines) and the employment of former military personnel.

6. *Borrower*. The borrower and the implementing agencies are responsible for evaluating alternative landmine removal methods, choosing among them, and implementing the chosen method. The Bank requires that the borrower obtain competent independent technical, financial, and legal advice on all aspects of project design and implementation; and it may require that the borrower establish a panel of internationally recognized experts to advise on the project.

7. *Bank staff*. Bank staff make clear to the borrower and implementing agencies that the Bank does not have institutional capability in the technical aspects of demining, including assessing risks associated with alternative technical approaches, and that the borrower and implementing agencies should not act in sole reliance on any views that Bank staff may express in this respect. Bank staff should exercise utmost caution in discussing technical aspects with the borrower and implementing agencies. Bank staff include in the project documents a brief summary of the process by which the borrower and implementing agencies have made the technical choices and a description of the quality assurance process to be put in place.

8. *Consultation with UN Agencies*. As appropriate, Bank staff consult with relevant UN agencies (the Department of Humanitarian Affairs, UNHCR, etc.) or the International Committee of the Red Cross to avoid duplication of efforts and to obtain the benefit of their technical expertise. Similarly, staff are encouraged to exchange views with NGOs and other bilateral agencies, as appropriate.

Procurement

9. Landmine removal is a difficult and dangerous task, and even experienced professional disposal teams cannot be sure that they have located and cleared all mines from the land. Even a 99 percent rate of successful clearance in a field seeded with 1,000 mines leaves 10 unexploded mines. The cost of insurance to the contractor could be high. Justifiable insurance costs may be included in the project cost.

10. Bank procurement arrangements are based on considerations of economy and efficiency. At the same time, in view of the high risk and limited sources of expertise involved in landmine clearance, procurement arrangements for these projects, including bid documents and contracts for landmine removal, must be tailored to the needs of the specific project. Contracting arrangements need to ensure that risks are appropriately identified and allocated and that any insurance arrangements are adequately reflected. All procurement and contracting arrangements must be cleared by the Procurement Policy Adviser, OPRPR.

Conditionality, Board Presentation, and Supervision

11. The legal agreements for any project involving landmine clearance include a covenant under which the government undertakes not to lay new landmines anywhere in the country that would in any way undermine the execution or development objectives of the project.

12. When the loan is presented to the Board for approval, Regional staff indicate to the Board whether and to what extent the country has renounced the use of landmines. If, during project implementation, the Bank receives evidence of new mine-laying activity in the country, the Regional vice president notifies the Board of the event and any effects it may have on the project.

A. Technical Terms

International Mine Action Standards for Humanitarian Demining (IMAS)¹⁰

The international standards for humanitarian demining were issued under the auspices of the UN and provide a framework for the creation of Standard Operating Procedures (SOPs) which detail the manner in which specific mine clearance operations are conducted. Operating procedures take into account the cultural, environmental and operational variations between countries. IMAS address safety, training, surveying, minefield marking, mine clearance, explosive ordnance disposal, medical, communications and minefield information management issues. IMAS standards will continue to evolve and develop as new standards are completed and approved, and as changes are made to those already issued.

Landmine or antipersonnel landmine

An antipersonnel landmine is a small device designed to kill or injure people. It detonates under less than half a kilogram of pressure. The vast majority of landmines have been randomly deployed to terrorize and demoralize local communities. Landmines are an element of a systematic war against civilians, especially in today's internal conflicts, and they can be found everywhere, around wells, along transport routes, in forests, in the backyards of houses, hidden in the sand, etc. The Ottawa Treaty also prohibits so-called "smart" antipersonnel mines, which have the capacity to self-destruct or self-deactivate.

Mine Action

Mine Action is a generic term that includes mine awareness education, minefield surveys and marking, mine detection, demining, landmine destruction and assistance to mine victims

UXO and submunitions

UXO is the acronym for unexploded ordnance or defective projectiles. These, like landmines, represent a long-term threat. About 10 percent of explosives used in armed conflict do not detonate. UXO includes submunitions, or cluster bombs that are aerially delivered in warheads or dispensers. Submunitions are designed to explode on impact but many fail to arm properly and as a result do not explode. Because of their small size and of the density in which they are disseminated, submunitions represent a much greater threat than normal UXOs.

Victim Assistance (VA)

Victim Assistance is the concerted, integrated public health response to antipersonnel mine victims. It is an approach advocated by the World Health Organization (WHO) and the International Committee of the Red Cross (ICRC), with the support of governments, and which

¹⁰ Humanitarian demining is not military demining. The objective of humanitarian demining is to create conditions for the safe return of refugees or IDPs to their homes and farms and to restore infrastructure critical to a nation's capacity for economic recovery and political stability. Military demining, by contrast, has very different priorities from those imposed by post-conflict reconstruction imperatives. Military demining has specific operational objectives: clearing paths for access to the front, clearing strategic areas, etc.

led to the Kampala Declaration in 1998 affirming the will of ten African countries to assume, in partnership with others, their responsibility toward the ill, injured and disabled. VA takes into account national health and development policy, government commitment to care for all trauma victims, non-discrimination among victims and intersectoral collaboration to meet all victim needs, be they mine victims or not. VA aims at giving a voice to people and countries affected by mines, as well as at creating solidarity between affected states and donors.

B. The UN System and Other Organizations

The UN System

UNMAS (United Nations Mine Action Service) is the focal point in the United Nations for landmine and unexploded ordnance (UXO) related issues. It is responsible for the development and maintenance of international mine action standards (IMAS). It also coordinates resource mobilization and manages the Trust Fund for Mine Action, which contributes importantly to UN mine action activities. UNMAS is responsible for ensuring an effective, proactive and coordinated UN response to landmine contamination both in humanitarian emergency situations and in support of peacekeeping operations.

UNDP (United Nations Development Programme) shares the operational responsibility for landmine response with UNMAS and assists governments in building sustainable national capacity for long-term mine action efforts. It also provides country support and liaison.

UNOPS (United Nations Office for Project Services) is generally responsible for the field implementation of UNMAS and UNDP mine action projects. It has a specialized Mine Action Unit which provides backstopping, maintains rosters of specialized individuals and firms, as well as specialized technical equipment. It has extensive experience in contracting for mine clearance, and maintains standing order arrangements for rapid delivery of specialized equipment. UNOPS has relevant technical and procurement expertise, has been accepted to provide support to government execution of Bank projects, and is familiar with Bank procurement and reporting procedures.

UNICEF (United Nations Children's Fund) is the lead agency for mine risk education. It provides guidance for mine awareness programs and ensures the rehabilitation of mine victims.

WFP (World Food Programme) is the managing agency for the UN humanitarian response depot (UNNHRD) and is responsible for the emergency storage of mine action equipment.

UNHCR (United Nations High Commission for Refugees) is responsible for the safety of refugees and international displaced persons (IDPs).

Nongovernmental Organizations (NGOs)

Non-governmental organizations have led the fight against landmines. The International Campaign to Ban Landmines (ICBL), was the spearhead of this campaign. In 1997 it received the Nobel Peace Prize for its outstanding work. Major NGOs such as Human Rights Watch, Handicap International and Norwegian People's Aid are members of the ICBL Core Group established to develop and coordinate the landmine clearance system worldwide.

The International Committee of the Red Cross (ICRC)

The ICRC is an impartial, neutral and independent organization whose mission is to protect the lives and dignity of victims of war and internal violence. Its actions are based on the Four Geneva Conventions and their Protocols and it has a unique experience in the management of war wounds, including those inflicted by antipersonnel landmines. ICRC is a partner of the Bank through a Post-Conflict Fund grant and has participated in the Bank staff exchange program. It is an important and reliable source of information, providing key data on the socio-economic impact of mine action and for cost-benefit analysis.

Normative Documentation

- Demining Guidelines.
- Ottawa Treaty introduction (1997)
- Ottawa Treaty full text (1997)
- Operational Policy 2.30 Development Cooperation and Conflict.
- Operational Policy 8.50 Emergency Recovery Assistance
- Bank Procedure 8.50 Emergency Recovery Assistance
- UN Mine Action Policy (as of 2002)
- UN Standards (as of 2002)
- List of accessions and ratifications to the Ottawa Treaty (as of 2003).

Operational Documentation

- Post-Conflict Reconstruction Guide.
- Post-Conflict Fund Guidelines.
- Post-Conflict Fund sample request (Sri Lanka).
- Landmine Monitor 2001
- Project Implementation Plan (PIP) guidance.
- Project Implementation Plan (PIP) Ethiopia, 2001
- Bidding documentation stand-alone contract for works (Croatia 2000)
- Bidding documentation stand-alone contract for works direct contracting (Ethiopia 2002)
- Bidding Documentation Demining as a Sub-Contract to Civil Works (Croatia 2001)
- Implementation Completion Report (ICR) Bosnia (Emergency Landmine Clearance), 1999
- Implementation Completion Report (ICR) Croatia (Emergency Transport and Mine Clearing 2002)
- Sample Credit Agreements (1996-1997)
- General Survey (Mozambique 2000)
- Socio-Economic Approaches to Mine Action (UNDP-World Bank-Geneva)
- International Center for Humanitarian Demining Study), 2001
- Socio-economic impact of mine action in Afghanistan, 2001
- Procedures for Mine Risk Management in World Bank-Funded Projects in Afghanistan 2001
- Sample Mine Action Plan (Croatia 2000)
- Sample Terms of Reference: Quality Assurance Advisor, Procurement/Implementation Advisor, Mine Action Advisor)