

Integrating Mine Action with Development:  
Enhancing Use of Landmine/ERW Hazard Information by  
Economic Development Actors

Operational Guidelines for Mine Action Centers

FINAL DRAFT

Charles Downs  
Survey Action Center  
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## **Enhancing Use of Hazard Information by Economic Development Actors: Operational Guidelines**

Preface .....	3
Abstract .....	5
Importance of linking mine action and economic development .....	6
- Problems due to insufficient use of mine action information .....	6
- Impact of mine action depends on actions of development actors .....	7
- Reduction in new victim rate no longer driving motivation for mine action.....	7
- Caveat: most development projects and actors are not affected by landmines.....	7
Approach: Understand development actors, provide useful service .....	8
- Development actors are “clients” as well as “stakeholders” .....	8
- Development actors and the threat of landmines.....	8
- Mapping development actors which need landmine information.....	9
- Landmine/ERW hazard information useful to development actors.....	10
- Other information not generally useful for development actors.....	10
- Demining services most often required by development actors .....	10
Operational Guidelines based on national mine action program experience .....	11
- Overview .....	11
- Conduct general public information campaign – significance of landmine problem.....	11
-- Endorsement by high-level government, civic and other figures.....	11
-- Build on successful resolution of problems faced by high profile development projects .....	12
-- NMAC known as one-stop service center regarding landmine/ERW issues and solutions .....	12
-- Distribute landmine information locally throughout the country .....	12
-- Stimulate national academic and policy research on landmines and their impact .....	12
- Conduct outreach program targeted to development actors .....	12
-- Focus on organizations investing in infrastructure, natural resources, and tourism.....	13
-- Compile inventory of planned projects and discuss possible landmine issues.....	13
-- Engage in as many planning fora as possible to discuss requirements of development actors .....	13
- Increase availability, quality and usefulness of mine action information.....	13
-- Provide ready access to data on-line and in response to requests .....	13
-- Provide data in useful standard formats .....	14
-- Maintain systematic data quality improvement efforts .....	14
-- Continual process to update data with improved information.....	14
-- Ensure database includes all demining data from all operators.....	14
-- Provide ready access to list of accredited demining operator contacts and their track record .....	14
-- Care with definition of “mined areas” .....	14

-- Periodic resurvey process, with technically qualified teams .....	15
- Develop appropriate institutional framework to support development actors .....	15
-- Dedicated NMAC unit for outreach to development actors .....	15
-- Sub-national focus of NMAC support to development .....	15
-- Priority setting – recognize investor priorities .....	16
-- Expanded role of commercial operators for timely operational response to development actors ...	16
-- Modifications to national standards .....	16
-- Strengthen mine action capacity to provide operational support to development actors .....	17
-- Provide appropriate alternative “clearance” certificate for suspect land released through survey..	17
-- Creation of an economic development actor stakeholder group .....	17
- Advocate for public policy framework to link mine action and development .....	17
-- Landmine concerns should be included in national development strategy and plans .....	18
-- Mine action costs should be included in respective development program budgets .....	18
-- Ministry investment plans should include necessary mine action.....	18
-- Include landmine budget category in national investment plans.....	18
-- Donor-financed projects should include necessary mine action in financial plan.....	19
-- Loan-financed projects should include necessary mine action in financial plan.....	19
-- Private territorial concessions should have an appropriate risk mitigation plan and financing .....	19
-- Landmines should be treated as similar to other environmental risk .....	19
Conclusion .....	20

## Preface

1. These “Operational Guidelines for Mine Action Centers” (henceforth “Guidelines”) are the product of a Survey Action Center project which originated with the concern that the rich data generated by mine action programs was rarely consulted by development actors, in spite of national mine action center (NMAC<sup>1</sup>) efforts to make the information available. Funded by the US Department of State, Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement (PM/WRA), the project collected experience from a wide range of national programs, through a broad survey of national experience and more detailed examination of a few cases, and developed these Guidelines based on the resulting understanding of development organization needs and NMAC best practices.
2. Over a one year period beginning in September 2008, the project compiled detailed information regarding 16 country programs through responses to a general survey and visited three programs to develop greater depth and nuance of understanding through interviews with development actors.<sup>2</sup> The initial survey identified an extensive list of public and private organizations which under some circumstances in some countries have requested hazard information, the key types of information and support most often requested, as well as the information least useful to development organizations. The initial project report, “Enhancing use of mine action information by development organizations: Mapping clients for mine action information,” summarized the outcome of the broad survey.<sup>3</sup> The resulting list can serve as a reference for mine action programs wishing to develop their own contacts.
3. SAC has developed these Guidelines in order to increase the use of available hazard information in investment planning by public and private development actors. These are practical guidelines, addressed in particular to the NMACs as keepers of mine action data and coordinators of operational planning, and meant to strengthen their interaction with non-mine action development actors. Greater use of this information by such actors will improve the planning of their own investment projects, improve planning of mine action operations and increase the overall contribution of mine action to development.
4. These Guidelines complement other international advice on how to link mine action and development (e.g., GICHD LMAD project<sup>4</sup>). Such efforts generally focus on the right to development and poverty reduction and stress links with community development organizations. NMACs must be concerned with the impact of landmines on broader economic development as well as poverty reduction. As one national program director commented in response to the survey, “We have been receiving here indeed an increasing number of requests from non-mine action organizations for issues ranging from facts and figures and statistics for media and PR purposes to contamination data, in-depth technical survey for given areas and ultimately actual clearance requests. The majority of requests come from government ministries, private companies contracted by government, other private companies contracted by private investors and a few from non-governmental organizations. Infrastructure development projects take a much greater stake than pure humanitarian ones in the requests.” These

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<sup>1</sup> These Guidelines refer to the keeper of mine action data and coordinator of mine action planning as the national mine action center – NMAC. This also is intended to cover as well those National Mine Action Authorities, UN MACs and International Mine Action NGOs which in some countries fulfill those roles.

<sup>2</sup> Experience of the following 16 programs was considered during this project: Afghanistan, Angola, Azerbaijan, Bosnia and Herzegovina, Cambodia, Colombia, Croatia, Ethiopia, Iraq, Laos, Mozambique, Nepal, Somalia, Sri Lanka, Sudan and Tajikistan. The three countries visited were: Azerbaijan, Cambodia and Colombia.

<sup>3</sup> Charles Downs, “Enhancing use of landmine/ERW hazard information by development organizations – Phase 1,” SAC, Dec 2008, is at: [www.sac-na.org/pdf\\_text/dataintegration/MA-support4DevelopmentOrgs\\_Dec2008.pdf](http://www.sac-na.org/pdf_text/dataintegration/MA-support4DevelopmentOrgs_Dec2008.pdf).

<sup>4</sup> <http://www.gichd.org/operational-assistance-research/linking-mine-action-and-development/overview/>.

Guidelines therefore focus primarily on promoting use of hazard information by public and private investors in order to improve the planning of their economic development projects.

5. SAC greatly appreciates the high level of cooperation received from other organizations working in the area of mine action and development. The richness of the Guidelines reflects the diverse experience and input, although the author remains responsible for the conclusions, interpretations and of course the Guidelines themselves.<sup>5</sup> SAC welcomes comments and observations to expand the Guidelines, and is available to assist national programs that wish to expand their outreach to public and private development investment actors.

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<sup>5</sup> These "Guidelines" have been strengthened by the greatly appreciated comments and observations of Camilo Benitez, Bob Eaton, Ted Paterson, In Channa, Olaf Juergensen, Mike Kendellen, and Reuben McCarthy, who in their personal capacity provided their thoughts on an earlier draft.

## Abstract

6. When economic development actors do not factor landmine/ERW hazards into their own planning, they may face project delays, added costs, and risk to life and equipment. This may interfere with the plans of community development actors, national or local government programs and private sector investors. As a result, valid projects may not be undertaken or completed, and some mine-affected communities may be stricken from the list of project beneficiaries if unplanned costs and delays will be too great. Furthermore, the unplanned nature of these complications may pose urgent demands for response by demining organizations, forcing them to interrupt their own planned activities.
7. Review of mine action program and development actor experience with landmine information indicates that: (a) for many development organizations that might be expected to be clients for mine action, explosive hazards do not have a significant impact on their work, (b) for some development organizations (especially those dealing with infrastructure investments or mineral exploration), landmine/ERW hazards do have potential implications; some organizations arrange for appropriate demining support while others choose to run the risk, and (c) there is more integration of mine action and development planning than often recognized.
8. Currently mine action authorities do not reach out systematically to development actors. Effective support by mine action to economic development is built on an understanding of development actors who make decisions for their organizations according to their own interests and goals. Development actors should be thought of as “clients” of mine action, and not simply “stakeholders” with a general interest in the progress of the sector. An effort of market research addressed to individual public and private actors will strengthen NMAC knowledge of the needs of the development sector.
9. The development actors which the NMAC should prioritize in its outreach are the public and private organizations involved in public works of all types, particular with footprints in rural and remote areas, such as roads, electric power and tourism, as well as private companies involved with mineral and petroleum exploration and extraction. These are the development actors whose projects are most likely to face landmine obstacles when working in mine affected regions.
10. These Operational Guidelines provide practical orientation for NMACs wishing to increase the positive impact of mine action on economic development. Specific measures include:
  - Conduct on-going general public information campaign regarding the nature and extent of the landmine problem and of the NMAC as a one-stop service center
  - Conduct targeted outreach program to development actors to identify their plans and projects which could be affected by landmine/ERW hazards and to consider options
  - Increase the availability, quality and usefulness of landmine data
  - Develop appropriate NMAC institutional framework to support development actors
  - Advocate a policy framework to encourage linking mine action with development
11. SAC established this project in recognition of the limited use of landmine/ERW information by development actors and to learn from the best practices developed by national programs which have faced this issue. Two keys to this are: (a) recognition by development actors that landmine/ERW problems may affect their own projects and (b) wide availability of information so that they may be alerted to areas of potential risk. Based upon a broad review of existing experience, these Guidelines provide a reference for any interested mine action program to strengthen its own outreach, to create an inventory of organizations and projects that require mine action support and to include them in operational planning for mine action resources.

## **Importance of linking mine action and economic development**

12. The purpose of these Operational Guidelines is to enhance support of mine action to development by increasing use of mine action information by economic development actors in planning their own activities. This will enable development actors to know if their project will encounter landmine/ERW hazards which might cause delay and increased cost, and in turn enable better planning of mine action activities to support development actor success by removing obstacles and avoiding unexpected delays and costs. By identifying and providing the information these actors require to plan their own actions more effectively, mine action directly supports national economic development and is able to better plan and provide such additional operational support as may be required.

### **- Problems due to insufficient use of mine action information**

13. Several problems may arise from insufficient use of mine action information by development actors. These are related to the success of (a) the specific project, (b) overall mission of the development organization, (c) planning of demining activities and (d) resource mobilization for mine action.
  - Landmines potentially affect the success of reconstruction and development projects when the project footprint will either stand upon or cross over suspect hazardous land. Such projects involve construction on, excavation of, or transit across suspect land. The possible presence of landmines creates uncertainty for the project and risks to project personnel. Individual projects may face unplanned delays and costs due to insufficient consideration of the presence of landmine/ERW hazards in their area. While projects may begin with only vague or no awareness of the potential problem, they may be brought to a halt when landmines are encountered. This will result in delay and added costs. It may also require that the project drop individual beneficiaries whose specific land is suspected to contain mines. Such problems could be avoided with better use of information and appropriate planning.
  - The broad mission of a development organization may be compromised by the lack of consideration of the landmine presence. There were several reports of government and NGO programs covering multiple communities, in which mine affected communities were excluded because there were not sufficient funds in the program budget. This was most common with programs addressing rehabilitation or investment in a specific capacity (irrigation, schools), in which a few communities had landmine problems. If no funds had been allocated to resolve such problems, the organization sought to achieve its own program goals by selecting non-mine-affected communities. The result was that a program which was meant to provide a general improvement excluded mine affected communities from benefit. If landmine information were taken into consideration during the planning stage there might be alternatives, whether obtaining the necessary budget or finding an appropriate alternative.
  - The threat of landmine contamination affects the specific plans of many sectors, including transportation (roads, bridges, and railways), power (electricity generation and distribution), water, agriculture, and social sectors (education, health, social welfare). The sectors are often not clearly reflected in national mine action plans nor do sector development plans reflect their need for demining services. Use of mine action information will increase the chance that sector planners incorporate resolution of potential landmine problems in their plans.
  - Mine action planning is made more difficult when development operators, having not considered landmine problems during their own project design and planning stage, encounter landmine obstacles which must be removed for their project to continue. This customarily results in an urgent request for demining support. Responding to this urgent request may require postponing planned activity. This makes it more difficult to complete planned work

and could be avoided if the need for demining support were considered during the planning stage of the development project and incorporated into the annual demining planning process.

- Explicit consideration of landmine issues during the planning of development activities would increase the awareness of both development organizations and interested donors regarding the significance of landmine issues and the cost of resolving them. This would result in increased funding for mine action, whether directly to mine action organizations or via the respective development project budgets.

### **- Impact of mine action depends on actions of development actors**

14. The development impact of mine action depends on the actions of others. If land is cleared for a community to install a new school, for a farmer to increase area cultivated, for rehabilitation of an irrigation system or for installation of a power pylon, and the corresponding resources are promptly in place, then mine action contributes well to development; if those resources do not follow promptly, the results are much less. Similarly, if a development project is underway and encounters an unexpected landmine obstacle but does not have demining resources readily available, the project will face delays, higher costs and risks due to the lack of coordination and planning for demining. The ability of mine action to have a greater positive impact on development depends on its success at facilitating the actions or anticipating the needs of development actors. Continuing outreach by the NMAC is important to identify specific development projects and clients for mine action support.

### **- Reduction in new victim rate no longer driving motivation for mine action**

15. The main rationale for mine action in most countries is no longer to prevent new victims. While there continue to be new victims, the numbers in most countries have fallen dramatically and continue to fall, to the point that the humanitarian justification to focus on this issue has become much weaker.<sup>6</sup> In most countries today, livelihood activities are by far the most important cause of new victims, whether collecting metal for sale or foraging for wood in known suspect areas. The principal reason to support mine action is to support development, whether as a poverty reduction issue of eliminating obstacles that affect disadvantaged populations or as support to economic development projects.

### **- Caveat: most development projects and actors are not affected by landmines**

16. While all of the above negative effects are possible, the vast majority of investments and services in landmine affected countries continue unimpeded by landmines and most people and organizations go about their activities unaffected by landmine obstacles. This reflects the very specific location of hazards and the possibility in many cases that the hazard can be avoided or otherwise mitigated. Most project developers do not have experience with landmines, and do not need to be particularly concerned about them – anymore than they would be about earthquakes, floods or other environmental conditions. Costly demining to eliminate suspicions in areas that actually have no landmine/ERW hazards increases costs and disrupt development investments. But the possibility of landmine/ERW hazards should be a normal environmental consideration in mine affected regions of the country. The approach of the Guidelines reflects this: to understand and support the needs of development actors, and to provide appropriate targeted information of use to specific organizations, rather than to assume that general circulation of mine action information is enough. Thus the NMAC should identify those projects and actors for which landmine/ERW hazards may be important, in order that they may better plan their investment and coordinate any necessary support with mine

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<sup>6</sup> See Landmine Monitor Reports, <http://lm.icbl.org/index.php/LM/Our-Research-Products/Landmine-Monitor>; see also SAC Update #4, “Reduction of Victims with Time,” 5 December 2005.

action operators. The timely provision of hazard information will assure that this is treated as a normal part of development project design, rather than as an emergency concern.

## **Approach: Understand development actors, provide useful service**

17. The approach taken in this project is: (a) landmines have a significant impact on economic development in specific cases; (b) for mine action to support economic development, it must be in support of specific public or private development actors which are prepared to take immediate advantage of the removal of obstacles and uncertainty; (c) NMAC should seek to identify development projects and actors with specific projects to plan together with them; and (d) mine action should understand its role as provision of services to support clients. The paragraphs below present conclusions from the survey of experience with development actors using hazard information. Then the Guidelines provide specific suggestions for NMACs to integrate mine action with development.

### **- Development actors are “clients” as well as “stakeholders”**

18. The NMAC should treat each public and private development actor as a “client” to be served rather than simply as part of a group of “stakeholders” to be consulted from time to time. Each actor has its own interests and priorities. By considering them as “clients”, the NMAC will try to provide the right information to enable development decision-makers to more effectively pursue their own interests. This implies the need for proactive market research to understand the development plans of each actor and to offer the specific hazard information useful to best develop their own plans.

### **- Development actors and the threat of landmines**

19. Most development actors interviewed were very interested in the landmine issues, but were not much concerned that mines might affect their own economic activities. In general, landmine/ERW hazards are less of an obstacle for development than thought to be by the mine action community. Public services, private commerce and investment are carried out by most actors in mine affected regions without any mine accidents. Many organizations have concluded that this is not relevant for their programming and implementation. Landmines/ERW are more likely to present obstacles to reconstruction projects than to new development investments – since the original infrastructure was often the target of mines or scene of conflict. While mines do not block or prevent most development projects; they may pose additional economic or engineering costs in specific cases.

20. In general, the lack of use of mine action information may be due to one or more of several factors:

- Lack of knowledge of the landmine problem and its relation to their activities, including lack of awareness of the information that exists and how to get it and lack of understanding of the prioritization process and how to have relevant sites included in operational planning.
- Low level of general risk even in highly mine-affected countries, where territory actually blocked by landmines is very limited. Many organizations based in the national capital can carry out the full range of their activities without dealing with landmines, and when landmines do appear as an obstacle for local infrastructure and services the organization may have the option to shift to another site rather than to rehabilitate a facility or area affected by mines.
- Difficult to use information, especially if it is rarely used, or comes in a difficult to interpret format, or contains an overwhelming amount of detail rather than only relevant information.

## - Mapping development actors which need landmine information

21. The organizations most likely to make use of hazard information are those dealing with physical investment or works, including: roads, railways, electricity, water systems, mineral and petroleum exploration, access roads, industrial expansion, parks and tourism investments, border posts and demarcation markers, and to a significantly lesser extent organizations providing services to the local population (health, education, elections). The greater number of requests in many countries has come from national and international companies involved with hydrocarbon and mineral exploration. If there are no known risks, they proceed without special concern. However, if there is suspicion of risk, they will usually seek more information and seek to reduce the risk or its impact, typically through survey, limited clearance and MRE.
22. Based on the responses to the initial project survey, we developed a general mapping of potential clients for mine action information. The main categories of users are:
  - Central Government strategy and planning entities: Presidency, Council of Ministers, Inter-ministerial Mine Action Coordination, Ministry of Planning
  - Central Government sector ministries, especially Public Works, Transport and Power
  - Provincial and Local Government
  - Communities and local organizations
  - Media
  - Embassies and Bilateral Donors
  - UN Organizations
  - World Bank and Regional Development Banks
  - International Development and Relief NGOs
  - National NGOs
  - Commercial demining companies
  - Natural resource based companies: mining, petroleum, tourism
23. Interviews with economic development actors in the three countries visited provide a much clearer map of which actors have found landmine/ERW hazards to provide obstacles to their projects. The Table below identifies development actors by sector, and can be summarized as follows:
  - IDP resettlement
  - Mineral exploration
  - Petroleum exploration
  - Petroleum pipelines
  - Electric power transmission
  - Road construction
  - Railroad rehabilitation
  - Integrated rural development
  - Historic sites and tourism
24. All of these organizations should be kept well informed by the NMAC and the lists can serve as the basis for national programs to conduct outreach and specific mapping of clients in their own country. NMAC generally have established mechanisms to provide information to central government, the media and donors, in order to keep them informed about the general level of the mine action problem and the strategy to face it. However, they are often not as effective with development organizations nor are the mine action information products tailored to their needs. On-going outreach to these and other potential clients will result in a regularly updated inventory of development actors and activities

requiring mine action support, to be incorporated in turn into mine action operational planning in order to guarantee the success of the development projects.

### **- Landmine/ERW hazard information useful to development actors**

25. Development organizations seek information to learn of hazards to ensure safety during planning and implementation of their projects. Information needs are generally for specific sites rather than for massive data. Depending on the specific nature of the organization and its project, the detailed information required may vary, but it tends to have certain shared elements to indicate whether where they are planning to develop the project is in (or contains) a suspect hazard area. Generally required information is best presented through maps with broad categories of risk, sometimes accompanied by tables of administrative areas with indications of total and suspect areas and of victims (recent and total). Once having learned whether or not a general area is suspect, the development organization may want much more precise information about the location of the hazard, the area to be avoided or cleared, and the measures and cost required to remove the hazard. This may lead to careful ground survey of the site. The concern is much the same as for construction in a flood plain, a seismic zone, or an environmentally contaminated site. If this is done in a timely manner, it allows the NMAC to consider the needs of the development organization in its own planning for MRE, survey and clearance, in order to remove obstacles before they become bottlenecks. According to the responses received from mine action authorities and development organizations, the information which has proven to be most useful is straightforward and includes:

- General hazard information maps at national and regional levels
- Hazard maps and accident information about specific sites of interest
- Confirmation whether a specific project site/route/swath crosses suspect hazard areas
- How to arrange for survey and clearance, if required
- Clearance certificate, when it exists

### **- Other information not generally useful for development actors**

26. In general, development actors reportedly rarely request and do not make use of the following classes of information available in the mine action database:

- Minefield maps
- LIS blockages and impact scores
- Mine types and number found
- Soil characteristics
- Community population
- Economic base of the community
- Public facilities and social services available

27. In those cases where it may be more relevant, the organizations typically collect information themselves or refer to the entity responsible for such information on the national level. Most organizations only are willing to accept outside data for their own use from “trusted sources”. While the NMAC is a “trusted source” for mine action information, it is not a “trusted source” for demographic and socio-economic information.

### **- Demining services most often required by development actors**

28. The additional support most frequently requested, when the above information indicates that a hazard is suspected, is typically provided by mine action operators rather than the NMAC. It includes:

- Survey team to accompany field design team for safety
- Identify specific areas of risk and exclude others from concern
- Advice regarding feasibility of alternate routings/sitings
- MRE for staff who will work in the mine-affected area and potentially for beneficiaries
- Demining of specific suspect areas that cannot be avoided

## Operational Guidelines based on national mine action program experience

### - Overview

29. Considerable effort has been made by virtually all mine action programs to coordinate with other actors, to seek priorities for clearance and to make information about the landmine problem widely available. Nonetheless mine action programs are often perceived as not very responsive to the needs of development organizations. For mine action to successfully support development, demining organizations must understand the specific needs of development organizations.
30. There are many measures that the NMAC can take to strengthen mine action support to national development by increasing the use of landmine/ERW hazard information during the planning process of development actors and thus improving the planning of mine action activities. This should be underpinned by an attitude that mine action seeks to provide a service to development actors to reduce the obstacles they face and enable them to be more successful. Specific measures are grouped below under the following broad headings:
- Conduct on-going general public information campaign regarding the nature and extent of the landmine problem and of the NMAC as a one-stop service center
  - Conduct outreach program targeted to development actors to identify their plans and projects which could be affected by landmine/ERW hazards and to consider options
  - Increase availability, quality and usefulness of mine action information
  - Develop appropriate institutional framework to support development actors
  - Advocate for further policy framework to link mine action and development

### - Conduct general public information campaign – significance of landmine problem

31. The public living outside mine affected regions is not generally well informed about the landmine problem in their own country. For most of the population – including central government officials and development actors – landmines are a remote remnant of the conflict, with effect limited to the areas of conflict and population displaced. The on-going public information campaign should highlight landmines as a humanitarian issue affecting victims and communities, as a safety issue, and as a development issue, and identify the NMAC as a one-stop resource for landmine problems.

### -- Endorsement by high-level government, civic and other figures

32. Seek high profile government and civic endorsement of importance of landmine issue. Endorsements by the Prime Minister, etc., are important. Cambodia, where there has been considerable public attention to the Millennium Development Goals, officially adopted MDG #9 to “move toward zero-impact from landmines and UXO by 2012,” and to “eliminate the negative humanitarian and socio-economic impacts of landmines and UXO by 2025.”

**-- Build on successful resolution of problems faced by high profile development projects**

33. For example, in Azerbaijan, ANAMA has provided support to several high profile national development projects. Its successful support to those projects increased its visibility and made it more likely that other parties will call upon it for mine action information and support. These activities have also made clearer the extent to which mines/UXO pose an obstacle to national development. The largest of these projects involved providing safe land for construction of permanent settlements for IDPs living in tent camps, ensuring safe placement of the Baku-Tbilisi-Ceyhan petroleum pipeline, and supporting preparation of district economic development and investment plans, as well as the NATO-supported clean-up of the Saloglu munitions depot.

**-- NMAC known as one-stop service center regarding landmine/ERW issues and solutions**

34. The NMAC should seek to be known as a one-stop service center for all mine action issues. It should produce and distribute national, provincial, district and community hazard maps for public display in the corresponding territories; provide explanation of how planning and prioritization works; how development actor should act to include their tasks in those priorities, and contact information and track records for demining service providers. It must be technically competent and be seen to be competent – able to solve problems or direct parties to those who can do so. This is a role it has to earn by having useful information and a service-oriented approach to those who seek its assistance.

**-- Distribute landmine information locally throughout the country**

35. NMAC should establish mine information offices at geographic level where planning is conducted, and information distribution points at local levels. In Ethiopia, EMAO provides local public information kits through police stations. Upon completion of district landmine/ERW hazard surveys, CMAC posts contamination maps in public areas (village square, police station) and seeks local updates. Include contact information for NMAC on all public information materials such as mine warning signs, MRE posters, banners, etc.

**-- Stimulate national academic and policy research on landmines and their impact**

36. As part of the effort to create broader awareness of the landmine problem, the NMAC can stimulate research and debate in academic and public policy circles regarding landmines and their impact on the country. Providing the mine action database as a research dataset, circulating the results and reports, and sponsoring an annual research and policy conference are particularly effective tools to stimulate wider discussion that will generate practical conclusions and policy proposals.

**- Conduct outreach program targeted to development actors**

37. The NMAC should conduct a targeted outreach program directed toward development actors. This outreach should be oriented to the planning and policy departments of ministries and public agencies, to private businesses and business associations, and to those offices which are likely contact points for new private business interested to invest in the country (e.g., national private investment promotion agency and commercial departments of embassies). The outreach should highlight possible landmine obstacles that development actors may face, the solutions that are available in general and specific sector analyses. Information should include how to obtain technical assistance to better identify the precise risks and options for individual projects, as well as in the preparation of technical statements of work for eventual tenders or contracts for demining support. The outreach should be periodically assessed through client surveys to understand what information and assistance proves to be most useful for development actors, how it is used and what else may be required.

**-- Focus on organizations investing in infrastructure, natural resources, and tourism**

38. Outreach to development actors should focus particular attention on those agencies and companies which design and implement investments in infrastructure (roads, bridges, power transmission, petroleum pipelines, dams and irrigation systems), natural resource development (exploration and extraction of minerals and petroleum), and tourism projects (national parks and eco-lodges). This is in addition to the more established cooperation that often exists with government and NGO integrated rural/community development projects. This outreach effort should include not only national and individual meetings on the topic, but also meetings in the affected regions with the provincial authorities and actors interested to invest there.

**-- Compile inventory of planned projects and discuss possible landmine issues**

39. This outreach effort is the opportunity to compile an inventory of development plans and projects of the various actors, and discuss the risks they may face in the areas where they plan to work.<sup>7</sup> Topics should include:

- Include both preliminary plans and funded projects in order to ensure that the respective project design and negotiations contemplate the need for survey and clearance, and that the demining requirements are known as early as possible to the NMAC and respective operators.
- Agree on periodic meetings to review investment programs, identify possible landmine concerns, and coordinate planning for demining services with development investments.
- Provide sector analyses showing how mine action information can make a difference to the success of the sector development programs and projects.
- Identify any development investments previously avoided because of landmine concerns
- Provide technical assistance to define mine action specific support required and estimate cost
- Provide technical assistance to conduct tenders, if these will be done by concerned agency
- Periodically conduct end-user surveys to determine who is using what information, why, and what other information would be useful

**-- Engage in as many planning fora as possible to discuss requirements of development actors**

40. The NMAC should participate in as many development planning fora as possible. Whenever possible it should come with a brief analysis of how landmines affect the development program under discussion.

**- Increase availability, quality and usefulness of mine action information**

41. Mine action information should be considered as “public information” and should be easily available to all. Those in the mine action community are very aware of the limitations of the data, in particular that it will never be sufficient to precisely describe the local limits of the problem. Nonetheless, it is the best nationwide information about the landmine/ERW hazard and should be readily accessible as the starting point for any development actor who may wish information about a particular area or project. The data can be improved in all countries, but whatever exists at any given time should be available for those who seek to better inform their own decisions.

**-- Provide ready access to data on-line and in response to requests**

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<sup>7</sup> SAC conducted such an inventory of infrastructure development projects for UNMACA in Afghanistan in 2006.

42. While countries have different approaches, data is most accessible if it is readily available on-line through well-designed and user-friendly websites (eg, Colombia<sup>8</sup>, Croatia<sup>9</sup>, and SAC LIS Explorer<sup>10</sup>) or upon simple request (most countries) without the need to meet narrow criteria for authorization.

**-- Provide data in useful standard formats**

43. It is useful to develop a set of basic templates for maps and tables to provide information. This will enable the requesting entity to know what to expect, facilitate standardized preparation and provide an identifiable NMAC information product. The actual format chosen for the reports is not of much moment, as long as it provides the information normally required. Improved mine action planning for and support to development projects does not depend on creation of unique reporting templates. Rather, it depends on the availability of general information regarding hazards and the consideration for specific survey and clearance support, together with an appropriate service orientation.

**-- Maintain systematic data quality improvement efforts**

44. The NMAC should continually improve the quality of the data. There are multiple points at which errors may enter any database. It is important to maintain a continuous data quality management effort to minimize errors at each stage in the data collection and entry process and to catch and correct errors whenever they are identified. The opportunities for error to enter into data collection, transmission and entry are routine, and so must be the efforts for data quality management.

**-- Continually update database with improved information**

45. The database should be updated with current information reflecting changes on the ground. Areas which were once identified as suspect may later be found to be in use without any evidence of hazard. They may have been subject to villager clearance or informal assessment with no hazard found. In some countries (eg, Cambodia) these may represent large areas, while in virtually all countries they are likely to represent significant areas. Subject to national standards and procedures, such areas should in general no longer be considered suspect.

**-- Ensure database includes all demining data from all operators**

46. The database should be updated to reflect all results of clearance and other land release activities. While the results of the major humanitarian operators are usually entered into the database, this is not always the case for commercial operators and for clearance conducted by military engineers. The complete record of work conducted will be very important for posterity, for example to consider risks that may confront future proposed changes in land use and new construction.

**-- Provide ready access to list of accredited demining operator contacts and their track record**

47. NMAC should provide easy access to the list of accredited operators, their contact information, and any noteworthy comments on their track record (eg, safety record, compliance with national standards). This will inform development actors about the potential demining service providers.

**-- Care with definition of “mined areas”**

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<sup>8</sup> PAICMA complete national statistics: <http://www.accioncontraminas.gov.co/estadisticas/estadisticas.html>

<sup>9</sup> CROMAC MIS Portal: <https://misportal.hcr.hr/HCRweb/faces/intro/introduction.jspx>

<sup>10</sup> Survey Action Center LIS Explorer: <http://www.sac-na.org/lisexplorer/index.html>

48. Careful use of terms by the mine action program will assist with request and provision of appropriate operational support. Great care should be taken in defining “mined areas”, because specifying an area as such implies a commitment to the local population and in relation to the Ottawa Convention that it will be cleared. If the existing information indicates that the development project footprint includes suspect hazard area, the project will require operational support in terms of survey. The NMAC should seek to ensure that there is sufficient survey capacity to respond to all requests. In many cases, this application of the land release approach outlined in IMAS 08.20, 08.21 and 08.22 will prove sufficient to remove the uncertainty and enable the development project to proceed.

#### **-- Periodic resurvey process, with technically qualified teams**

49. The NMAC should periodically collect new survey data throughout the country. In the early post-conflict period, the most important support of mine action to development was to open access to rehabilitate transportation and other infrastructure. Once that has been completed, the most important contribution of mine action to development is the information support it can provide to narrow the extent of uncertainty and minimize the clearance of suspect but uncontaminated land. Several countries (eg, Azerbaijan, Bosnia and Herzegovina, Cambodia, Ethiopia<sup>11</sup> and Mozambique<sup>12</sup>) have found that general or targeted resurvey can provide a quantum improvement in the quality of the information on hand. Resurvey builds on the greater local knowledge of informants who have now lived longer in the area since the conflict. Additionally, the improved results benefit greatly from survey teams that include experienced members equipped to more precisely define the minimum polygon of the suspect areas. Resurvey should be a continuing process, rather than be considered as a one-time event, since both local knowledge and the ability to draw a more precise polygon will continue to increase with time.

#### **- Develop appropriate institutional framework to support development actors**

50. There are several institutional adjustments that are strongly under the influence of the NMAC which are necessary to provide better support to development and development actors.

#### **-- Dedicated NMAC unit for outreach to development actors**

51. The NMAC should establish a specific unit or focal point to work with development actors; doing this will help the NMAC to accumulate knowledge about their needs and strengthen positive working relations. Most organizations do not have a specific unit dedicated to respond to requests for information, which is typically handled through the central office with support from the information section. Having a dedicated unit or focal point for development actors is similar to having dedicated staff to work with the MRE sector.

#### **-- Sub-national focus of NMAC support to development**

52. It is at the provincial and district levels that the NMAC will be able to develop strong dialog with the sub-national government offices whose projects are affected by landmines/ERW. Awareness of the extent to which landmines/ERW are an obstacle to routine business and expanded investment is greatest among those who face the issue on a daily basis. The problems created by landmines for development actors are very concrete and found at the local level. As physical and engineering

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<sup>11</sup> In Ethiopia, EMAO resurvey found that a majority of the LIS suspect areas contained no explosive hazards, even though they did contain evidence which supported community suspicion.

<sup>12</sup> In Mozambique, resurvey conducted by HALO Trust significantly reduced the number of communities and estimated area suspected of being affected by landmines. The revised profile is now the basis for IND and operator work, including a focus on land release being implemented with SAC support.

problems, these issues are located in the regions and faced as practical problems by operational staff. Headquarters staff, especially in the public sector, tends to be much less aware of the significance of these problems, precisely because they are not relevant in their daily design work. It is important that the central policy and planning actors take the problem into consideration when appropriate, in order to ensure that time and resources are adequately budgeted to resolve landmine problems when they are faced by decentralized projects. NMAC should work directly in the more affected regions and develop institutional stakeholders who are able to maintain an appropriate level of attention to the problem. In order to carry out this decentralized discussion, the NMAC needs to have either regional offices of its own or mobile teams who spend considerable time in the regions.

#### **-- Priority setting – recognize investor priorities**

53. Development actors' priorities for mine action should be recognized as valid priorities on their own, and as such worthy of response.<sup>13</sup> Public and private investor priorities for demining will be specific to their projects, and may not have been identified as national or community priorities through the annual mine action planning process. It may be useful to distinguish three broad sources of demand for demining: (a) government institutions (ministries and territorial authorities); (b) market demand, which could be required to pay at least part of the cost; and (c) mine action program, which typically focuses on impact, victims and community development projects. A complete priority setting system should recognize all three. Whether the benefits of mine clearance become real depends on the use of the area that has been demined. Development benefits are greatest with immediate use of the land, and falloff rapidly if the area is not used for some time afterward. Better task selection – clearly linked to planned development activity with funding – will result in greater economic benefit.

#### **-- Expanded role of commercial operators for timely operational response to development actors**

54. Many national programs (e.g., Angola, Bosnia and Herzegovina, Croatia, and Mozambique) have concluded that a demining program based solely on public and NGO demining capacity is often not sufficiently timely and flexible in response to development actor requirements, while the presence of commercial demining operators makes the program more responsive and able to grow or shrink more easily in response to changes in demand for their services. In addition, some NGOs and mine action donors insist that they wish only to be involved in demining for “humanitarian” rather than “development” purposes, and they note potential legal issues related to use in commercial operations of assets developed with “humanitarian” funds. As part of the effort to provide greater support by mine action to development actors, the NMAC should encourage the establishment of commercial demining companies and ensure that they are certified and operate according to national standards.

#### **-- Modifications to national standards**

55. Proper support to development actors within the framework of the national program could raise the need to adjust national standards and procedures. One of the most important may be regarding the margin of demining for which development projects are responsible. Since development project demining normally focuses on a defined area or right-of-way, the prime contractor may require clearance of only part of a contaminated area. The national authority should consider including in the National Mine Action Standards or directives the requirement for minimum width of clearance in such cases and marking of the contiguous hazard area. This requirement should be reasonable for the contractor to fulfill – that is, it should include a small additional area, marking and data to the national authority as part of the respective contract.<sup>14</sup> It should not assume the contractor takes responsibility

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<sup>13</sup> IKMAA, Kurdish Autonomous Region of Iraq, and EMAO, Ethiopia, have responded well to this challenge.

<sup>14</sup> Such requirements were specified in USAID-financed contracts for reconstruction of highways in Afghanistan as well as World Bank-financed projects in Cambodia and Croatia, among others.

for a much larger village or commune area. This requirement would be included in the contract under the responsibility of the prime contractor to ensure that it occurs. A further option to consider would be for the national authority to fund (directly or through the prime contractor) the cost of the additional clearance, taking advantage of the presence of the demining contractor at the site.

**-- Strengthen mine action capacity to provide operational support to development actors**

56. Expand the various NMAC capacities necessary to provide fuller operational support to development actors. This includes in particular (a) increase in the number of survey teams to be able to promptly respond to all requests, (b) enhancing survey teams to include demining/EOD capacity to handle small tasks, (c) strengthening the data quality management capacity of the database unit; (d) QA capacity to effectively monitor the increased amount of demining activity likely to develop in response to development actors, and (e) develop capacity to provide technical advice in the definition of requirements and preparation of statements of work for demining tenders and contracts.

**-- Provide appropriate alternative “clearance” certificate for suspect land released through survey**

57. When clearance occurs, a clearance certificate provides the necessary assurance for the investor, contractor and insurance companies to proceed with work at a given site. However, since most suspect land in the development project footprint will not have been subject to clearance, it will not be appropriate to issue clearance certificates. Use of such land may be perfectly justified, but is not supported by an appropriate legal instrument in most countries. With the increased release of land through non-technical and technical survey methods – without full clearance – there is a need for appropriate documentation (other than a clearance certificate) that will support the decision-making, operations and liability assumption by the normal actors and institutional infrastructure for development. Some countries have established a category of “Area Without Identified Risk”, to refer to areas that have been surveyed in a professional manner which would have identified evidence of hazard if any were present. In such cases, the BHMIC (Bosnia) issues a certificate that the area is “without identified risk.” The certificate, based upon a professional survey conducted according to national standards and procedures, demonstrates investor due diligence in the event of a later incident. In light of the development of the Land Release concept and IMAS, perhaps the appropriate action would be to issue a certificate that the area is “Without Evidence of Hazard” – AWEH.

**-- Create an economic development actor stakeholder group**

58. As part of the effort to increase awareness of and attention to the importance of landmines as obstacles to economic development, the NMAC should seek to develop a stakeholder group among public and private development actors with natural concern about the safety of the land where they will conduct their new projects. This is similar to other working groups that exist for MRE, VA and demining, with the important difference that it would be comprised of clients of mine action rather than actors in mine action. This could begin with outreach at both national and regional levels to the most relevant business associations, local and regional governments, major natural resource focused companies, companies involved with transport of electricity, water, petroleum and communications, as well as roads and parks, among others. Currently under consideration in Colombia, this could include establishment of a business roundtable of public and private economic actors to provide advice and improve the program.

**- Advocate for public policy framework to link mine action and development**

59. Future effectiveness of mine action programs depends in large part on the actions of many agencies not normally considered as part of the mine action field. Agencies whose work programs are

adversely affected by landmine/ERW contamination need to be encouraged to address their problems squarely, including whenever possible lining up the financing required. Most development organizations operate on a tightly specified budget and assume that since they are “helping” the country it is the responsibility of the national authorities to ensure that any demining that is required will be done on a timely basis. However, there are rarely idle demining resources to assign to such tasks, particularly if they were not included in the annual priority setting and planning process. This requires a government-wide policy, not primarily focused on mine action organizations. There are several elements to the general policy and legal framework that the NMAC can advocate through the Council of Ministers or other broad public sector policy body. The important consideration in all cases is that the need for demining support be considered during project formulation, and when it is required the source of resources for demining support be indicated in the respective project financing agreement. These measures would provide some institutional obligations to support good practice.

**-- Landmine concerns should be included in national development strategy and plans**

60. In order to ensure that development actors and donors are fully aware of the significance given by the Government to the landmine/ERW problem and to the need to consider it whenever relevant, the Government should include appropriate references to the issue in its Poverty Reduction Strategy, National Development Plan or similar national policies (this has been done in Afghanistan, Cambodia, Colombia, Mozambique and other countries). Since in most countries landmines/ERW are a local problem in specific areas, but not widespread enough to be identified as an overarching national priority, the landmine/ERW problem should be identified as “of a critical nature wherever it exists”. While this does not solve the problem, it does reflect a higher profile to mine action and to its role in consultation and planning with other public and private actors.

**-- Mine action costs should be included in respective development program budgets**

61. Central Government should adopt and widely disseminate a policy that (a) demining services required by any public or private investment over a certain threshold must be included in the respective overall program budget, based on consultations with the NMAC regarding the nature of the contamination and the cost to mitigate it, (b) assigns responsibility (financial and contractual) for the demining services to the prime contractor for the investment project, and (c) be conducted by accredited mine action service providers and subject to qualified quality assurance.

**-- Ministry investment plans should include necessary mine action**

62. The NMAC should seek to establish that any public entity requesting funds for an investment project is responsible to ensure that the funds for any necessary demining support are also provided. This could mean that investment proposals for the national budget would be required to include a budget line for demining in order to receive approval of the Ministry of Finance/Budget (as in Angola). Alternatively, it could mean that the demining support would be provided by other donor or existing counterpart funds, or even by the core funding provided to the mine action program, but in any case the estimated value and source of the funds would be required to be specified in the proposal.

**-- Include landmine budget category in national investment plans**

63. Mine action requirements should be included in sector and sub-sector plans for transportation, roads and bridges, small scale irrigation, water, power, agriculture, rural development, and only secondarily for cross cutting issues. The budget necessary for mine action activities should be considered in the national budget. It could be directly budgeted together with the development investments it is to support, or it could be referred and the alternative source indicated.

**-- Donor-financed projects should include necessary mine action in financial plan**

64. The NMAC should seek to establish that donor funded projects (through the government or NGOs) that will require demining support should indicate the source of such support in the proposal submitted for approval by the entity overseeing such donor arrangements. The demining funding could be contained in the same project, in a parallel project, or even as a government counterpart contribution, but whichever the case the estimated value and source of funds would be required to be specified for government acceptance of the proposal.

**-- Loan-financed projects should include necessary mine action in financial plan**

65. The NMAC should seek to establish that any infrastructure projects funded by development bank loans (World Bank, regional development banks) that will require demining support must consider such requirement during project design and appraisal and should have the estimated amount and source of the support specified in the respective loan agreement.<sup>15</sup> Depending on the policies of the development bank concerned and the preference of the national government, the funds for demining could come from the same loan, from the government counterpart payments for the loan, from the core mine action budget, or from other sources.

**-- Private territorial concessions should have an appropriate risk mitigation plan and financing**

66. Proposals for territorial investment concessions (e.g., mineral exploration) should contain an acceptable plan for mitigation of explosive hazards that may be encountered.<sup>16</sup> This could be included in the Foreign Investment Law or regulations, noting that companies will be liable for any accidents if they have not fulfilled this responsibility.

**-- Landmines should be treated as similar to other environmental risk**

67. Most countries have legislation, regulations and guidelines which require consideration and appropriate mitigation of certain types of environmental risks, such as seismic zones, flood zones and environmental contamination. That legislation indicates what is expected to be done and who is responsible to do it, beginning with checking to see whether there is a history of risk in the area, and appropriate follow up when there is. Countries should take a similar approach to the issue of landmine/ERW risks within the proposed development project footprint. Existing environmental and land use regulations and guidelines should be reviewed with this consideration in mind. Environmental impact assessments could be expanded to include assessment of landmine/ERW hazards and mitigation plans when relevant, as has been done by the World Bank in the Environmental Management Plan for infrastructure projects in Cambodia or in its “Procedures for Mine Risk Management” in Bank-funded projects in Afghanistan.

68. Consideration of landmine/ERW hazards by engineering consulting firms should be institutionalized as good practice. ISO certification organizations should be encouraged to include the potential presence of landmines/UXO as a risk factor to be included in risk assessments.

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<sup>15</sup> World Bank-financed projects in Afghanistan, Bosnia, Cambodia, Croatia and Ethiopia have included such terms.

<sup>16</sup> Some companies in Cambodia now include such ERW risk mitigation plans as a normal business practice.

## Conclusion

69. The preceding Guidelines provide many detailed recommendations regarding what NMACs can do to enhance the use of landmine/ERW hazard information by development actors as a key element to increase the support of mine action to development. A few broad elements stand out, according to which NMACs can develop their own specific measures, as summarized below:

- NMACs should consider development actors as clients to be served and supported, and not simply as stakeholders to be informed.
- Development actors' priorities for mine action should be recognized as valid priorities on their own, and as such worthy of response. Particular attention should be given to projects that are ready but will not proceed without demining support.
- The NMAC should map the development actors interested in mine action. The mapping process can begin with the lists of development actors presented above and should pay particular attention to public and private actors seeking to develop public works (roads, railroads and electric power), mineral and petroleum extraction, and tourism.
- The NMAC should systematically reach out and follow up with individual development actors to inventory their projects and jointly determine their possible need for mine action support, based on clear understanding of the respective actor's investment plans.
- The NMAC should invest in the continual improvement of the national mine action database, to ensure that information is widely and easily available, useful, up-to-date and complete.
- All projects that may require demining support should identify the corresponding costs and the respective budget resources as part of the respective approval process.
- The NMAC and national mine action program structure should be adjusted to properly support development actors. In particular, this requires considerable expansion in technically qualified survey assets to determine whether the specific sites and swathes of interest to development investors contain hazards and require clearance.
- The NMAC should lead the development of national land release standards and practice for support on suspect land that has not been confirmed to contain explosive hazards.

70. These Guidelines, drawn from best practice experience of mine action programs in many countries, are designed to support national programs that seek to increase their effectiveness in support of economic development. They are based on the practice developed in the countries contacted and as such are not comprehensive. Comments and suggestions to improve these Guidelines will be very welcome, and SAC is ready to assist programs that may wish support to tailor the Guidelines to their specific national situation.

<b>Table</b> <b>Summary of Development Actor Responses in Three Case Countries</b> <b>(Azerbaijan, Cambodia, Colombia)</b>					
<b>Sector</b>	<b>Actors</b>	<b>Country</b>	<b>Aware of ERW problem in regions of work?</b>	<b>ERW threaten own work?</b>	<b>Information or support requested</b>
Government	Provincial and local authorities	AZE, CMB, COL	Yes	Yes	Maps, survey (clearance)
IDP Resettlement	Government Social Fund, INGOs	AZE, CMB, COL	Yes	Sometimes	Maps, survey (clearance)
Mineral exploration	Mining companies, geological companies	CMB, COL	Yes	Sometimes	Maps, survey (clearance)
Petroleum extraction	Petroleum companies	COL	Yes	Sometimes	Maps, survey (clearance)
Petroleum pipelines	Private companies	AZE, COL	Yes	Sometimes	Maps, survey (clearance)
Industry	Private companies (factory expansion)	AZE	Yes	Sometimes	Survey, removal
School construction	Education Ministry, Development Banks	CMB	Yes	Sometimes	Maps, survey (clearance)
Water canal systems	Water authority	AZE, CMB	Yes	Slightly	Maps, survey (clearance)
Integrated rural development	Bilateral donors, INGOs	CMB	Yes	Sometimes	Maps, survey (clearance)
Historic sites	National Patrimony Authority	CMB	Yes	Sometimes	Maps, survey (clearance)
Tourism	National Park Agency	CMB, COL	Yes	Some areas	Maps, survey (clearance), MRE
Telecom	Optical cable company	CMB	Yes	Sometimes	Maps, survey (clearance)
Electricity transmission	Power transmission companies	CMB, COL	Yes	Sometimes	Maps, survey (clearance)
Road construction	Public Works Ministry, Development Banks	AZE, CMB, COL	Yes	Risk factor	Maps, survey (clearance)
Railroad rehabilitation	Public authority, Development Banks	CMB	Yes	Risk factor	Maps, survey (clearance)
Insurance	Private companies	AZE	Yes	No; risk factor	Maps
Education services	Education Ministry, Bilateral and INGO	AZE, CMB	Yes	No	MRE
Health services	Health Ministry, INGOs, bilateral donors	AZE, CMB	Yes	No	MRE
Agriculture – export	Private companies; producer federations	CMB, COL	Yes	No	