

# A Conversation about Land Cancellation and Release with H. Murphey "Murf" McCloy

by John E. Stevens [ PM/WRA ]

Land Cancellation and Release in mine action is looked at by many experts as the next logical step to the safe and time-effective return of mined areas. This interview examines the benefits of the land-release method and addresses its criticisms.

Humanitarian mine action is poised for another step forward via the Land Cancellation and Release approach. Unlike previous mine-action developments that were largely systemic (e.g., Landmine Impact Surveys) or technical (for example, the HSTAMIDS mine detector<sup>1</sup>), Land Cancellation and Release is essentially conceptual. It balances surveys with risk-management assessments in order to speed the rate at which Suspected Hazardous Areas can be deemed safe and returned to productive use. In some

cases, Land Cancellation and Release may occur without *any* clearance.

Since the term *humanitarian demining* was introduced by American and other practitioners (United Kingdom, France, etc.) or people in Afghanistan in late 1988, its doctrines and practices have matured as it spread to other conflict-affected countries. Many of its technical approaches can be traced to World War II and the extraordinary post-war clearance of mines and explosive remnants of war that rendered western Europe largely impact-free a mere five years later. What distinguished *humanitarian demining*—later expanded to the more holistic *humanitarian-mine action*—in the latter half of the 20<sup>th</sup> century from its World War II roots was an approach that sought to calculate precisely the scope and nature of the problem in advance, followed by more rigorous clearance and quality assurance. This approach, ultimately codified in the first edition of International Mine Action Standards in 2001, assured that mine-affected populations could occupy their lands again safely and that deminers would minimize risk to themselves.

The problem was that mine clearance that adhered to IMAS inevitably increased demining costs and times. IMAS' high standards often introduced tensions between those donor nations, such as the United States, which encouraged IMAS at every step, and mine-affected nations eager to speed economic development and resettlement of populations while accepting greater



A Vietnamese Army Engineer Officer, trained to conduct Landmine Impact Surveys, interviews villagers in a hamlet in Quang Binh province, north of the old demilitarized zone, about the locations of ERW. This interview took place during the final stages of a multi-million dollar Landmine Impact Survey in Vietnam that was funded by the U.S. Department of State's Office of Weapons Removal and Abatement. PHOTO COURTESY OF THE AUTHOR

human risk. I must confess that when I was Program Manager for Vietnam, I insisted that IMAS be followed to the letter.

Land Cancellation and Release will change mine action again. To learn more, I approached my colleague, H. Murphey "Murf" McCloy, a humanitarian-demining

pioneer. Among other accomplishments, McCloy started the first United States humanitarian-demining program in Bosnia and Herzegovina in 1996 in cooperation with United Nations mine-action authorities. This program morphed into internationally supported programs in several Balkan countries that saved lives and contributed to regional confidence-building. Our conversation about Land Release and Cancellation follows.

At the time this photo was taken in Azerbaijan, the hills in the distance were mined. PHOTO COURTESY OF DEBORAH NETLAND, PM/WRA





This verdant grape vineyard in Afghanistan's Shomali Valley was devastated by fighting and infested with landmines and ERW. Thanks to Roots of Peace, through support from U.S.-government grants and private donors, the land was demined and safely replanted, and is again producing delicious grapes for consumption in the region. PHOTO COURTESY OF ROOTS OF PEACE

**Stevens: What exactly is land release?**

**McCloy:** The latest draft of IMAS 08.20 (*Land Release*), approved by the IMAS Review Board and that should soon be published, defines it as "... the process of applying all reasonable effort to identify or better define Confirmed Hazardous Areas (CHA) and remove all suspicion of mines/ERW through Non-technical Survey, Technical Survey and/or clearance using an evidence-based and documented approach."<sup>2</sup>

**Stevens: What role do surveys play in the land-release process?**

**McCloy:** Surveys play a central role in the land-release process, for good and for bad. On the "good side," well-conducted surveys lay the groundwork for efficient and cost-effective mine action by narrowing the size of

the areas that are genuinely hazardous and that need to be subjected to expensive, full-clearance measures. Doing so has two major benefits. First, scant demining resources are expended only on land that contains explosive threats. Second, some areas may be returned to safe use through the application of much less expensive survey measures alone—Non-technical Survey being the least costly, and Technical Survey being more costly but much less expensive than full clearance.

On the other hand, inaccurate or inadequate surveys can distort the mine/ERW picture. This can result in an exaggeration of the explosive threat in an area, causing unnecessary expenditure of clearance resources. Even worse, a "false clear" conclusion can divert the application of more definitive survey/clearance measures from potentially dangerous ground,

thereby unnecessarily putting land users at risk.

**Stevens: Given the need by donor nations, nongovernmental organizations and individual contributors to prioritize their limited funding, how do mine-action programs determine the appropriate "end state" to be reached?**

**McCloy:** Programs don't determine end state; stakeholders do. The decision varies with the stakeholders. The key stakeholders are the national authorities of a mine-/ERW-affected nation and the international donors

that support the mine-action efforts of those authorities with funding and other assistance.

For the national authorities, the end state may be that point at which the explosive threat to the population has been reduced to impact-free or mine-free status, both of which involve a commitment to a long-term effort. The impact-free approach that the United States pursues envisions an end state in which "the last citizen has been rendered safe from the effects of mines." The mine-free end state, favored by advocates of the Ottawa Convention ban on anti-personnel mines, envisions victory "when the last mine (anywhere) has been cleared/destroyed."

For the foreign-government (donor) stakeholder, the end state can take a variety of forms, depending on the resources that the donor has, and the donor's assessment of the needs and chances of success (defined in the donor's terms) in entering into a collaborative effort with the host nation and other international supporters.

Each stakeholder must determine the appropriate end state for itself, whether it is pegged to the achievement of Ottawa Convention commitments, such as eliminating all mines within the national territory, or to shorter-term, pragmatic capacity-building goals (as is the case of most U.S. humanitarian mine-action assistance programs). These goals are oriented toward creating a host nation's independent capability to plan, manage and execute its national program with or without external assistance.

The only stakeholder that is guaranteed to "be there" until the "last mine is cleared" end state is the mine-affected nation itself. Other stakeholders' end states will vary in scope and duration as dictated by their individual political and humanitarian goals for the host nation concerned and by their available resources.

**Stevens: Can these end states be defined early in the process to make it feasible to determine successful completion?**

**McCloy:** Stakeholders/donors can and should establish their initial end state during the mobilization phase while they are collecting information on the situation in the host nation and marshalling assets to bring to bear on the problems known to exist. Planning an end state gives focus and purpose at the outset to the coordination and execution of the assistance that will be provided. This end state represents a goal to be achieved; objectives and other concrete measures of effectiveness can be derived and measured using this goal.

Initial end states are not immutable; an initial approach to mine-action assistance can be revised. Conditions can change within the political, socioeconomic security framework of a post-conflict country, as can the end-state goals of the individual donors/stakeholders. The important thing is to have an end state in mind from the start. Making changes from a known point of reference is easier and more economical in terms of the expenditure of time, resources and political capital. It also provides a useful launch point from which to elicit and gauge cooperative efforts from host-nation authorities and other stakeholders.

**Stevens: What is an acceptable level of residual risk?**

**McCloy:** An acceptable level of residual risk is what the respective national mine-action authorities say it is. Residual risk, as defined in IMAS 04.10 *Glossary of Terms* (second edition, 1 January 2003), is: "In the context of humanitarian demining, the risk remaining following the application of all reasonable efforts to remove and/or destroy all mine or ERW hazards from a specified area to a specified depth."<sup>3</sup>



According to the draft IMAS 08.20 *Land Release*, in the process of determining when land can be released from suspicion all reasonable efforts is “the level of effort required to achieve the desired level of confidence that the land is free of mines/ERW.”<sup>2</sup> Depending on the evidence of explosive contamination gathered from the survey techniques applied to a particular piece of ground, “all reasonable efforts” can vary from “no further efforts are required to release the land” to “more surveying is required to make a final determination,” all the way to “full clearance measures must be applied to this land before it can be returned to safe use.” It is the responsibility of the various national mine-action authorities to develop a national land-release policy, to prepare and publish standards and guidelines governing the land-release program, and to include a definition of the criteria for “all reasonable efforts” for their respective countries.

**Stevens: Can people be confident that landmines/ERW in a community have deteriorated sufficiently to eliminate the risk of explosion?**

**McCloy:** No. Landmine deterioration is a function of many variables, including those induced by local soil conditions, depth of burial, exposure to sunlight and other weather phenomena, type of construction (hermetically sealed; plastic, metal or wooden casing; firing mechanism, etc.), composition of the explosive charge, age of the mine, time in the ground, and other factors.

There is no set of conditions that will guarantee that all mines, even of the same type, will deteriorate to a harmless state. In fact, it is possible for mines under certain conditions to deteriorate to an unstable state that renders them more sensitive/susceptible to unintended detonation than when originally manufactured.

**Stevens: Can people be confident that all of the landmines/ERW have been removed?**

**McCloy:** No. In spite of the best efforts of human deminers, mine-detecting dogs and machines, there is always the possibility that an area formerly contaminated with mines/ERW can contain some residual risk even after full clearance has been conducted properly. The methods and procedures prescribed in the clearance-related IMAS are designed to ensure the removal or destruction of all mine and ERW hazards within a specified area to a specified depth. There are no 100-percent guarantees.

What the members of a mine-/ERW-affected community *can* be confident in is that *if* a thorough, well-documented and supervised process has been undertaken (i.e., all reasonable effort has been expended), this process will reduce the residual risk to a “tolerable level” (i.e., a level of threat low enough that they and other stakeholders are convinced that the area can be returned to safe use).

This confidence is generated in the local population

by the demonstrated reliability over time of the national mine-action authority, mine-action center and local/international demining organizations to return areas to safe use and to respond quickly and effectively in those cases where additional threats are found in areas formerly considered cleared or free of mine/ERW threats.

**Stevens: When does the need to use the land make the risk worth taking?**

**McCloy:** The risk is worth taking when the national mine-action authority and other stakeholders, particularly the local/host-nation stakeholders, feel that it is safe enough to use.

There is a movement by Ottawa Convention adherents and by some international funders of humanitarian mine action to expand the use of the full spectrum of land-release methodologies to achieve a more expedient and cost-effective release of areas once deemed to be mined. In a world of limited resources, lower-cost measures such as Non-technical and Technical Survey are desirable alternatives to the full-clearance option. Mine-affected Ottawa States Parties are encouraged to adopt land-release policies that include all three methods.

Ultimately, however, the disposition of mines/ERW within the national territory of a mine-affected state is the responsibility of the nation itself. Consequently, this is a decision for national authorities, with the national mine-action authority responsible for developing a national land-release policy and relevant standards and procedures, hopefully in concert with other stakeholders, to include international donors and the local civilian community.

The international community can encourage mine-affected countries to adopt a comprehensive land-release program, but it is up to the individual mine-affected countries themselves to decide whether to do so, and where and how such operations will be carried out.

**Stevens: Isn't Land Cancellation and Release a sham that enables donor nations and mine-affected nations alike to put a stamp of approval on sloppily done work, or proceed on assumptions that are based on questionable surveys that could endanger lives in order to save money?**

**McCloy:** Land Cancellation and Release is neither a sham nor an internationally-orchestrated cost-cutting measure that sacrifices the safety and well-being of civilian populations. It is instead a highly developed form of risk management that serves to offset the problems associated with shrinking donor funding for mine action worldwide. It does this by achieving operational economies of scale through database purification, along with the release of land through the application of survey and clearance methodologies appropriate to the threats confirmed through adequate and accurate survey techniques.

There is no relaxing of standards regarding the level of evidence required to tailor survey or clearance work to the specific tasks, nor is there any lessening or “watering down” of the standards to which survey and clearance operations must be performed. The aim is to employ full clearance (the most costly) resources only on genuinely hazardous areas identified through accurate and adequate survey techniques.

The standards/guidelines set forth in the newly adopted land-recovery-associated IMAS (IMAS 08.20 *Land Release*;<sup>2</sup> IMAS 08.21 *Non-technical Survey*;<sup>4</sup> and IMAS 08.22 *Technical Survey*<sup>5</sup>), in conjunction with the long-standing IMAS 09.10 *Clearance Requirements*<sup>6</sup> (published in 2003) set forth procedures and methodologies that, if properly codified, published and enforced by the respective national mine-action authority, will return land to safe use at a lower cost with a tolerable level of risk that is acceptable to all stakeholders, including the local civilian community.

Land Cancellation includes such activities as purging the national mine/ERW database of invalid (redundant/incorrect) Suspected Hazardous Area entries as well as releasing land for safe use through a combination of Non-technical Survey, Technical Survey, and/or full-clearance operations.

**Stevens: The Ottawa Convention ban on anti-personnel landmines calls for the total elimination of landmines. Does Land Cancellation and Release undercut the goal of that ban?**

**McCloy:** The Ottawa Convention process has evolved into a position that reconciles the “total elimination” position previously accepted by all States Parties with the cost-effective “all reasonable efforts/tolerable risk” approach of the Land Cancellation and Release process.

Annex C of IMAS 08.20 *Land Release* reads: “Article 5.2 of the Mine Ban Convention [commonly known as the Ottawa Convention] requires each State Party to ... make every effort to identify all areas under its jurisdiction or control in which anti-personnel mines are known or suspected to be emplaced and [to] ensure as soon as possible that all AP mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all AP mines contained therein have been destroyed.”<sup>2</sup>

The sophistry involved in moving from the bottom-line position of destroying all anti-personnel mines to accepting the Land Cancellation and Release process is that the statement above implies *an obligation* on the part of States Parties to the Convention to ensure that mined areas under their control are accurately surveyed,

and then perimeter-marked by fencing or other means.

The final connection between “destroying all mines” and using “all available methods” (i.e., Non-technical Survey, Technical Survey and clearance) to release land in a more cost-effective manner is provided by a paper titled “Applying All Available Methods to Achieve the Full, Efficient, and Expedient Implementation of Article 5,”<sup>7</sup> endorsed at the Ninth Meeting of States Parties in November 2008.

Two of the key conclusions of this paper are that, first, the States Parties acknowledge that land reassessment and release through non-technical means, when undertaken in accordance with high-quality national policies and standards that incorporate key principles highlighted in this paper, is not a shortcut to implementing Article 5.1 but rather a means to more expediently release with confidence areas at one time deemed to be mined.

Second, three main activities can be undertaken to assess and, where applicable, to release land that has been previously identified and reported as part of a “mined area”: Non-technical means, Technical Survey and clearance.

Note that it is the responsibility of the national authorities of the mine-affected countries to make this work. This responsibility is also reflected in the duties of the national mine-action authority as set forth in the land-release-related IMAS.

Annex C of IMAS 08.20 states that while proponents of the Ottawa Convention have tried to make a similar connection between survey and the elimination of mines/ERW for the Convention on Certain Conventional Weapons (to which the United States is a State Party), the implied connection between “all reasonable precautions” and “survey” is not nearly as compelling.

**Stevens: At the humanitarian mine-action workshop hosted by China in April 2004, several Western demining organizations intimated that Chinese demining procedures at the time were not up to IMAS standards, imperiled both deminers and the affected populations, and were harmful to the environment. The Chinese defended their approach as “practical, reliable, simple, and low-cost—and particularly suited for mine-clearance in developing countries.” This approach was rejected by the Western participants, in part because it implied that the lives of people in developing countries were not as worthy as those in richer countries. Doesn't the new Land Cancellation and Release IMAS essentially echo the Chinese approach?**

**McCloy:** While the Chinese demining procedures were definitely low-cost, they were not in accordance with the IMAS. In the case of the Land Cancellation



## Reconciling Real-world Situations with Formal Land Cancellation and Release



PHOTO COURTESY OF THE HALO TRUST

The three scenarios below help to explain some of the dilemmas mine-action authorities face when implementing Land Cancellation and Release policies.

**Sri Lanka.** The above photo depicts a freshly cultivated field on the Jaffna Peninsula, directly adjacent to some red minefield demarcation stakes. The area was cleared in one day. When the deminers arrived the next day, a farmer had already plowed to the red stakes. In this case, one could say that the farmer conducted *de facto* quality assurance/quality control. What is the Sri Lankan national mine-action authority to do?

**Angola.** Here is a hypothetical scenario drawn from real situations: A key dirt road connects two towns in Angola. It was reportedly mined and the adjoining areas may well be mined. Yet, for the past year residents have used this road with trucks, 4x4s and animal-drawn carts without suffering any injuries or deaths from mines. Should the Angolan national mine-action authority declare victory in this area and focus its demining resources exclusively on other hazardous areas?

**Cambodia.** Here is another hypothetical situation inspired by actual scenarios: One or more polygons on a Landmine Impact Survey of a district in Cambodia indicate that the areas in question are mined. Yet, for the last three years farmers in this allegedly mined area have been intensively cultivating their rice paddies and have not suffered any injuries or deaths.

Should the Cambodian national mine-action authority still make an effort to survey the land before declaring it safe, or should they use their limited resources to clear other land that is definitely mined?

In all three cases, the answers to the real-world situations described above would have to be provided by the countries' national mine-action authorities. The national mine-action authorities could all release areas "empirically cleared" based on the evidence available. There must still be a process undertaken to define the actual limits of the areas declared tolerably free from the risk of mines.

The use of the land without adverse consequences in the three examples cited above does provide evidence (and here I stress evidence, not proof) that these areas contain no explosive threats and may not need to be subjected to full clearance in order to be returned to safe usage. Nevertheless, these areas still need to be accurately defined in terms of grid coordinates and turning points (like any other piece of cleared ground), and officially released only after being subjected to the land-release processes and procedures specified by the national mine-action authority of the respective country.

To further illustrate, a national mine-action authority may feel that the fact that a farmer has plowed certain ground without encountering a mine may be due more to luck than to the actual absence of explosive threats, and, therefore, would require more stringent (and costly) final proofs to release land plowed only once, but would require less costly measures for land that has been plowed two times or more. Similarly, while the roadbeds of well-traveled sections of road may be considered for release short of full clearance, the fact is that there is much less compelling evidence that there are no explosive threats present on the adjacent slopes. Consequently, the roadbeds may be defined and released after less costly and time-consuming measures while the accompanying verges of these same sections of road may require much more work to achieve release. In the end, it will all depend on the proofs/procedures specified by the national mine-action authority. Given the same conditions in different countries, the proofs and procedures could be different in each situation, depending on how the national authorities view "tolerable risk."

tion and Release process being espoused through the new IMAS, there are definite standards that cover this process and acknowledge the potential residual risk to affected populations while presenting procedures/methodologies to keep the risk at a level acceptable for all stakeholders (tolerable risk), including the civilian population.

If I were a local that needed the land to feed my family, I would probably feel the same way. Above all, I think that the risk management inherent in the land-release process is far superior in terms of lower risk/higher safety than do-it-yourself village demining (or *informal demining* as it is now called), which is what many inhab-

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The Chinese level of risk was risk defined by default, or lack of adherence to appropriate international standards. The new IMAS land-release level of risk is a function of conscious design with the savings in time and money carefully weighed against safety, and it is contingent on the thoroughness of the various survey and clearance processes.

**Stevens:** Which would you rather visit: a known mined area that had been cleared to traditional IMAS standards, or a once-suspected mined area that had simply been released following a data-collection exercise with accuracy and thoroughness certified by the host government but unknown to you?

**McCloy:** All things being equal, naturally I would feel confident that the residual-risk potential would be lower for an area subjected to full clearance than for that released through survey alone. However, if I trusted in the abilities of each link in the mine-action chain, I would not hesitate to visit either area you described, although I would probably be more "situationally aware" in the survey-released area.

itants of threat areas must resort to because of the needs-resources priorities gap that delays mine action for years.

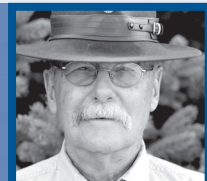
The more I know about mine action—to include the role and effectiveness of the national mine-action authority and the operational reputations of the mine-action center and the demining organizations performing the survey/clearance work—the more confident I am about where I can safely venture. ♦

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**John Stevens** is a career civil servant at the U.S. Department of State who has publicized the U.S. Humanitarian Mine Action program since 1999. His prior exposure to landmines was limited to being taught to use Claymores while a paratrooper in the early 1970s, and in avoiding mines while an Observer with the Multinational Force and Observers in the Sinai in the mid-1980s. Stevens managed PM/WRA's mine-action program in Vietnam for two years before attending the National War College, from which he graduated in June 2009, with a master's degree in national security strategy.

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