

# Tackling Small Arms and Light Weapons



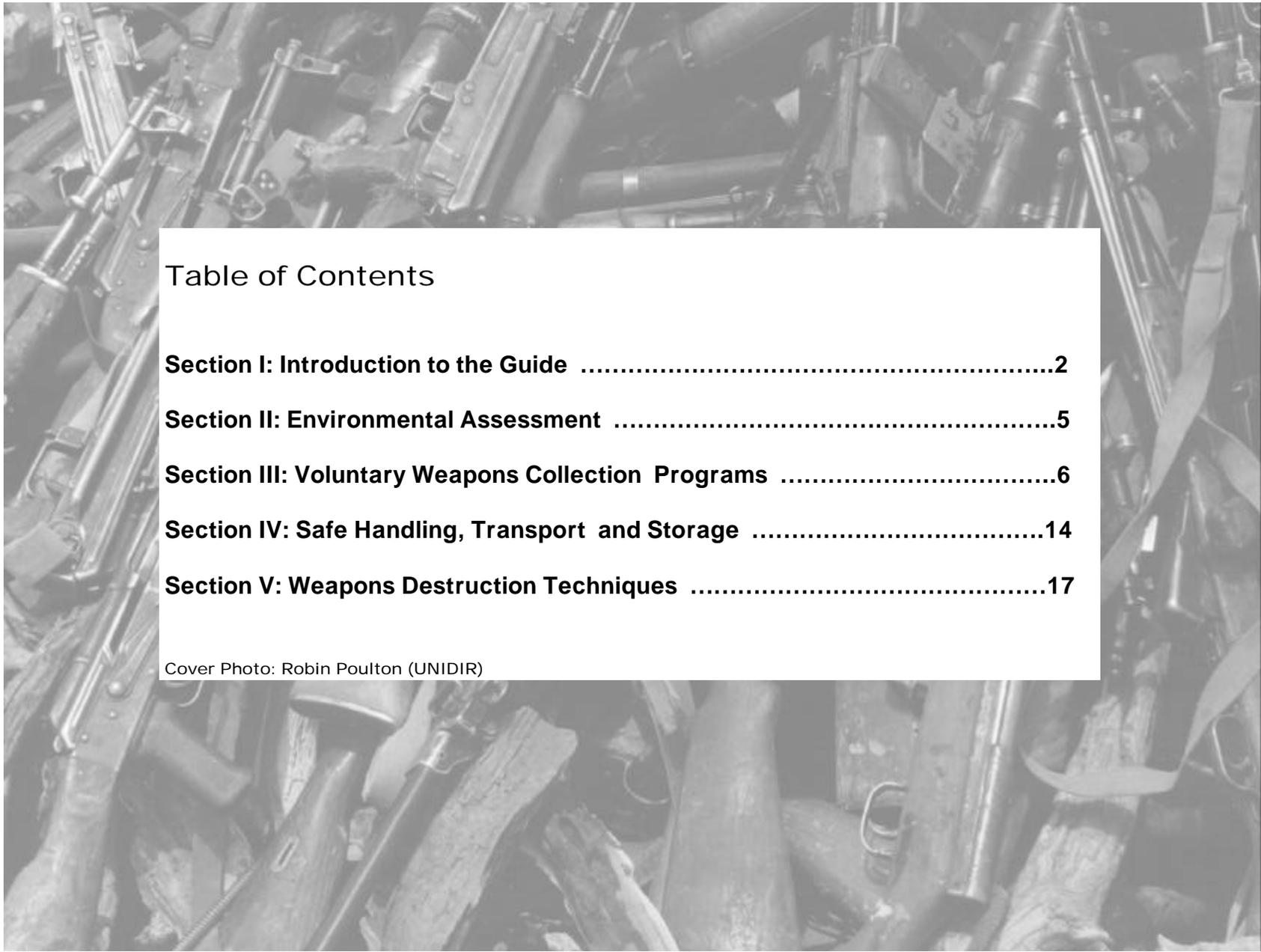
*A Practical Guide for Collection and Destruction*

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Bonn International Center for Conversion  
(BICC)

Program on Security and Development  
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Monterey Institute of International Studies



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Cover Photo: Robin Poulton (UNIDIR)

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## Section 1

### Introduction to the Guide

*Tackling Small Arms and Light Weapons: A Practical Guide for Collection and Destruction* is a joint effort of the Program on Security and Development (SAND) at the Monterey Institute of International Studies and the Bonn International Center for Conversion (BICC). The *Guide* is a synthesis of best practices observed by SAND and BICC during more than five years of international field research in the area of weapons collection and disposal. The *Guide* is also a product of the international community integrating material from those United Nations agencies, governments and NGOs who have begun practical work on small arms. Contained within are sections on environmental assessment, voluntary weapons collection, safe handling, transport and storage and destruction techniques. It is designed as a work in progress as the body of knowledge continues to grow. It will be continuously updated based on field research and the experience of its users. For those organizations who are planning a weapons collection program, this Guide can also serve as a basic framework for a proposal for financial support.

The publication and distribution of this document have been made possible with funds provided by the Swiss Federal Department of Foreign Affairs, the Netherlands Ministry of Foreign Affairs and the Ministry for Foreign Affairs of Finland. The *Guide's* content has also been critiqued and refined through consultations with representatives of the UN's Coordinating Action on Small Arms (CASA) mechanism, the Peace Implementation Network of the Fafo Institute, governments and NGOs working in the regions of the world most affected by the proliferation and misuse of these weapons.

The *Guide* is designed to be used by a broad spectrum of organizations and individuals from international peacekeepers, local

military and security officials to academics, policy makers at all levels of government and NGOs whose mission is to provide development assistance, promote peaceful conflict resolution or deliver humanitarian aid. **While the *Guide* is a practical and useful response to the challenges faced by these organizations in no way does it encourage untrained individuals or institutions to seek out, collect, handle or destroy small arms and light weapons. The hands-on work of collecting and destroying weapons should always be carried out by honest, well-trained military or security officials.**

The spread and use of small arms and light weapons continues to effect the work and lives of civilians across the globe who must operate in areas where trained military and security personnel are scarce. The International Committee of the Red Cross documented this reality in its June 1999 report titled *Arms availability and the situation of civilians in armed conflict*:

*Respondents indicated that ICRC operations were interrupted fairly frequently by armed security threats (i.e., beyond interruptions due to fighting among combatants). Almost 60% of respondents put the frequency of such interruptions at once or more per month. There was also general consensus (approximately 70% of respondents) regarding the occurrence of armed security threats involving either expatriate or local ICRC staff. The most common type of security incident affecting either expatriate or local ICRC personnel was firing of weapons at or near ICRC staff, followed by use of weapons to threaten ICRC personnel and use of weapons to commit a robbery. Approximately one third of respondents believed that "roughly half" or more of the population lived in areas not accessible to the ICRC because of armed security threats.*

Armed security threats involving Red Cross staff and the inaccessibility of areas due the threat of armed violence are only two ways in which the spread of weaponry and armed violence disrupt

the work of such organizations. There are many others.

In view of situations like these reported by the ICRC, it is only prudent that organizations and individuals outside the military and security sectors be aware of these weapons and the alternative actions for the collection, handling and disposal of small arms and light weapons should that be necessary. While these organizations are unlikely to collect and destroy weapons themselves, they do have a direct interest in seeing a reduction in the availability and number of weapons in their area of operation. With the help of this *Guide*, they can provide direct or indirect support for such efforts, thereby increasing the likelihood of success.

### ***Small arms and light weapons defined***

In 1997, The General Assembly of the United Nations adopted a report drafted by a panel of governmental experts. It contained definitions and a typology of small arms that have now been generally accepted by the international community in dealing with the problems associated with this class of weapon.

Small arms and light weapons have unique characteristics that concern organizations deployed to assist in development or humanitarian relief. Specifically:

- ❖ An individual can carry small arms for personal use while light weapons can be handled by two or more people serving as a crew, a pack animal or a light vehicle. They allow for highly mobile operations;
- ❖ Mortars, rocket and grenade launchers or mounted anti-aircraft guns often constitute the main armament of light forces, "providing them with high firepower that often causes heavy casualties among the civilian population if used indiscriminately,";
- ❖ Their relatively low cost in comparison to other conventional arms make them affordable to many actors beyond the State;

and

- ❖ Since many small arms require little, if any, maintenance, they can essentially last forever. They can be hidden easily and even young children can use them with minimal training.

In 1997, the United Nations General Assembly approved definitions for the following categories of small arms and light weapons:

#### Small Arms

- Revolvers and self-loading pistols;
- Rifles and carbines;
- Sub-machine-guns;
- Assault rifles;
- Light machine-guns;



**AK - 47**

Photo Courtesy of Canadian Council for International Peace and Security

#### Light Weapons

- Heavy machine-guns;
- Hand-held, under-barrel and mounted grenade launchers;
- Portable anti-aircraft guns;
- Portable anti-tank guns and recoilless rifles;
- Portable launchers of anti-tank missile and rocket systems;
- Portable launchers of anti-aircraft missile systems;
- Mortars of calibres of less than 100 mm;



**.30" Browning M1919 Machinegun**

Photo Courtesy of Canadian Council for International Peace and Security

#### Ammunition and explosives

- Cartridges (rounds) for small arms;
- Shells and missiles for light weapons;
- Anti-personnel and anti-tank grenades;

- Landmines;
- Mobile containers with missiles or shells for single action anti-aircraft and anti-tank systems; and
- Explosives.



**M67 Grenade**  
 "The Grenade Recognition Manual" by Darryl W. Lynn

### **Sections and Purposes**

*Tackling Small Arms: A Practical Guide* has been divided into four sections in addition to this introduction in order to follow a logical sequence of events and analysis. Listed below are the sections and their objectives:

**Section 2: Environmental Assessment-** outlines those questions users need to answer in order to develop an assessment of the weapons situation in a specified area;

**Section 3: Voluntary Weapons Collection-** provides a detailed framework for planning and implementing voluntary weapons turn-in and collection programs;

**Section 4: Safe Handling, Transport and Storage-** provides basic information that will help reduce the risk of accidents and injury during weapons collection and destruction efforts; and

**Section 5: Weapons Destruction Techniques-** describes basic methods for destroying weapons recovered in the field.

### **Guide use and follow-up**

As was mentioned earlier in this section, the authors of this *Guide*

do not in any way encourage untrained individuals or organizations to participate in the physical collection and destruction of small arms and light weapons. This work should only be carried out by trained experts. SAND and BICC are not responsible for the misuse of the information contained in this guide. *Tackling Small Arms: A Practical Guide* has been divided into removable sections so that the user may mix and match content as needed. It can be downloaded from the Internet by section or in its entirety at <http://www.bicc.de/weapons> or <http://sand.miiis.edu/projects>. Versions in Spanish, French and Portuguese will be available by June 2000 with other language translations to follow.

The content of the guide is a framework for analysis and action. It is not a formula to be followed irrespective of the context. Each situation requires adapting the information in this *Guide* to programs and actions that meet local needs and constraints.

To enhance the process of adapting the information in this guide, the Bonn International Center for Conversion has established the Help Desk for Practical Disarmament. The Help Desk is available to respond to the following requests:

- ❖ Questions about the *Guide's* content;
- ❖ Further research and reports on small arms and light weapons;
- ❖ New information in the field of weapons collection and disposal;
- ❖ Guidance on how to proceed with collection and destruction efforts; and
- ❖ Additional copies of the guide (available in different languages and formats by request).

**Help Desk for Practical Disarmament**  
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## Section 2

### Environmental Assessment

In order to cope with an environment that is weapons-abundant, it is prudent to conduct a basic and on-going assessment or survey of the situation as it pertains to these weapons. This exercise will be useful in determining the feasibility of a future weapons collection or destruction program. There are two types of factors that should be analyzed: Basic and Weapons-Specific.

For an example of a very extensive survey carried out by the Working Group on Weapons Reduction in Cambodia visit the following web site:

<http://www.igc.org/nonviolence/wgwr/>

While different groups, including security and military forces, may participate in the assessment phase care should be taken on deciding who will survey the civilian population. Interviewers should not be seen as a threat.

The following is a list of Basic and Weapons-Specific Factors:

#### Basic Factors

- Community demographics
- Current status of human security (physical, food, water, etc.)
- Economic factors (employment, inflation, currency value)
- Community cohesiveness
- Levels of crime and violence
- Gang activity
- Structure and quality of police force
- Quality of judicial system
- Status of border area and sea ports

#### Weapons-Specific Factors

- Where, to what extent, and by whom is the work of citizens, NGOs and businesses concerned being effected by armed violence?
- To what extent is this violence due to weapons visibility, availability, possession and misuse?
- What specific types of weapons can be identified as the primary cause of the problem?
- Who is in possession of these weapons?
- Why do these people possess these weapons?
- What laws if any govern the possession and use of small arms?
- How are these laws being enforced?
- What is the culture of weapons, culture of violence in the area?
- How were these weapons distributed?
- What previous efforts have been implemented to reduce the weapons in circulation?
- What organizations are operating in the area which could assist in reducing or preventing the availability or misuse of these weapons?



Cambodia: Weapons Confiscated by Government Officials being Prepared for Destruction  
Photo: Natalie Pauwels (BICC)

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## Section 3

### Voluntary Weapons Collection Programs

This section of the guide outlines the key issues and primary tasks that must be undertaken to implement a voluntary weapons collection program. (We assume that the user of this resource will have already carried out the environmental assessment as described in Section 2 before planning and organizing a VWCP.) If this exercise indicates that the environment is suitable and conducive to a VWCP, then one should seek the support and collaboration of an appropriate individual or institution that can provide the necessary technical and logistical expertise. The authors of this manual strongly recommend against initiating a VWCP without the participation of military, public security or other qualified personnel.



Pile of weapons turned in voluntarily in Mali, West Africa  
Photo: Robin Poulton (UNIDIR)

The collection of excessive weapons from civil society can be part of peace missions, and post-peace mission environments and is influenced by the mandates and implementation of such missions. However, to develop common and practical guidelines across a variety of situations, weapons collection programs that are conducted in situations other than post-peace mission environments are also fruitful sources of information. The problem of armed violence is global, as evidenced by the weapons collection programs being conducted in states from the developed and industrialized world.

A VWCP can be described as a program where responsible gov-

ernment, non-governmental or international organization motivates individuals or groups to surrender legal and illegal weapons that are not required for the purposes of national defense or internal security, and may be unsafe or unwanted by citizens. Individuals or groups of people are encouraged to participate based on incentives that may include amnesty, anonymity or some material benefit, cash or in-kind.

#### Components of a VWCP

1. Environmental assessment- See Section 2
2. Program rationales and goals
3. Incentives
4. Organizing a VWCP
5. Legal Considerations
6. Establishing the types of weapons to be collected
7. Funding and support
8. Location
9. Length and timing
10. Publicity
11. Integration with other programs
12. Weapons turn-in procedures
13. Destruction plans and process
14. Program evaluation

#### *Program rationales and goals*

VWCPs can be implemented in a variety of environments including the disarmament of warring factions following a peace process, a post-conflict society where military weapons continue to proliferate, or other weapons-abundant areas that may not reflect traditional conflict situations. In the latter case, a VWCP might be initiated after an event such as the killing of an innocent child or the sudden arming of a community through the looting of insecure arsenals or police stations.

Selecting program objectives can be affected by several factors.

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First, various parties may agree to support the program in pursuit of different objectives. For instance, some may be mainly interested in the disarming of certain groups, whereas others may be motivated especially by the incentives offered in exchange for the weapons. Second, objectives that actors say they are pursuing may be quite different from what they really hope to achieve. Third, objectives may be directly or indirectly related to weapons collection. The former include curtailing the power of a certain group by disarming it, enhancing law enforcement and reducing arms-related crime and fatalities. Objectives that are not directly linked to collecting weapons may include demonstrating to the public at home or abroad that the authorities are living up to their commitments or signaling to the population that progress towards peace and crime reduction is possible, even if few weapons are actually retrieved.

*VWCP objectives and goals may include:*

- Collecting a specific type of weapon which is either causing significant damage to civilians (e.g., hand grenades) or having a special impact on the level of instability (e.g., man-portable air defense missiles);
- Catalyzing programs that address larger violence issues, such as reducing the practice of using weapons to resolve conflicts;
- Publicizing the connection between weapons and violence;
- Developing norms against weapon use;
- Lowering the number of weapons available for crime and violence;
- Increasing awareness of the negative consequences of weapons possession and misuse;
- Enhancing community solidarity;
- Improving community/police and/or military relations as well as local institutional capacity to deal with arms proliferation in the future;
- Disrupting the weapons supply and local arms markets;
- Reducing the frequency and lethality of armed violence;

- Reducing the number of accidents and acts of domestic violence;
- Reducing the visibility of weapons in the community; and
- Initiating the program as a launching pad for a broader community development project.

#### ***Integration with other programs***

To increase the likelihood that VWCPs will accomplish their primary goals and objectives, they should be integrated and coordinated with other programs which address not only reducing the number and visibility of weapons but also the larger aims of human security and development.

One of the primary goals of a VWCP should be to use it as a bridge to these programs, emphasizing that the initial focus on the tools of violence must lead to the accomplishment of more basic societal goals. These other programs may include:

- Education and awareness programs that emphasize the dangerous effects of weapons;
- Improved policing techniques which emphasize the police as a member of the community;
- The enforcement of laws and regulations regarding the possession and misuse of weapons;
- Weapons violence reduction programs;
- Youth at-risk counseling programs; and
- Community-building programs such as peaceful conflict resolution, public health, education and sustainable development.

#### ***Incentives***

One of the keys to a successful VWCP is providing the appropriate incentives for those citizens who will voluntarily turn in their weapons. They must be incentives that do not detract from the program's goals or create additional problems.

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Incentives can be developed for both individuals and aggregates of individuals, such as a village or neighborhood. This choice will depend on the religion(s) and culture of the area, the role of the individual in that particular society, and the structure and effectiveness of the local governments concerned.

*Examples of incentives include:*

- Cash;
- Vouchers for food, clothing and other goods needed by the population;
- Educational scholarships for participants and/or their families;
- Computers, radios and other items that can be used to enhance the level of education of the population;
- Tools for trades or agriculture;
- Housing and construction materials;
- Infrastructure projects such as schools, roads, wells, bridges; and
- Public health services.

Care must be taken in the use of cash in order to avoid abuse by participants whose motives run counter to the goals of the VWCP. For example, weapons dealers may use the opportunity to turn in surplus stocks to gain a profit and purchase additional weapons. In most cases cash incentives are not appropriate and may be detrimental to overall objectives.

The cash or in-kind value offered for a weapon must be selected with care. One option is to select a value for each type of weapon above the black market price. Another option is to set the exchange value offered for each weapon below black market value, to ensure that citizens turning in their weapons do so for the public good.

Compared with consumer goods and vouchers, capital goods and monies for small business development have the advantage of contributing to the development of income-generating activities

(for ex-combatants, former arms owners or others). Collective incentives promote community cohesiveness and might reduce paranoia over public scrutiny from neighbors and friends.

While each participant is free to use the compensation for turning in a weapon as they see fit, incentives should be designed so that they contribute to the overall goals of improving human security and development in the community. Linking disarmament to economic investment and job creation may be more effective if it is handled collectively rather than on an individual basis. However attractive micro-enterprise, cooperatives and other similar schemes may be for some program participants, one must take into account that not all ex-combatants or members of society are prepared to be entrepreneurs.

Incentives must also address the resistance among potential participants to turn in their weapons. People often feel they need weapons to obtain benefits or defend themselves. Males are often attracted to owning and displaying weapons even if they have no need or intention of using them. Traditional and modern cultures alike often consider the bearing of arms as a sign of honor, valor, virility or prestige.

The resistance to turning in weapons can also stem from their monetary value. If only a few guns put together have a street value equal to several times a citizen's monthly income, the owner may be reluctant to give up the weapons without recompense.

Before and during the period of collection, strong emphasis should be placed on voluntary compliance, positive incentives and freedom of prosecution. However, planners must consider the desirability and feasibility of making it clear that after this period of amnesty, the laws governing the possession of arms by civilians will be fully and actively enforced.

While a standard price (value in the case of goods) for each working weapon of a certain type is essential, it does not have to be

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the full (legal or illicit) market price. But the price should be enough to make it worth people's while to travel and bring it in. This will eliminate arguments over what a weapon is worth and accusations of favoritism and corruption. The VWCP must not result in bargaining over the value of each weapon nor be seen as just a financial transaction.

### ***Organizing a VWCP***

The institutions that organize a VWCP must be able to balance public trust, administrative ability and technical expertise. A VWCP can be organized in any number of ways including the following:

- Local government in collaboration with local civil society groups including the private sector;
- Local civil society groups with the assistance of local and/or national governments, especially the police or military to receive and destroy weapons;
- National government in collaboration with civil society groups—local, national or international.

Clear lines of authority and responsibility need to be established by program organizers. Collaboration with the police or other security forces needs to be especially clear in cases where these institutions are distrusted by large segments of the target population. In many cases, the police or military may only provide technical and logistical support. It might be appropriate for officials to arrive and remain out of uniform for the duration of the program. Where military or police institutions have not been able to collaborate, organizations such as the voluntary fire corps have stepped in. Regardless, all VWCPs require someone with the technical ability to identify, evaluate, disarm and store any weapons turned in.

Much of the success of the VWCP depends on its sponsors, namely, local politicians, civic organizations, community groups, religious leader, businesses and local media who can assist in the

organization, fund raising and publicity.

### ***Legal Considerations***

It is necessary to understand that the current laws and regulations in the area where the VWCP is to be conducted. In some countries or provinces, providing an amnesty requires amending existing statutes or even constitutions. In others, carrying firearms in public may be prohibited and regulations must be amended or suspended to allow people to participate in the program. Any immunity from prosecution to be permitted during the VWCP must also be evaluated in light of existing legislation. Obtaining the appropriate legal support might require the intervention of the executive branch of government or the national legislature. This can take time. These concerns are secondary in societies where lawlessness is predominant and there is little or no government presence.

The recruiting of volunteers and the identification of duties and responsibilities should also be confirmed early in the planning of a VWCP. Volunteers can be used to assist in publicizing the event, distributing flyers and posting signs, as well as in raising funds or securing donations. During the actual operation of the VWCP, volunteers are necessary to assist participants in turning in their weapons, especially in the case of those who may be hesitant to approach the police officer or other governmental official receiving the weapons.

In planning a VWCP, organizers must be aware of recent events that may hinder or improve the program. Feelings regarding personal safety among the population may affect the turn over of weapons positively or negatively. The same is true of the prevailing political situation. A program should be run in adherence with local laws and the support of local government officials. Endorsement by elected or public officials can also reassure potential participants. We do not advise implementing a VWCP immediately prior or during an election unless the majority of players in the political process endorse the idea.

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Planners should consider the feasibility of a formal acknowledgment of the participation of citizens in the VWCP. This acknowledgment could be in the form of a certificate signed by a local or national authority that recognizes their co-operation and enlists their aid in the process of community/national development and/or reconciliation.

### ***Establishing the types of weapons to be collected***

Based on the environmental assessment and program objectives, planners must decide which types of weapons can and should be turned in. Factors to be considered are:

- The lethality or destructiveness of the weapons, in other words, the damage they can cause to people, the environment, etc.;
- Their perceived proliferation or pervasiveness (how widely they are spread);
- The perceived danger of unintended or collateral damage, in other words the risk of improper use or harm to untargeted people or objects; and
- What specific individuals or groups are supposed to hand in weaponry.

As an example, hand grenades are less destructive than anti-tank weapons. Nonetheless, the VWCP planners may consider it more urgent to collect them because they are more widely spread and/or because they are more likely to be used inappropriately. On the other hand, planners may give higher priority to anti-tank weapons because they fear politically motivated attacks on government vehicles.

Organizers should be careful not to turn away individuals surrendering weaponry not originally contemplated in the VWCP for two key reasons. First, to prevent unnecessary accidents or violence caused by a person who feels rejected by the program. Second, to send the message that turning in the tools of violence is the right thing to do. If resources are scarce, a symbolic or nominal

form of compensation can be offered such as paying for the person's transportation to the collection site. If a weapon is no longer operable it can still be added to the stock of weapons to be destroyed. Another issue is to decide on whether or not ammunition and other explosives will be included in the program mandate.

### ***Funding and Support***

Weapons collection programs are most likely to succeed when they enjoy strong support across the political spectrum. Depending on the size, scale and geographic scope of a specific VWCP, resources are needed for staff compensation, renting facilities, transportation, incentives, publicity and promotion and providing storage. In many cases resources are obtained from a mix of cash and material contributions, or offset by volunteers.

*Potential funders of a VWCP include:*

- Businesses in the affected area whose sales are affected by the violence;
- Citizens affected by armed violence;
- Local government;
- National government; and
- Governments, IGOs and NGOs engaged in capacity building in the affected area.

The amount of money to be raised will depend largely on what type of incentive is to be offered. If in-kind (non-cash) incentives are to be used and donations of usable goods have been obtained, the actual cash amount will mostly be needed for promotion, materials and the purchase of supplies. If, however, cash is to be used as the primary incentive, or to purchase non-cash vouchers or equipment, the amount to be raised will be affected by the estimate of the number of weapons expected to be collected and the price range that is to be offered.

Potential sponsors of the program should be identified and their

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level of support ascertained well in advance of the projected date. Sponsors should include local law enforcement agencies who will be responsible for securing weapons received and checking that they are not loaded and, if required by the program organizers, functional. Police or other local security officials should also be responsible for the transport of the collected weapons to their final destination.

### ***Location***

A clear delineation of the area of the VWCP is critical. Making it clear who is in charge and who is eligible to participate will avoid problems of intermediaries and weapons traders coming to the VWCP from outside the community.

The site for a VWCP should most often be a location other than a military base or police station. Especially in communities where the police are not trusted and/or for those programs that hope to collect illegal weapons, alternate venues are preferable.

Often churches, other places of worship or community centers are used as collection sites. They provide a location that is well known in the community and seen as neutral. Some VWCPs, which operate on a mobile basis, go to pre-determined locations that are announced beforehand, or if invited by local citizens the organizers go to homes, community centers or areas where it is known that arms caches exist. These activities should not resemble weapons raids.

In choosing a site, thought should be given to the ease of access to the population participating in the program (e.g., near public transportation routes). There must also be a secure area in which collected firearms can be kept prior to being taken away for storage or destruction. Other recommendations include equipping each site with a container where collected arms, paperwork and other supplies can be stored. Grenades and other explosives should be taped shut until they can be disposed of properly.

### ***Length and timing***

The duration of a VWCP is dependent on many factors, including the amount of funds raised, the size of the program, the expectations of organizers and logistical realities. Programs can range from one day to one year or more. Sometimes these programs are annual events.

The duration and timing of a VWCP should take into account when most people would be able to participate, and when the sites selected would be available. Participation may be enhanced if held on a non-work day. This also tends to be a quiet time for local media, ensuring coverage of the event.

Once the VWCP is announced, collection should start very soon thereafter under controlled conditions in order to reduce the likelihood that incentives may have undesirable effects. For instance, there may be an influx of additional weapons from outside of the target community.

If the popularity and success of the program exceeds expectations, it can be extended by the use of promissory notes, (if the store of incentives have already been depleted). The programs that have received the highest number of weapons have been those that have been implemented over weeks and months rather than days. This approach has several advantages:

- It allows potential participants to judge the preliminary response to the program and if positive, may induce them to participate;
- It permits more publicity and greater dissemination of the program by word of mouth; and
- It shows the commitment of the organizers to the goals of the program and longer-term commitment to reducing the circulation of weapons in the community.

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### ***Publicity***

Publicity is key to maximizing the number of participants, and therefore the number and types of weapons turned in. This is especially true for programs in which one of the primary objectives is to increase awareness regarding gun violence and mishaps due to improperly stored or secured firearms in the home.

All types of media - print, television, radio and Internet (if existing and appropriate) - should be utilized, with the focus on that forum to which the majority of the people in the community have access. Enlisting the support of local media personalities, to include athletes and entertainers, may also help raise the profile of the program.

In regions where there is no formal media, the use of community leaders or other promoters might be necessary. Disabled veterans and other victims of violence are often effective for this task.

Publicity material should clearly state the name, date, place and time of the program, by whom it is organized, who are eligible participants, whether or not the program is being conducted on a 'no questions asked' or amnesty basis, the incentives being offered, which weapons will be accepted (functional versus non-functional or toy weapons, types and calibers, etc) and the conditions under which the firearm must be transported to the collection site.

### ***Weapon turn-in procedures***

Even when the types of weapons to be accepted in a particular VWCP are established care should be taken to make sure that all weapons are operable and unloaded. Even in the case of amnesty and anonymity, serial numbers should be recorded before destruction. A qualified technical person should be present at all times. Some programs require that weapons be surrendered in a sealed transparent plastic bag to prevent any suspicion of misuse while others may permit transport in the trunk of a car only to be opened by the official supervising the VWCP. For more related

information see Section 4 of this guide.

### ***Destruction plans and process***

In many instances, VWCPs include a destruction component to dispose of the weapons collected. This can be done to prevent the weapons turned in from re-circulating and to provide evidence of this to the program participants and collaborators. A VWCP can handle the destruction of weapons in a variety of ways. In all cases, the weapon should be documented as to type, serial number, condition, etc.

Weapons can be destroyed on location or collected and stored in a secure facility until a critical mass of weapons has accumulated; they can then be destroyed publicly and the material can be used for monuments or other forms of art or recycled for productive purposes. Experience has demonstrated time and time again the importance of holding a public ceremony at the conclusion of a VWCP. Such ceremonies may involve the destruction of weapons collected and/or the creation of a public monument from their remains.

Specific methods of destroying small arms and light weapons can be found in Section 5.

### ***Program Evaluation***

By their nature, VWCPs are very high profile and can be controversial. The citizens of the community, the governments involved, and the sponsors and funders will all demand to know the results of the program. Therefore, the evaluation component of VWCP must be part of the initial plan. In this section of the plan, documentation is developed for both auditing and evaluation purposes. Many times there are unexpected or intangible benefits that come after implementation. These should also be taken into consideration.

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A process evaluation plan must be established and include:

- Accounting for the funds (goods) received and expended or distributed to participants;
- A detailed description of the implementation of all aspects of the program- funding, publicity, legislative action, etc.;
- A detailed description of how those individuals or groups implementing the VWCP have performed their duties and tasks; and
- Verification of the final disposition of the weapons.

An outcome evaluation plan should include:

- Evidence as to the accomplishment, or lack thereof, of the stated goals;
- Evidence from the participants (voluntary) as to why they turned in their weapons; and
- Any other information generated from implementing the program such as lessons-learned that can be used to plan and implement future VWCPs

For those interested in reading about case studies in weapons collection and disposal from Albania, Central Africa, Croatia, El Salvador, Guatemala, Liberia and Mali look for the forthcoming BICC publication *Managing the Remnants of War: Weapons Collection and Disposal as an Element of Peace-Building*. Evaluations of these and other programs can be found on the BICC (<http://www.bicc.de>) and SAND (<http://sand.miis.edu>) web sites.

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## Section 4

### Safe Handling, Transport and Storage

The content of this section has been modified from materials provided courtesy of the United Nations Development Programme Albania Office "Weapons for Development" pilot project.

#### *Safe Handling*

**The authors of this guide discourage untrained persons from handling weaponry. A qualified weapons expert should be the only person to do so. However, under circumstances where it is absolutely necessary one should consider the following:**

#### Four rules of firearm safety

1. Whenever picking up a weapon, assume that it is loaded and dangerous;
2. When handling a weapon, control the direction of the muzzle at all times;
3. Never touch the trigger;
4. Open the action and check for the presence of ammunition.

#### Frequently Asked Questions (FAQs)

##### **What is the safety of a firearm?**

Most, but not all, firearms are equipped with a mechanism to reduce the chances of an accidental firing. These may take the form of a slide, lever or button on the side or the top of the weapon. The safety is considered to be "off" when the weapon is capable of firing if the trigger is pulled. The safety position can be indicated in the following different ways:

- "Fire" and "Safe" or "F" and "S";
- "On" and "Off";
- Black or white dot (meaning the weapon is safe) and red dot

(meaning the weapons can be fired). Some firearms may use a white/black zero (0) or bullet icon with a line through it instead of a dot; and

- Firearms capable of selective fire may use the letters "A" for fully automatic fire and "R" for semi-automatic fire.

##### **How safe is the safety on a firearm?**

Never assume that engaging the safety mechanism on a firearm will prevent it from accidental discharge. Some weapon designs are notoriously unreliable, some older weapons for example, and can discharge if dropped or hit sharply. Also, on well-worn weapons the safety can deteriorate to the point where it will not prevent discharge.

##### **How can I tell if a firearm is loaded?**

Unless you are knowledgeable on how to operate a particular model of weapon, always assume that it is loaded and dangerous.

##### **Is a firearm safe to handle if I have pulled the trigger and nothing happens?**

Ammunition is never 100% reliable, especially if it is old, has been allowed to deteriorate because of the weather, or was manufactured by an amateur. Therefore, pulling the trigger may not necessarily ignite the cartridge. This creates a very dangerous situation called a misfire (or hang-fire).

##### **Will a firearm covered in rust or mud still work?**

Some small arms such as the AK-47 were designed specifically so that they would continue to operate despite foul weather and years of use. Any firearm should be treated as if it still may fire. Only a gunsmith or other weapons expert can determine if a weapon is safe and/or usable.

#### *Transport*

Unless weapons collection and destruction are carried out on site, it will be necessary to transport the collected weapons, ammunition and explosives safely. The first thing that needs to be de-

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cided is who is to participate in the transport to a storage or destruction facility. Weapons and ammunition should be transported separately, preferably in different vehicles. In addition to the vehicles transporting collected weaponry, there should one or two security vehicles that accompany them.

The vehicles used for the transport should be serviceable and equipped with fire extinguishers. At least one set of paperwork for the items being carried should be with the driver (licensed by the appropriate authorities). A weapons expert should accompany the driver of the vehicle carrying weapons or explosives. Often times, a caravan will be organized between point A and point B where unloaded vehicles are in front and at the rear to prevent outside vehicles from approaching the loaded vehicles.

Vehicle security should always be a high priority. In the event of a vehicle break down or stop for any reason, it should not be left unattended. The drivers of security vehicles should contact the relevant authorities if an unscheduled stop occurs. There can be no smoking or fires within 25 meters of a loaded vehicle at any time.

Loading and unloading should be carried out in secure areas with a weapons expert present. There should be separate loading of different categories of ammunition and weapons. Ideally, weapons and ammunitions will not be transported in the same vehicle. The paperwork accompanying the vehicle(s) should be complete before the transport leaves for its destination.

**If an accident occurs:**

- The vehicle should be isolated by closing the road in both directions and a buffer zone should be created between the vehicle(s) and any people in the area;
- Weapons experts, medical personnel and fire prevention and response officials need to be notified;
- Any injured personnel should be evacuated and treated immediately;

- Based on the assessment the weapons expert can organize any necessary unloading or other safety measures;
- The driver(s) and weapons expert should stay in secured areas and be ready to inform the appropriate authorities; and
- If the vehicles involved catch fire they should be abandoned unless there is personnel still inside.

***Storage***

It is important that weapons and ammunition collected be handled and stored safely. Therefore, the following recommendations are provided to assist in the correct and safe storage of weapons, ammunition and explosives.

Storage buildings, rooms or containers should be secure, dry and without any electrical appliances or supply except for that of lighting. Storage should be in an isolated area without trees and overhead power cables. It is understood that under certain circumstances all of the conditions noted may not be achievable, but when all of them can be met the likelihood of accidents can be reduced considerably. Some form of fire fighting equipment should be close to the storage facility.

The storage area should be guarded and it might be necessary to have several locks and keys held by distinct organizations or individuals requiring all parties to unlock the facility to be able to enter. By doing this, irregularities and pilferage can be prevented.

If both weapons and ammunition are to be stored, they should be stored separately in different buildings, containers or rooms. If this is not possible, they should be separated by a barrier of some kind, such as sand bags or empty wooden boxes filled with dry sand.

***Ammunition Considerations***

There may be many types of ammunition that need to be stored. If at all possible the ammunition should be divided and separated

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into the following four categories:

*Category I Ammunition with High Explosive (HE) risk*

- High Capacity Shells
- Grenades
- Demolition explosives
- Mortars
- Rocket motors
- Detonators of all types
- Mines

*Category II Ammunition with burning or fragmentation risk*

- Armor piercing bullets
- Cartridge cases with propellant
- 20mm-37mm HE shell/rounds

*Category III Ammunition with only burning risk*

- Bagged propellant charges
- Loose propellant
- Rocket motors without warhead
- Pyrotechnics

*Category IV Ammunition with little or no hazard*

- Small arms rounds (bullets)

The above categories are not complete and often times judgments must be made as to what type of ammunition is involved. Ammunition with particular storage and fire risk such as white phosphorous can cause dreadful burns to the skin. In such cases a large bucket of water should be kept nearby to immerse the ammunition in case it begins to leak.

Should adequate storage facilities be available the following rules

should be observed.

1. Do not mix the different categories;
2. If it is not clear which category an item of ammunition belongs to it should be stored as Category I;
3. If there is only one room for storage, then place items in each category in different parts of the room;
4. There should be no fuse detonator/igniter left in any ammunition if it can be removed by hand, such as unscrewing the fuses, etc.;
5. When detonators are stored, they should be separated from all other types of ammunition whatever their categories;
6. Detonators, when possible, should be stored in closed metal boxes to prevent electrical static because they are very sensitive to friction heat;
7. Smoking or fires must not be allowed within 25 meters of the area;
8. All magazines from weapons should be emptied and stored with the weapons;
9. Any directional weapons such as a Rocket Propelled Grenade (RPG), should be placed with the warhead facing out of the stack and away from occupied areas;
10. If your storage area contains different types and categories of ammunition, boxes of Category IV ammunition may be used as a wall between them to prevent fragments from igniting other types of ammunition or explosives; and
11. Should a fire get started, DO NOT enter the storage area until a fire brigade arrives.

**The above list is for conceptual guidance and planning purposes only. Any program that stores weapons and ammunition must have the support of an individual or institution with adequate training in firearm safety. Temporary storage is only a short-term solution. As soon as possible, all weapons and ammunition should be moved to a permanent secure storage site or destroyed.**

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## Section 5

### Weapons Destruction Techniques

Summary of BICC Report 13 by David DeClerq, *Destroying Small Arms and Light Weapons: A Survey of Methods and Practical Guide*, April 1999.

#### Destroy Weapons?

If a weapons collection program is implemented, one of the main concerns will be the future disposition of the weapons collected. There are two basic decisions on the disposition: to destroy the collected weapons or not. In most cases, in which the weapons collected are not destroyed, they are given to security forces for storage or use. Regarding destruction, several methods exist as will be discussed at length below.



Weapons Crushing in Cambodia  
Photo: Natalie Pauwels (BICC)

While this study supports the decision to destroy weapons, circumstances exist which justify storage or re-issuance to security or armed forces. These usually revolve around the forceful collection of weapons stolen by individuals, criminals or rebel groups from government or police stockpiles. However, these cases fall into the realm of

government crime fighting and not directly into micro-disarmament plans. There are many disadvantages if weapons are not destroyed in areas that have been designated for disarmament or as future peace zones. One primary disadvantage is that the number of weapons in the country or region would not be decreased, but simply transferred. This would discourage volun-

tary turn-ins of weapons since the people would be afraid that the weapon they turn in could be used against them in the future. Also, a collection program done without the destruction of the weapons would not likely be successful in terms of weapons collected, unless they were forcefully collected, and in either case would form an environment of distrust between the people and the government.

On the other hand, a weapons collection program accompanied by destruction reverses the disadvantages listed above. For example, people would see that the government is truly trying to do something about violence in the country or region, and would feel reassured that the weapon they turned in would not be used against them in the future. Additionally, if the destruction is carried out publicly, it can have a large positive psychological effect on the people by showing them that their country and/or region is moving toward a more peaceful future.

#### Destruction Methods

From the numerous cases in which small arms and light weapons have been collected or seized, there have come a multitude of methods for their destruction. These methods can range from the very cheap and simple to the more complex and thus more expensive. Collection programs used around the world have had to make a number of considerations when choosing a destruction method. These choices must usually consider several factors such as: quantity of weapons collected; time and location restraints; requirements of security and government involvement; psychological and publicity needs (the building of a peace monument with destroyed weapons for example); national infrastructure (roads, equipment availability and domestic recycling capabilities); labor costs; and overall implementation funds.

The following is a list and description of some of the most common methods that have been used for the destruction of small arms and light weapons and munitions. The purpose is not to rank or recommend any particular method, but simply to present

the technical necessities and constraints of each method, as well as more general advantages and disadvantages. The list is not exhaustive as there are a multitude of ways that a weapon can be made inoperable or destroyed.

### **Burning**

Burning has been effectively used in countries such as Mali and Nicaragua. It is a simple and cheap way to destroy weapons successfully. The only materials necessary for this method would be some type of fuel (wood or coal) and a flammable substance to intensify the heat (gasoline for example). The only skill needed would be in stacking the firearms to maximize their destruction.



Weapons mixed with dry wood in preparation for burning

Mali, West Africa

Photo: Robin Poulton (UNIDIR)

Burning has the added advantage of making a political and psychological statement to the population by signifying the symbolic steps that are being taken toward peace. This could be especially salient for a country just emerging from a conflict to signify that the war is finally over and that the country is moving toward a future of peace. It is also a very visible way for those who may have voluntarily surrendered weapons to see that their weapons will not be used again.

However, one of the main disadvantages of burning is its ineffectiveness if there is not sufficient heat produced in the burning. Although, even if there is no visible damage to the firearm, it would probably be disabled enough to make firing the weapon dangerous or impossible. This could be overcome by re-burning these weapons or by disabling them further through other means

such as using a sledgehammer.

An additional consideration should be the fact that unless the country has a well-established steel industry, the scrap value of the burned arms would probably not offset the transportation costs. It is then best to either bury the scrap or construct some sort of peace monument.

### ***Advantages***

- Simple and cost-effective
- High psychological and political value

### ***Disadvantages***

- Not 100% effective in destroying the weapons
- Minimal value for resulting scrap
- Environmental concerns

### **Cutting**

Cutting has been widely used and can be done in a variety of ways. However, the various methods also produce numerous outcomes regarding effectiveness. More specifically, the slightly higher-tech methods of using either oxy-acetylene torches or plasma cutters over conventional saw blades leave far fewer questions that the disabled weapon will be used for parts. In general, when cutting small arms from handguns to assault rifles, the weapons are cut completely through their receivers. If a second cut is to be made, the weapons can be cut at the barrel near the chamber. Below are several ways to go about destroying small arms and light weapons through cutting.

### ***Oxy-Acetylene Torch***

Oxy-acetylene cutting is a proven method of destroying all types of weapons. The equipment is relatively simple to use, and person-

nel can be trained to use the torch, in one day. The equipment needed is available for lease or sale worldwide, and can be transported by helicopter, light airplane or light truck. Additionally, the torch is almost maintenance free and spare parts are easy to come by in almost every country.



Oxy-Acetylene Torch  
with Accessories

If used to make a cut through the receiver, the cut and congealed metal slag renders the weapon useless. It is possible that with these pieces a gunsmith might be able to construct one working weapon from several hundred

pieces, but the time and effort involved and danger to the user far outweigh any benefits of this undertaking. To be absolutely sure that the weapon is completely useless, a second cut could be made through the barrel near the chamber.

The only real disadvantage to this method is the number of weapons that can be destroyed in a given time. The time it takes will vary from weapon to weapon based on size. Operator skill and experience will also bear on the speed of destruction. A rough average for the number of weapons that could realistically be destroyed in an eight-hour day would be 300-400. Another disadvantage that may arise depending upon the environment and manner in which the destruction is being carried out (i.e. whether destruction is done by a mobile unit vs. a well-secured stationary site) would be the attractiveness



Representatives of El Salvador's Ministry of Defense destroying collected weapons using oxy-acetylene torches.

of the equipment to theft. This is a disadvantage to which all methods using any sort of machinery is susceptible.

#### **Advantages**

- Simple and requires little training
- Close to 100% effective in rendering weapon useless, especially if two cuts are made
- Easily maintained and transported

#### **Disadvantages**

- Time consuming if a large quantity weapons is to be destroyed
- Equipment may be a target for theft

#### **Plasma Cutter**

In equipment cost, a plasma cutter is more expensive than an oxy-acetylene torch. However, it can do the same job as an oxy-acetylene torch in about half the time and is easier to use, thus labor costs could be saved. This difference in labor cost and equipment cost would have to be calculated for the most cost efficient method. The plasma cutter also makes a much cleaner cut than an oxy-acetylene torch. Because this cleaner cut does not produce the same amount of slag, it may make the pieces more susceptible to repair or re-use. However, this should be of only slight concern, especially when double cuts can be made more efficiently with the plasma cutter.



The average cost of a plasma cutter appropriate for this type of

job is US\$2,000. It would require 220 volts of electrical current and could be used with a portable generator. A 5kWh generator costs approximately US\$800. Additionally, the cutter would require an air compressor.

### **Advantages**

- Simpler than oxy-acetylene torch and requires little training
- Close to 100% effective in rendering weapons useless, especially if two cuts are made
- Can do twice the work in the same amount of time

### **Disadvantages**

- Could be too expensive if for small quantities of weaponry
- Cleaner cut may increase risk of parts being re-used (only slight concern)
- Equipment may be a target for theft

### **Hydraulic Shears**

Numerous police forces around the world have used this method of destruction for collected or seized weapons. Cutting shears provide a simple and environmentally friendly way to very effectively destroy weapons of all sizes and types. Additionally, hydraulic shears could destroy thousands of weapons in one day.

While this method is simple and efficient, it may also be price-prohibitive. Shears can run in price from a few thousand dollars (US) to tens of thousands of dollars depending on the size of steel they can bend or cut and how fast they can do the job. The machinery needed can be bought new or used, and can also be custom designed to fit individual needs (mobile vs. stationary destruction). Although these machines can become quite expensive, they are rugged,



This particular type of shear is an alligator shear and would be the most logical choice for destroying weapons.

have a long life, are easily serviced, and can take advantage of low-cost labor due to their ease of use. Thus, hydraulic shears may be a worthwhile investment if a well-planned and sustained weapons collection and destruction program is to be implemented.

### **Advantages**

- Simple to use and requires little training
- Close to 100% effective in rendering the weapons useless
- Reliable and long-lived
- Large numbers of weapons can be destroyed

### **Disadvantages**

- Could be too expensive for small quantities of weapons
- Equipment may be target of theft

### **Other Cutting Methods**

There are of course numerous other “lower-tech” methods that could be used to destroy weapons such as hand saws. These methods would obviously not be practical for destroying more than a handful of weapons. Additionally, these methods could leave the cut pieces susceptible to re-use. This could be overcome with the additional use of a sledgehammer.

Advantages to these cutting methods are mobility, low cost and lack of attractiveness to thieves. If there were a collection program that were to move around a country or region, and expected to only collect a few weapons at each site, this might be a consideration.

### **Advantages**

- Very simple to use and inexpensive
- Mobile and not very susceptible to theft

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### ***Disadvantages***

- Labor intensive, only a handful of weapons can be destroyed at a time
- Not 100% effective in destroying weapons

### **Shredding**

Of all methods mentioned, shredding is the fastest and most effective method of destroying arms. A large shredder can literally destroy thousands of weapons per day, and there is absolutely no fear that any parts could be re-used. In developed countries such as the United States, Canada and Australia this is generally the final step in the destruction process. Additionally, shredder scrap metal can be recycled to recapture some of the costs of this method, although this may be minimal due to the lower quality of scrap produced.

The primary disadvantages to this method are the expense and availability of the requisite equipment. Even in developed countries that have established recycling facilities, where shredders of this type are generally found, there are only a few of these machines. The machines cost several million dollars (US). Smaller, but still very expensive, models are available. Thus, this method would only be cost-effective if many thousands of weapons were to be destroyed or if the country has a well-established recycling capability.

### ***Advantages***

- Simple to use
- 100% assurance of complete destruction
- Some costs can be recovered through recycling
- Can destroy thousands of weapons at a time

### ***Disadvantages***

- Extremely expensive equipment to buy if not already available

- in-country
- Not very portable
- Not cost-effective for quantities of weapons under several thousand

### **Crushing With Vehicles**

A fairly simple method to at least disable weapons is through the use of heavy vehicles. The most effective vehicles would be ones with tracks such as tanks or heavy construction vehicles. One would simply need to have the track pads removed, lay the weapons on a flat hard surface such as asphalt or concrete and run over the weapons with the vehicle several times. Reports from Canadian Army officials who used this method state that weapons were so mangled by the vehicles (tanks in this case) that the weapons were rendered completely useless. Likewise, if the weapons are laid against a curb or log, they could be bent or broken using any sort of heavy vehicle. Finally, front-end loaders could use their blades similarly to those of shears to bend or break weapons.



Crushing Weapons in Cambodia  
Photo: Natalie Pauwels (BICC)

A disadvantage to this method could be the lack of effectiveness. This could be overcome by having visual inspections conducted by competent officials to determine the number of runs required to destroy the weapons. Additionally, this could simply be an intermediate method to disable the weapons before complete destruction by some other method such as burning.

### ***Advantages***

- Simple to execute
- Requisite equipment widely available
- Fairly inexpensive

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- Hundreds of weapons can be destroyed in one day

### ***Disadvantages***

- Not 100% effective in destroying all weapons
- Difficult to do in remote, rural areas
- Not practical for wide-ranging mobile destruction plan

### **Other Methods**

There are of course numerous other methods that could be employed to either destroy or disable weapons. Examples are the use of sledgehammers, blast furnaces or various saws. The barrels of the weapons could also be simply plugged with concrete or metal welds. Additionally, there is any number of ingenious tools that could be fashioned from scrap metal to break or crush the weapons.

These methods have three main advantages. The first advantage is their mobility and simplicity. If a collection and destruction plan were to be carried out by a mobile unit moving through a region or country, most of this equipment could simply be placed in the bed of a pick up truck. The second advantage is cost. Except for saws, which may require special blades and several of them for replacement, the equipment needed is not cost-prohibitive. Finally, this equipment would not be as susceptible to theft as in the case of torches, plasma cutters or other such machinery.

The major disadvantages are the overall lack of effectiveness of these methods and the fact that they are slow and labor-intensive. As a result, only a handful of weapons could be handled at one time.

### **Ammunition and Explosives Destruction**

There are few options available for the destruction of ball ammunition and explosives, as compared with small arms and light weapons. Regarding ball ammunition, two basic methods exist depending on the amount to be destroyed. If there is only a small

amount to be destroyed, one could simply fire it normally into a backstop of some sort. For small or slightly larger amounts, or if a weapon suitable for expending the rounds is not available, ball ammunition can also be destroyed through burning. For very large amounts, destruction becomes more difficult without the aid of military ordnance professionals. Additionally, because the method would likely still be in the form of burning, there could be environmental concerns in such a large-scale burn.

Explosive ordnance destruction such as grenades, mines, mortar shells, etc. is somewhat more difficult and costly than that of ball ammunition. The easiest method is detonation, preferably soon after collection as the unreliable disposition of this sort of ordnance could pose large safety risks if transported and/or stored. In El Salvador, authorities dug several holes one meter deep and 50 cm wide for detonation. On other occasions, the explosives were used in conjunction with a construction project—if a road had to be widened or built, it was done with the assistance of collected explosives saving on construction costs and destroying the weapons.

### **Conclusions**

There are numerous ways in which small arms and light weapons can be destroyed. They range in cost and simplicity, and can suit any type of destruction program's needs be they small or mobile, very large collections or satisfying political and psychological concerns. The planners of a collection and destruction program must decide what the program's needs are, and how to satisfy those needs. There is also a lot of room for creativity. Because small arms and light weapons are only made of steel, wood and plastic, they lend themselves to all sorts of methods for destruction. Ammunition and explosives are limited in the methods for destruction, but as seen in the El Salvador example, not completely without creative or useful ideas.