

4.10 Disarmament

Contents

Summary	1
1. Module scope and objectives	1
1.1. References	2
2. Terms, definitions and abbreviations	2
3. Introduction	2
4. Guiding principles	4
4.1. Aim and objectives of disarmament	4
5. Operational risks and balanced disarmament	5
5.1. Operational risks	5
5.2. Balanced disarmament	5
6. Technical risks and hazards	6
6.1. Explosives hazards	7
6.2. Technical advice	7
7. Information collection and operational planning phase	7
7.1. Team selection and structure	8
7.2. Time-lines	8
7.3. Screening and individual eligibility criteria	9
7.4. Weapons survey	12
7.5. Risk assessment	12
7.6. DDR awareness activities	12
8. Weapons collection (or retrieval) phase	13
8.1. Static and mobile collection options	13
8.2. Encampment	13
8.3. Buffer zones and separation of forces	13
8.4. Pick-up points	14
8.5. Weapons and explosives safety	17
8.6. Static disarmament sites	18
8.7. Mobile collection points	19
8.8. Accounting and combatant registration	20
8.9. EOD support	20

9. Stockpile management phase	20
9.1. Stockpile security	21
9.2. Storage of weapons	22
9.3. Storage of ammunition and explosives	22
10. Destruction phase	23
10.1. Destruction of weapons	23
10.2. Destruction of ammunition and explosives	25
11. Sequential operations	25
Annex A (Normative): Terms, definitions and abbreviations	26
Annex B: Normative references	29
Annex C: Bibliography	30
Annex D (Informative): Explosives hazards	31
Appendix 1 to Annex D (Informative): Safety cards	32
Appendix 2 to Annex D (Informative): General safety policy	33
Appendix 3 to Annex D (Informative): Quality policy	34
Annex E (Informative): Technical adviser: Terms of reference	36
Annex F: Weapons survey basic information requirements	37
Annex G (Informative): Guide to risk management during disarmament operations	39
Annex H (Informative): Example of a combatant reporting card	42
Annex I (Informative): Schematic layout of a pick-up point	43
Annex J (Informative): Schematic layout of a weapons collection point	44
Annex K (Informative): Explosive ordnance disposal support	45
Annex L: Schematic layout of a disarmament site	48
Annex M: Weapons destruction techniques and technology	49
Endnotes	51

NOTE

Each IDDRS module is current with effect from the date shown on the cover page. As the IDDRS is periodically reviewed, users should consult the UN DDR Resource Centre web site for updates: <http://www.unddr.org>.

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4.10 Disarmament

Summary

Generally understood as the 'act of reducing or depriving of arms', disarmament is usually regarded as the first step of a disarmament, demobilization and reintegration (DDR) process. The removal of weapons, ammunition and explosives is a highly symbolic act in the ending of an individual's active role as a combatant. Disarmament also contributes to establishing a secure environment and paves the way for demobilization and reintegration to take place.

The disarmament component of a DDR programme needs to be comprehensive, effective, efficient and safe. It should be designed to reinforce countrywide security and be planned in coordination with wider peace-building and recovery efforts. The disarmament carried out within a DDR programme is only one aspect of a new national arms control management system, and should support future internal arms control and reduction measures (small arms and light weapons [SALW] control).

The disarmament component of a DDR programme should usually consist of four main phases: (1) information collection and operational planning; (2) weapons collection or retrieval operations; (3) stockpile management; and (4) destruction. The disarmament component of a DDR programme shall be shaped by four guiding principles: national sovereignty, armed violence reduction, safety and capacity development.

This IDDRS provides guidance on how to plan and implement effective disarmament within a wider DDR programme, including the operational methodology. To be most effective, this methodology should be included during the strategic, operational and detailed mission-planning phases of programme development. The technical threat and risks will have a major influence on the future success or failure of a programme, and therefore the appropriate expertise must be involved from the beginning. The financial costs of this operational methodology are low when compared with total DDR programme costs, yet they have the potential for high impact on the success of a DDR programme.

The handling of weapons, ammunition and explosives by unqualified or untrained individuals or groups will always result in danger, and therefore this IDDRS also examines the concepts of risk and hazards during disarmament operations.

The removal of weapons, ammunition and explosives is a highly symbolic act in the ending of an individual's active role as a combatant.

1. Module scope and objectives

This module establishes the guiding principles and operational methodology for the safe, effective and efficient planning and conduct of the disarmament component in support of a DDR programme or operation.

To be most effective, it is important that this methodology is included during the strategic, operational and detailed mission planning phases of programme development. Any

DDR programme faces many threats and risks, all of which will have a significant influence on the future success or failure of a programme, and therefore, the appropriate expertise must be involved from the beginning, to avoid as many of these risks/threats as possible. The financial costs of this operational methodology are low when compared with total DDR programme costs, yet they have a very powerful effect on the success of a DDR programme.

1.1. References

A list of normative references is given in Annex B. Normative references are important documents to which mention is made in this standard, and which form part of the provisions of this standard.

A list of informative references that provide valuable background information on disarmament operations in support of DDR programmes is given in Annex C in the form of a bibliography.

2. Terms, definitions and abbreviations

Annex A contains a list of terms, definitions and abbreviations used in this standard. A complete glossary of all the terms and definitions used in the series of integrated DDR standards (IDDRS) is given in IDDRS 1.20.

In the IDDRS series, the words ‘shall’, ‘should’ and ‘may’ are used to indicate the intended degree of compliance with the standards laid down. This use is consistent with the language used in International Organization for Standardization (ISO) standards and guidelines.

- “a) ‘shall’ is used to indicate requirements, methods or specifications, which are to be adopted in order to satisfy the standard in full.
- b) ‘should’ is used to indicate the preferred requirements, methods or specifications.
- c) ‘may’ is used to indicate a possible method or course of action.”

The term ‘national authority’ refers to the government department(s),¹ organization(s) or institution(s) in each country whose function it is to regulate, manage and coordinate DDR activities.

The term ‘disarmament’ refers to the collection, documentation, control and disposal of small arms, ammunition, explosives and light and heavy weapons of combatants, and often also of the civilian population. Disarmament should also include the development of responsible national arms management programmes.

3. Introduction

Disarmament is generally understood to be the ‘act of reducing or depriving of arms’, and as such is applicable to all weapons systems, ammunition and explosives, including nuclear, chemical, biological, radiological and conventional systems. This module, however, will only look at disarmament involving conventional weapon systems and ammunition, as it applies during DDR operations, programmes or activities.

The importance of comprehensive disarmament during DDR programmes cannot be overstated. The presence of easily accessible weapons poses a major threat, especially in a fragile post-conflict security environment, and undermines recovery and development.

The disarmament component of a DDR programme needs to be comprehensive, effective, efficient and safe. It should be specifically designed to respond and adapt to the security environment and be planned in coherence with wider peace-building and recovery efforts. Disarmament is primarily aimed at reducing or controlling the number of weapons held by combatants before demobilization. The surrendered weapons should be collected, registered, stored and then either destroyed or, by prior arrangement with key stakeholders, redistributed to the new government for use by the national security forces (e.g., police or military). However, the disarmament carried out within a DDR programme is only one aspect of a new national arms control management system, and should support future internal arms control and reduction measures (including SALW control). While the disarmament component of a DDR programme should initially focus on former combatants, future measures to deal with the control of legal and illegal civilian possession, national stockpiles and security force possession should also be examined at the appropriate time. These measures should not be put in place before the demobilization phase.

Disarmament is usually regarded as the first step of a DDR process, as the removal of weapons, ammunition and explosives is a highly symbolic act that signifies the ending of an individual's active role as a combatant. Disarmament is also essential to maintaining a secure environment in which demobilization and reintegration can take place as part of a long-term peace-building strategy.

The disarmament component of a DDR programme should usually consist of four main phases:

- information collection and operational planning;
- weapons collection or retrieval operations;²
- stockpile management;
- destruction.

Within each phase there are a number of recommended specific components, which are summarized in the following matrix:

SERIAL	PHASE	COMPONENTS
1.	Information collection and operational planning	<ul style="list-style-type: none"> ■ Team selection and structure ■ Eligibility criteria ■ Weapons survey ■ Risk assessment ■ DDR awareness (sensitization)
2.	Weapons collection or retrieval	<ul style="list-style-type: none"> ■ Pick-up points (PUPs) ■ Weapons collection points (WCPs) ■ Disarmament sites ■ Weapons registration and accounting ■ Explosive ordnance disposal (EOD) support
3.	Stockpile management	<ul style="list-style-type: none"> ■ Security ■ Weapons storage ■ Ammunition storage
4.	Destruction	<ul style="list-style-type: none"> ■ Weapons destruction ■ Ammunition destruction

This module provides the information necessary to plan and implement effective disarmament within a wider DDR programme. The handling of weapons, ammunition and explosives by unqualified or untrained individuals or groups will always result in danger, and therefore the module also examines the management of risks and hazards during disarmament operations.

4. Guiding principles

The disarmament component of a DDR programme shall be shaped by four guiding principles:

National governments have the right and responsibility to apply their own national standards to all disarmament operations on their territory, but should act in compliance with international arms control conventions and agreements.

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- *National sovereignty*: National governments have the right and responsibility to apply their own national standards to all disarmament operations on their territory, but should act in compliance with international arms control conventions and agreements. The primary responsibility for disarmament and weapons collection lies with the government of the affected state. The support and specialist knowledge of the United Nations (UN) is placed at the disposal of a national government or legitimate authority to ensure that disarmament decisions are made in accordance with acceptable regional and international arms control standards (also see IDDRS 3.30 on National Institutions for DDR);
- *Armed violence reduction*: The disarmament component of DDR is primarily aimed at reducing the capacity of individuals and groups to engage in armed violence. Its longer-term objectives should be to reduce the potential for a wider return to armed violence and conflict, thereby contributing to a secure environment;
 - *Safety*: The protection of people most at risk is a basic objective of disarmament programmes. The humanitarian principles of neutrality, impartiality and humanity shall always apply. A concept of ‘balanced disarmament’ should be applied at every opportunity (also see section 5.2, below);
- *Capacity development*: Building the capacity of state and non-state national bodies is essential to their empowerment and the effective, successful continuation of future disarmament programmes once DDR has come to an end. Emphasis should be placed on building national capacities to develop, maintain and apply appropriate standards for long-term SALW control measures (also see section 7, below, and IDDRS 3.30 on National Institutions for DDR).

The protection of people most at risk is a basic objective of disarmament programmes.

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4.1. Aim and objectives of disarmament

The overarching aim of disarmament within a DDR process is to reduce or control the number of weapons held by combatants before demobilization in order to build confidence in the peace process, increase security and prevent a return to conflict. Clear operational objectives should also be developed and agreed to. These may include:

- the reduction in the number of weapons possessed by, or available to, armed forces and groups;
- a reduction in actual, or the threat of, armed violence;
- zero, or at the very least minimal, casualties during the disarmament component;
- an improvement in the perception of human security within communities;
- the need to make a public connection between the availability of weapons and armed violence in society;
- the requirement to build community awareness of the problem and hence community solidarity;
- the reduction and disruption of the transfer and illicit trade of weapons within the DDR area of operations;
- the reduction of the open visibility of weapons in the community, and addressing the culture of weapons;
- the development of norms against the illegal use of weapons.

5. Operational risks and balanced disarmament

5.1. Operational risks

The operational risks to the disarmament component of the DDR programme shall be identified during the initial planning phase of the DDR programme. There are likely to be many operational risks, but the following are generally the most common:

- *Threats to the safety and security of DDR programme personnel (both UN and non-UN):* During the disarmament phase of the DDR process, staff are in direct contact with armed individuals, forces and groups.³ These may not necessarily comply with the Laws of Armed Conflict or Geneva Conventions, may be under the influence of drugs and narcotics, and may respond irrationally;
- *Lack of sustainability of the disarmament process:* The disarmament process shall not start unless the sustainability of funding and resources is guaranteed. Previous attempts to carry out disarmament operations with insufficient assets or funds have resulted in partial disarmament, a return to armed violence and conflict, and the failure of the entire DDR process.

5.2. Balanced disarmament

A major operational concept that must be decided on at the planning stage of the disarmament component is the phased sequencing (ordering over time) of arms collection operations. It is vital that the balance in the operational capability of warring factions remains unaffected by the disarmament process. The capability of warring factions will inevitably be reduced during the disarmament component, as that is one aim, but proportionality and the balance of power among these factions must be maintained.

This approach will:

- assist in preventing warring factions from taking advantage of a sudden change in their favour in the balance of military capability;
- ensure that the neutrality of the disarmament organization is not compromised;
- build trust and confidence in the process, as factions can monitor each other's disarmament, which is carried out simultaneously.

A mechanism should be developed to enable former warring factions to monitor or verify the disarmament process and the surrendered weapons of other groups. This will also increase confidence in the disarmament process.

6. Technical risks and hazards

In order to deal with potential technical threats during the disarmament component of DDR operations, and then to implement an appropriate response to such threats, it is necessary to understand the difference between risks and hazards. A hazard is defined as “a potential source of physical injury or damage to the health of people, or damage to property or the environment”, while a risk can be defined as “the combination of the probability of occurrence of a hazard and the severity of that hazard”.⁴ In terms of disarmament operations, many hazards are created by the presence of weapons, ammunition and explosives. While the level of risk is dependent on the knowledge and training of the collection teams, the physical condition of the weapons, ammunition and explosives and the environment in which they have been stored have a major effect on that risk.

A formal risk assessment shall be conducted before the start of the collection phase of the disarmament component in order to ensure the safest possible working environment. This risk assessment should identify the tolerable risk (the risk accepted by society in a given context based on current values), and then identify the necessary protective measures to achieve a residual risk (the risk remaining after protective measures have been taken). In developing this ‘safe’ working environment, it must be acknowledged that there can be no absolute safety, and that many of the activities carried out during weapons collection operations have a high risk associated with them. However, national authorities, international organizations and non-governmental organizations (NGOs) must try to achieve the highest possible levels of safety.

“Safety is achieved by reducing risk to tolerable levels. Tolerable risk is determined by the search for an optimal balance between the ideal of absolute safety and the demands to be met by the product, process or service, and factors such as benefit to the user, suitability for purpose, cost effectiveness, and conventions of the society concerned. It follows that there is a need to review continually the tolerable level, in particular when developments, both in technology and in knowledge, can lead to economically feasible improvements to attain the minimum risk compatible with the use of the product, process or service.”⁵

The factors to be considered in order to achieve tolerable risk include the following:

- the selection of equipment with inherently safe design;
- the development of work practices that contribute to risk reduction;
- risk education as part of a DDR awareness campaign;
- sound and effective training;
- sound management and supervision;
- appropriate personal protective equipment.

Society is increasing the pressure on organizations to reduce the risk of illness, accidents and incidents in the workplace. This includes pressure to ensure equality and uniformity of treatment for employees, regardless of the location of the workplace. The international community should not be exempt from this pressure during the weapons collection or retrieval phase of disarmament operations.

6.1. Explosives hazards

There are major explosives safety issues involved in any disarmament operation, ranging from the physical condition of the ammunition that will be surrendered to the degree of knowledge and training of the local population. The major problem areas are discussed in Annex D.

6.2. Technical advice

The complexity of the dangers involved in dealing with unstable ammunition and explosives means that the provision of sound advice is a highly technical task. Military forces deployed in support of peace support operations sponsored by the UN or regional organizations do not necessarily have the capability to provide this advice; i.e., their skills are not necessarily adequate to provide complete technical support to disarmament operations. For example, an infantry- or engineer-trained soldier may have solid skills in weapons and explosives use and handling, but will generally have insufficient training in ammunition and explosive safety matters. This module aims to establish the generic training and qualification requirements for the provision of this essential advice. Recommended terms of reference for the disarmament component technical adviser (TA) are given in Annex E.

The complexity of the dangers involved in dealing with unstable ammunition and explosives means that the provision of sound advice is a highly technical task.

7. Information collection and operational planning phase

In order to implement effective disarmament programmes, meticulous planning is required. The initial stages of the planning phase will depend heavily on accurate information from all the armed forces and groups to be disarmed, and rely on close liaison with all the stakeholders. The disarmament component is the first stage of the entire DDR process, and operational decisions made at this stage will have an impact on the whole DDR process. Disarmament, therefore, cannot be planned in isolation from the rest of the DDR programme. Decisions made during disarmament planning on, for example, encampment, will influence decisions during demobilization planning, as the camps could possibly have other uses (also see IDDRS 3.10 on Integrated DDR Planning: Processes and Structures).

Close liaison with the leaders of the warring factions is of particular importance. They will be the UN's link, via the national body responsible for DDR ownership (normally known as the national commission on DDR — NCDDR), to the armed forces and groups themselves. Through these leaders, the sizes and locations of the armed forces and groups, as well as the number and type of weapons held and the nature of any groups associated with these armed forces and groups, may be assessed. It is, however, important not to rely solely on this source of information as military commanders may give false or misleading information about the size of their force in order to achieve political advantage. Military observers (MILOBs) and UN police should cooperate closely in all information-gathering.

It is vital to determine the extent of the capability needed to carry out a disarmament component, and then to compare this with a realistic appraisal of the current capacity available to deliver it. Requests for further assistance shall be made as early as possible in the planning stage (also see IDDRS 4.40 on UN Military Roles and Responsibilities and IDDRS 4.50 on UN Police Roles and Responsibilities).

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The operational planning for the weapons collection phase of the disarmament component should be carried out at the same time as other political and socio-economic activities that may be taking place, including planning for reintegration (e.g., labour market surveys). The practical success of a disarmament component will be increased by the adoption of an integrated approach from the start of the DDR operation.

Generally during the disarmament process, weapons, ammunition and explosives will be collected as ex-combatants arrive at agreed collection points, or report to a mobile collection team. Weapons collection as part of a wider SALW control and reduction initiative, often after the initial DDR programme, is a more complex process, in which a range of incentives and options are necessary to support the collection phase; details of this can be found in IDDRS 4.11 on SALW Control, Security and Development and the South Eastern Europe Regional Micro-Disarmament Standards and Guidelines (SEE RMDS/G) series of regional standards, which are the standard guidelines used in this module.⁶

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7.1. Team selection and structure

The detailed structure and make-up of the disarmament team will be heavily influenced by the context, and by the organizational structure and capability of the authority that is responsible for disarmament. Nevertheless, an appropriately qualified TA shall be appointed to the disarmament component planning team during the planning phase (see section 6.2).

Also, detailed terms of reference shall be established for all technical personnel, including locally employed support staff, in order that responsibilities are clearly defined (also see IDDRS 3.42 on Personnel and Staffing).

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The capacity and capability of the local authorities and civilian community shall be determined in order to:

- establish the level of support they are initially capable of providing to the disarmament component;
- establish the amount of training and development necessary to provide the local authority with a sustainable capacity for the future.

The national authority should also be advised on the development of national standing operating procedures (SOPs) for the safe, effective and efficient conduct of the disarmament component of the DDR programme.

7.2. Time-lines

The time-lines for the implementation of any disarmament programme should be developed by taking the following factors into account:

- the availability of accurate information about the size of the armed forces and groups that are to be disarmed;
- the location of the armed forces' and groups' units;
- the number, type and location of their weapons;
- the nature, processing capacity and location of WCPs, PUPs and disarmament sites;
- the time it takes for a MILOB to process each ex-combatant (this could be anywhere from 15 to 20 minutes per person). A rehearsal should be carried out before combatants arrive to determine how long individual weapons collection and accounting will take.

Depending on the nature of the conflict and other political and social conditions, a well-planned and well-implemented disarmament component may see large numbers of ex-combatants arriving for disarmament during the early stage of the programme. The numbers of combatants reporting for disarmament may drop in the middle stages of the process, but it is best to expect and plan for a late increase in such numbers. Late arrivals may turn up because of improved confidence in the peace process in the country or because some combatants and weapons have been held back until the very last stages of disarmament as a self-protection measure.

The minimum possible time should be taken to process ex-combatants through the disarmament and demobilization phase and then back into the community. This speed is necessary to prevent DDR participants from becoming comfortable in residential camps and becoming unwilling to leave.

7.3. Screening and individual eligibility criteria

7.3.1. General

Establishing rigorous, unambiguous and transparent criteria that allow people to participate in DDR, particularly in contexts dominated by irregular or non-state armed groups, is vital to achieving the objectives of DDR. Selection criteria must be carefully designed and agreed to by all parties, and screening processes must be ready for use in the disarmament and demobilization stages.

Disarmament is usually linked to eligibility to enter the DDR process; however, lessons learned from previous programmes suggest that entry into a DDR programme should not depend on participants actually possessing weapons. Participants may include individuals in support and non-combat roles or those associated with armed forces and groups. Because they are unarmed, these individuals may not be eligible for disarmament, but they will be eligible for demobilization and/or reintegration.

Integrated DDR should be adapted to meet the needs of male and female adult combatants; youth and children associated with armed forces and groups; ex-combatants with disabilities and chronic illnesses; those working in non-combat roles; and dependants (also see IDDRS 2.30 on Participants, Beneficiaries and Partners).

DDR programmes are aimed at combatants and people associated with armed forces and groups. These individuals are often quite diverse, having participated in the conflict within rebel armed groups and armed gangs, as mercenaries, as members of organized armed forces, etc. Operational and implementation strategies should be adapted to provide the best assistance to different participant groups (e.g., separate encampment and specialized demobilization and reintegration assistance for children, appropriate medical support for those chronically ill and those with disabilities, etc.) (also see IDDRS 5.10 on Women, Gender and DDR, IDDRS 5.20 on Youth and DDR, IDDRS 5.30 on Children and DDR, IDDRS 5.60 on HIV/AIDS and DDR and IDDRS 5.70 on Health and DDR).

The screening process is used to confirm whether or not individuals meet the qualification or 'eligibility' criteria for entering the DDR programme. Screening methods and data storage and interpretation must be standardized and applied equally in all disarmament sites. Close cooperation with the leadership of armed forces and groups, civil society, local police and national DDR-related bodies, and a well-conducted public information and sensitization campaign, are essential tools to ensure that only qualified combatants and those associated with the armed forces and groups participate in a DDR programme (also see IDDRS 4.60 on Public Information and Strategic Communication in Support of DDR).

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Eligibility criteria are usually shaped by particular norms and practical factors. Where they exist, peace agreements determine who is eligible for DDR and define DDR participants in terms of their military affiliation. For individual eligibility, screening is also carried out in order to ensure the inclusion of marginalized or 'invisible' groups. When DDR is implemented without a political agreement, there is a heavier emphasis on proof of individual combatant status, rather than affiliation with an armed force or group.

In general, for UN-mandated operations, the screening of combatants at the disarmament phase is carried out by UN military personnel (normally MILOBs). MILOBs should be supported by specialist civilian disarmament staff and military staff who provide both security and specialized technical advice on all aspects of disarmament.

7.3.2. Local advisers

Local advisers (social workers, reliable members of the community such as members of women's peace groups, religious organizations or established NGOs), who know the local languages, customs and history, should also be recruited and trained to assist in the screening process. Specific emphasis should be placed on the importance of confidentiality when dealing with local advisers.

7.3.3. Aim and objectives of screening

The fundamental aim of disarmament screening is to ensure that the only recipients of DDR-specific assistance are those groups that meet previously agreed criteria. It is important that non-combatants, petty criminals or civilians in possession of illicit weapons do not enter the programme under false pretences, although mechanisms to deal with these individuals should be developed as part of the wider arms control and reduction measures.

The screening process should also be designed to prevent combatants from 'double-dipping'.

The screening process should also be designed to prevent combatants from 'double-dipping' by registering more than once to

gain more benefits, and should make it difficult for commanders to exploit the process by entering their friends and family. Screening may include biometric registration (e.g., iris scan, finger printing), or additional tests for doubtful cases, such as knowledge of weapons, drill, specific battle events or the command structure of the armed force or group in question (also see IDDRS 4.20 on Demobilization).

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7.3.4. Inclusivity

Non-discrimination, and fair and equitable treatment are core principles in both the design and implementation of integrated DDR. This means that individuals shall not be discriminated against on the basis of sex, age, race, religion, nationality, ethnic origin, political opinion, or other personal characteristic or associations. The principle of non-discrimination is particularly important when establishing eligibility criteria for entry into DDR programmes. On the basis of their particular needs, ex-combatants should have access to the same opportunities/benefits regardless of which armed force/group or political faction they fought with.

It is likely that there will be a need to neutralize potential 'spoilers', e.g., by negotiating 'special packages' for commanders in order to secure their buy-in to the DDR process and to ensure that they allow combatants to join the process. This political compromise should be carefully negotiated on a case-by-case basis.

7.3.5. Non-weapons-holders

The surrender of a weapon should not be the single qualifying criterion for an individual to participate in a DDR programme. This practice may require additional rules and safeguards to be established to prevent fraudulent exploitation of the programme. It is important to be cautiously flexible, however, as there is evidence that women associated with armed forces and groups in supporting roles are often left out of DDR processes because they have no weapons to hand in; many accounts from the field have shown that commanders remove weapons from women and give them to male non-combatants for personal financial or political gain.

While eligibility screening is a useful method to protect female combatants and encourage them to enter the process, plans shall be devised to allow access for women associated with armed groups and forces who do not carry weapons, as they are entitled to the benefits of the DDR programme. Children shall under no circumstances be expected to submit a weapon or prove their knowledge of weapons-handling in order to be released from a fighting force (also see IDDRS 5.10 on Women, Gender and DDR, IDDRS 5.20 on Youth and DDR and IDDRS 5.30 on Children and DDR).

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7.3.6. Screening methodology

An independent and neutral assessment of the strength, profile, deployment, arms-to-combatant ratio, and number of non-combatants associated with armed forces and groups shall be carried out as part of the DDR planning process (also see IDDRS 3.20 on DDR Programme Design and IDDRS 4.30 on Social and Economic Reintegration).⁷ Provisions for this operational assessment may be included in the political agreement authorizing DDR to take place. If it is not possible to conduct an independent assessment, parties to the conflict should be required, through the peace agreement, to provide DDR planners with verifiable lists of names of combatants and associates in non-combat roles as early as possible.

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Detailed cross-examination of DDR candidates' knowledge of key battles, commanders and armed force/group structure can be used to confirm eligibility. Yet this will only be effective if knowledgeable local staff are available to assist with this task. Female staff should be included to screen female combatants who may otherwise feel too intimidated to come forward.

Other options to assess eligibility may include:

- a language and culture test for foreign combatants;
- for combatants claiming to have taken part in active combat, a weapons procedures test, which will identify their familiarity with, and ability to handle, weapons. Although members of armed groups and militias may not have received formal training to military standards, they should be able to demonstrate an understanding of how to use the weapon. This test should be balanced against others to identify combatant status. (Children and women with weapons should be disarmed, but should not be required to demonstrate their capacity to use a weapon or prove familiarity with weaponry to be admitted to the DDR programme; see IDDRS 5.10 on Women, Gender and DDR and IDDRS 5.30 on Children and DDR);
- for local militias (i.e., armed groups that did not travel outside their communities of origin), community verification, which may also be considered as a method to determine combatant status. However, steps should be taken to protect community verifiers in highly politicized and violent environments. Verification should be carried out by both female and male community members to ensure that all women (and girls) in armed groups and forces are accounted for.

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7.4. Weapons survey

An accurate and detailed weapons survey is essential to draw up effective and safe plans for the disarmament component of a DDR programme. Sufficient data on the number and type of weapons, ammunition and explosives that can be expected to be recovered are essential, and data shall be updated and distributed to those involved as operational circumstances change and develop. A weapons survey allows an accurate definition of the extent of the

disarmament task, allowing for planning of the collection or retrieval process, and future storage and destruction requirements.

The more accurate and verifiable the initial data regarding the specifically identified groups participating in the conflict, the better will be the capacity of the UN to make appropriate plans to meet the aims of the disarm-

An accurate and detailed weapons survey is essential to draw up effective and safe plans for the disarmament component of a DDR programme.

ament programme. Sufficient time should be given to information collection and analysis at the planning stage before the finalization of any formal peace agreement. Once sufficient reliable information has been gathered, collaborative plans can be drawn up by the NCDDR and UN DDR unit outlining the intended locations and site requirements for disarmament operations, the logistic and staffing needs required to carry out the disarmament operation, and a timetable for operations.

There is a range of methodologies available for carrying out a weapons survey, from the traditional military J2 intelligence cycle⁸ to the social science research-based SALW Survey developed for UNDP by the Small Arms Survey and the South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms (SEESAC).⁹ If a demining programme is taking place at the same time, then information from the general mine action assessment and landmine impact survey may also provide valuable information. The basic information requirements for a weapons survey are set out in Annex F.

7.5. Risk assessment

A detailed risk assessment shall be carried out together with a formal threat analysis for the disarmament component. ISO Guide 51 provides useful information on the concept of risk management, and this has been adopted in Annex G to apply to the disarmament component of DDR.

7.6. DDR awareness activities

The early and ongoing sensitization of the armed forces and groups to the planned collection process are essential to the removal of weapons. Indeed, public awareness and sensitization campaigns will have a strong influence on the success of the entire DDR operation.

A professional DDR awareness campaign for the weapons collection component of the disarmament operation shall be conducted (also see IDDRS 4.60 on Public Information and Strategic Communication in Support of DDR and the SALW Awareness Support Pack 2005 [SASP 2]). Well before the collection phase begins, in addition to sensitization, there should be an increase in the levels of contact and coordination between representatives of the armed forces and groups and the disarmament component team. As operational plans for the collection phase are being further defined, additional information should be distributed in the build-up to the launch of the collection phase.

To further consolidate disarmament messages, sensitization should continue throughout the lifetime of the disarmament phase, using all available means to repeat daily the operational details. Furthermore, during ongoing operations, daily feedback on progress towards the aim of the disarmament programme should be disseminated, if at all possible, to help reassure stakeholders that the number of weapons is indeed being reduced, and that the reduction is balanced among former warring factions.

Safety cards shall be prepared, translated, printed and issued to the local community before any collection or amnesty programme (see Appendix 1 to Annex D). These safety cards provide low-level technical advice to the local population that can be followed without any specialist tools and equipment. Distribution may be difficult in some situations, and other ways of distributing this advice should be considered, such as radio, during the awareness-raising process.

8. Weapons collection (or retrieval) phase

8.1. Static and mobile collection options

Static or site-based disarmament uses specifically designed disarmament sites to carry out the disarmament operation. These require detailed planning and significant organization, and rely on the coordination of a range of implementing partners. The establishment and management of disarmament sites should be specifically included in the peace agreement to ensure that former warring factions agree and are aware that they have a responsibility under the peace agreement to proceed to such sites.

Members of armed forces and groups will usually be met at a PUP before moving to the disarmament sites, and the administrative and safety processes then begin at the PUP. There are similarities between procedures at the PUP and those carried out at a mobile collection point (MCP), but the two activities are different processes and should not be confused. Members of armed forces and groups that report to a PUP will then be moved to a disarmament site, while those who enter through the MCP route will be directed to make their way to the demobilization site.

8.2. Encampment

The advantages and disadvantages of encampment during the disarmament and demobilization components of a DDR programme is still an area of major discussion within the DDR community. There have been some examples of disarmament initiatives, usually when combatants had to wait for long periods before being transported to their homes for resettlement, which took place at residential camps. Recently, such cases have been rare, and it is now more usual to reach out to armed forces and groups through DDR information and sensitization campaigns over a considerable period. This happens before groups are assembled by their faction leader and brought to the D1 site for non-residential disarmament, and before an immediate and short residential demobilization period at a demobilization camp begins. For further detailed information on encampment, refer to IDDRS 4.20 on Demobilization.

4.20 ◀▶

8.3. Buffer zones and separation of forces

The initial operational task of the disarmament phase, if it has not been done as part of the peace negotiation process, should be the establishment of 'buffer zones' as a means of sepa-

Weapons to be incinerated by the head of state in an official disarmament ceremony, Bossangoa, Central African Republic, December 2004. Photo: M. Nzengou, UNDP/Bangui



rating warring factions. This will reduce the risks of contact between such factions during the disarmament process, resulting in:

- a reduction of the risk of a further outbreak of conflict;
- improved safety and security for the DDR team during the DDR process.

The buffer zones shall be patrolled and observed by UN forces during the disarmament phase, and buffer zones shall be clearly identified and agreed to by the warring factions. Consideration should be given to the inclusion of liaison officers from the warring factions with the UN forces patrolling and observing the buffer zones, as this will be an important confidence-building measure.

Secure corridors should be identified, agreed to and then patrolled before the movement of combatants to the PUPs or disarmament sites.

8.4. Pick-up points¹⁰

A variety of methods may be used to gather combatants together for the purpose of entering a DDR initiative, all of which require significant planning, but the most common is the use of PUPs. These are locations pre-selected and agreed to by armed forces and group leaders and the UN mission military command. They are selected because of their convenience, security and accessibility for all parties. The time, date, place and conditions for entering the disarmament process should be negotiated by commanders, the NCDDR and the DDR unit.

The role of PUPs is to concentrate combatants into a safe location, prior to a controlled and supervised move to the disarmament sites. Combatants often need to be moved from

rural locations, and since many armed forces and groups will not have adequate transport, PUPs should be situated close to their positions. They shall not be located in or near civilian areas such as villages, towns or cities.

All combatants should be informed, through the information and sensitization programme, of:

- the time and date to report;
- the location to report to;
- appropriate weapons safety measures;
- the level of UN or military security to expect on arrival.

A card should be used to inform individual combatants about the reporting process they will be expected to follow. The card shall be translated into the local language(s); an example is given in Annex H.

Once the combatants have arrived at the designated PUP, they will be met by UN military representatives, who shall arrange their transportation to the disarmament site. This first meeting of the combatants with UN staff shall be considered a high-risk situation, and all combatants shall be considered to be potentially dangerous until they are disarmed. A schematic layout of a PUP is provided in Annex I.

8.4.1. Organization of a PUP

The PUP should be secured and staffed by representatives of the main stakeholders. Personnel numbers will be dependent on the expected numbers of participants, but the following will be required:

- MILOBs (male and female);
- a UN military security team (for area protection);
- civilian DDR technical staff;
- local staff from the NCDDR;
- specialist staff (such as child protection officers);
- NGO representatives.

There should be as few personnel at the PUP as possible, given the inherent security and explosive safety risks involved. The officer in charge at each PUP may, in agreement with the senior DDR officer and NCDDR representative, also allow additional NGO staff and independent representatives of the international community access to the sites for the purposes of transparency and verification. This should be at their own risk.

8.4.2. Activities at the PUP

The combatants may be either completely disarmed at the PUP (see section 8.7 for mobile collection procedures), or may keep their weapons during movement to the disarmament site. In such a case, they should be persuaded, if possible, to surrender their ammunition (see section 8.5 for safety measures). The issue of weapons surrender at the PUP will be either a requirement of the peace agreement, or, more usually, a matter of negotiation between the combatants and the PUP commander.

The following activities should occur at the PUP:

- personnel meet combatants outside the PUP at clearly marked waiting area;
- personnel deliver a PUP briefing, explaining what will happen at the site;

- personnel check that weapons are clear of ammunition and made safe, ensuring that magazines are removed;
- MILOBs screen combatants to identify those carrying ammunition and explosives. These individuals should be immediately moved to the ammunition area in the WCP (see section 8.5);
- personnel conduct a clothing and baggage search of all combatants;
- combatants move to the PUP and have their weapons and safe ammunition re-screened by MILOBs;
- combatants with eligible weapons and safe ammunition pass through the MILOB screening area and to the transport area, before moving to the disarmament site;
- combatants move to the disarmament site. The UN shall be responsible for ensuring the protection and physical security of combatants during movement from the PUP.

8.4.3. Non-eligible individuals

Those individuals who do not meet the eligibility criteria for entry into the DDR programme (see section 7.3) should be excluded from the DDR programme, and if possible transported away from the PUP.

It is usual in DDR programmes that individuals with defective weapons have these retained by the MILOBs, but, depending on the eligibility criteria, they may not be allowed to enter the programme. They are given receipt documentation for the weapon in return, which shows full details of the ineligible weapon handed over, which may be used in any appeals process at a later date.

In the past, combatants have been allowed to enter a programme if they can submit the required amount of ammunition. This system is open to abuse, however, as ammunition is easy to hand out to non-combatant supporters, who can then enter a programme for the personal or political gain of the one who gave them the ammunition. The handing over of ammunition, unless it is also a self-contained system (such as mines, grenades, surface-to-air missiles or certain anti-tank rocket launchers), should therefore not be a sufficient criterion for entry. Individuals who only hand over small arms ammunition should have this ammunition retained by the MILOBs, but should not necessarily be allowed to enter the DDR programme. They should be given receipt documentation, which shows full details of the ammunition handed over, but should be subjected to other forms of verification (such as interviews) to qualify to enter the programme, either then or at a later date. The EOD team or TA should advise on whether the ammunition type presents a similar risk to that of a self-contained unit, and should therefore qualify as a weapon (e.g., a high-explosive hand grenade).

8.4.4. Special cases

To attend to the many different needs of those who do not fit a 'classic' combatant profile (i.e., male, adult and able-bodied), the PUP team should be prepared to manage special cases before transporting them to further sites. This is the reason for the multi-skilled organization of the PUP team. The PUP shall therefore be prepared to:

- gather wounded and disabled combatants, women associated with armed forces and groups, children associated with armed forces and groups and dependants outside the PUP;
- all these should be allowed to enter the DDR process and should follow the route described in section 8.4.2, although they should also be screened and then accompanied

by gender and child protection officers, medical staff or NGO representatives, as appropriate, in order to ensure that special needs are taken into account during the process.

These groups will require transportation to interim care centres (children), internment sites (foreigners) or female-only sites (if applicable). Care should be taken to separate women from men at all times to prevent intimidation. Chronically ill and disabled individuals who are eligible to enter a DDR programme may be transported straight to demobilization sites, where sufficient medical care can be given. They may complete their disarmament forms with a MILOB at the medical screening facility at the demobilization site.

8.5. Weapons and explosives safety

The organization responsible for the implementation of the disarmament component shall ensure that it fulfils its 'duty of care' in terms of the safety of the local civil population. This 'duty of care' should be fulfilled by:

The organization responsible for the implementation of the disarmament component shall ensure that it fulfils its 'duty of care' in terms of the safety of the local civil population.

- ensuring that the physical layout of WCPs within disarmament sites shall be, as far as possible, in accordance with the plan shown in Annex J;
- developing, printing and issuing safety cards for timely distribution to the local population in the designated area (see section 7.6);
- the deployment of appropriately qualified and experienced staff to each WCP to: (1) advise on explosive safety; (2) certify ammunition and explosives as 'safe to move'; (3) conduct render safe procedures on unsafe ammunition; and (4) advise on 'safety distances' during the collection process. Supporting EOD teams should usually provide these staff (see Annex J).



Disarmament, Liberia, April 2004. Photo: E. Kanalstein, UNMIL

8.5.1. Activities at the weapons collection point

The WCP team should perform the following actions at the WCP site before combatants move further through the DDR process:

- a WCP safety briefing is conducted;
- a clothing and baggage search of all combatants is conducted (this may be omitted for those individuals at a PUP);
- combatants enter the screening area where MILOBs identify those combatants with ammunition and explosives. These combatants are directed to the 'ammunition in' point, while those with only weapons move to the 'weapons in' point;
- EOD and ammunition specialists examine the ammunition and explosives. Unsafe ammunition is identified for immediate destruction. Safe ammunition should be moved to the ammunition storage area. The combatant then moves to the 'weapon in' point;
- the combatant surrenders his/her weapon in return for the appropriate documentation;
- ex-combatants are moved to the demobilization site.¹¹

The above procedures need to be changed slightly if the WCP is part of a PUP. Then the WCP team shall attempt to take custody of all ammunition and explosives from combatants and provide them with a receipt document that shows full details of the ammunition surrendered. If combatants refuse to surrender their ammunition, then the EOD representative or TA should ensure that it is 'safe to move'. Once the WCP team is satisfied that all ammunition has been surrendered or is 'safe to move', the combatants may then enter the main disarmament process again. Negotiation and diplomatic skills may be necessary to ensure the surrender of 'unsafe' ammunition, but it shall be made clear to the combatant — and armed group commander — that the particular individual will not be allowed to enter the process, purely for safety reasons, and the options should be clearly explained.

If disarmament is completed at the PUP, all weapons collected may be put beyond immediate use (by the separation of components) by military personnel at this point, with weapons' receipts (chits) being issued to each combatant who surrendered arms or ammunition. Similarly, each combatant may also complete a disarmament registration documentation form at this point.

8.6. Static disarmament sites

Since members of armed factions might be geographically spread out and difficult to access, the importance of widespread sensitization followed by the controlled arrival of combatants at disarmament sites into the DDR programme, according to specific and controlled timelines, cannot be over-emphasized.

Responsibility for the arrival of combatants at the first entry point of the DDR programme rests firmly with the armed faction leadership, with control passing to the UN peacekeeping mission upon entry to the DDR process. Site-based disarmament relies on the influence of military leaders and chains of command that were established during the conflict, and is therefore considered to be a fairly coercive approach. A schematic layout of a disarmament site is given in Annex L.

A local representative, who has the trust of the community as a whole, shall be present as part of the disarmament collection team at every disarmament site.

Static disarmament generally follows this process:

- widespread sensitization of armed groups and forces;
- agreement of time-lines and the strategy for the controlled arrival of armed groups;
- the arrival of combatants at specifically agreed PUPs or RVs;
- movement of combatants to the designated disarmament site;
- weapons collection at the WCP;
- immediate onward passage of combatants to a residential demobilization camp for the completion of the demobilization components of the DDR programme.

A local representative, who has the trust of the community as a whole, shall be present as part of the disarmament collection team at every disarmament site. The local representative's duties should include liaison, translation, mobilization of local resources and local media operations.

8.6.1. Activities at disarmament sites

Disarmament sites are staffed by a similar team to that needed for PUPs, although on a larger scale. Once members of armed forces and groups arrive, the disarmament team performs the following actions to disarm them:

- combatants that arrive as individuals, groups or from the PUP report to a holding area inside the disarmament site;
- a further clothing and baggage search of all combatants is carried out (for those from this PUP, this may be omitted at the discretion of the disarmament site commander);
- if weapons, ammunition and explosives have not been removed at the PUP, combatants are moved to the WCP;
- the ex-combatants enter the screening area, where MILOBs fill in a disarmament form for combatants with weapons and ammunition documentation;
- ex-combatants then wait for transport (if necessary) to the demobilization camp.

Disarmament documentation, except for weapons and ammunition receipts, should be completed in triplicate, with one copy remaining with the combatant, the second passed to the NCDDR database and the final one held at the UN mission DDR office. The UN copy should be used to collate records on a central DDR electronic database, which will allow for programme analysis, the production of ID cards, and the monitoring and evaluation of the ongoing DDR programme.

8.6.2. Foreign combatants

When foreign combatants are to be repatriated for demobilization at home after disarmament, a temporary holding facility capable of meeting basic humanitarian needs may be set up. The best practice is to locate this within the perimeter of the nearest UN military facility to the border crossing, which minimizes the need for additional support infrastructure or security requirements. Ex-combatants awaiting repatriation should remain in these transit areas until they are formally handed over to the appropriate government official at the national border in the receiving country.

8.7. Mobile collection points

In certain circumstances, the establishment of a fixed disarmament site may be inappropriate. In such cases, an option is the use of mobile collection points (MCPs), which usually

consist of a group of modified road vehicles and have the advantage of decreased logistic outlay, flexibility, economy, and rapid deployment and assembly.

MCPs permit a more rapid response than site-based disarmament, and can be used when weapons are concentrated in a specific geographical area or when moving collected arms or assembling scattered combatants would be difficult. They may be the most appropriate method to register and disarm irregular forces that have not been part of, or have yet to enter, a formal DDR programme.

The processes used within a MCP should be adapted to suit local circumstances from those of the PUP and WCP (see sections 8.4 and 8.5, above).

If the local political or security circumstances change dramatically during a mobile disarmament process, all staff as well as the combatants should be moved to a safer location in order to complete the minimum required process. It will then become a command decision whether to continue disarmament operations or to postpone these until more suitable circumstances arise.

8.8. Accounting and combatant registration

Data collected from weapons during the disarmament process should provide sufficient recorded information to correctly account for the weapons and ammunition throughout the DDR programme, as well as providing the basis for each individual's demobilization process.

A computerized management information system is essential for:

- the registration of the combatant (i.e., personal, family and educational profile; ID card production; transitional allowance and microcredit control; capacity-building requirement, etc.);
- the stockpile management of the weapons and ammunition, from collection, through storage to destruction and/or redistribution.

UNDP's Bureau for Crisis Prevention and Recovery (BCPR) has developed software to deal with combatant registration and the management of weapons and ammunition within a DDR programme. It is called the *Disarmament, Demobilization, Reintegration and SALW Control MIS* (DREAM) and is available free of charge from UNDP.

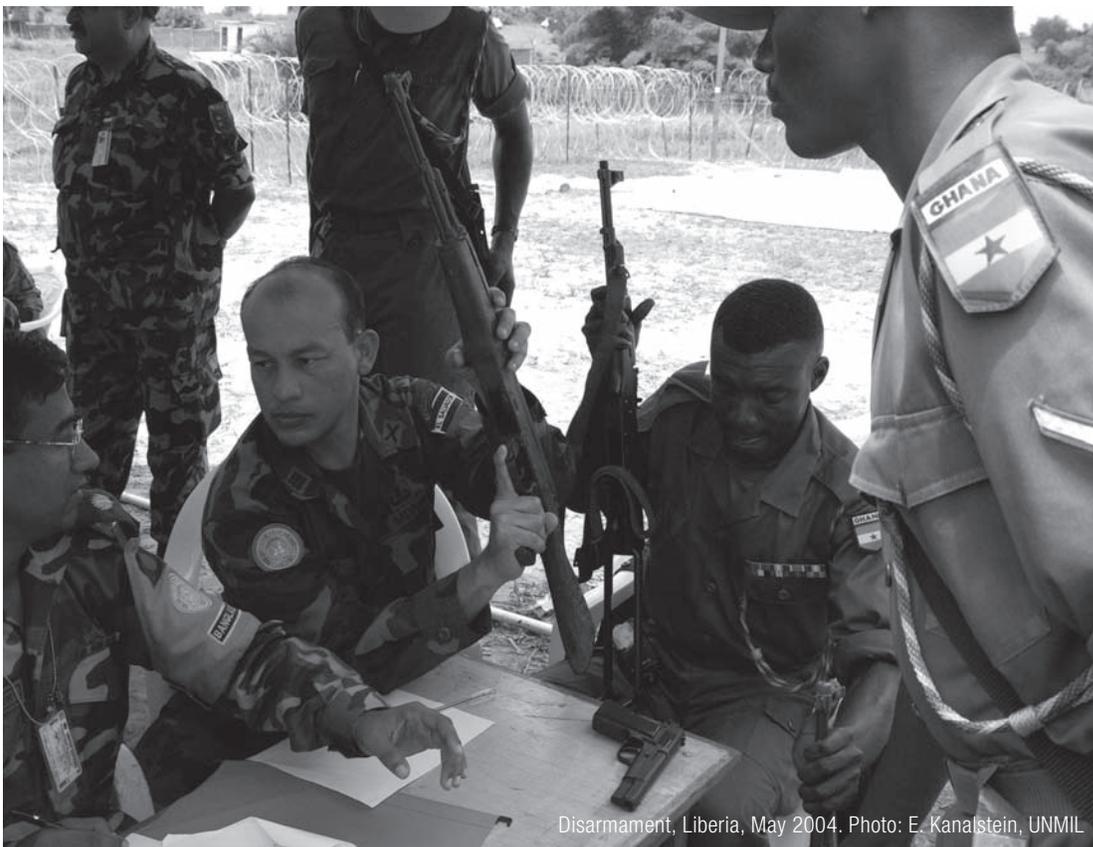
8.9. EOD support

An immediate EOD response capability shall be established, as described in Annex K. Experience has shown that this capability will be required during the initial collection phase until all disarmament personnel have been trained and have practised the necessary procedures.

9. Stockpile management phase

The term 'stockpile management' can be defined as "those procedures and activities regarding weapons, ammunition and explosive safety and security in accounting, storage, transportation and handling".

Yet stockpile management is a term that can have many definitions. Within the IDDRS series, the definition is as above, yet there are further implications for the safe, efficient and effective management of ammunition and explosives than it really covers.¹² In a wider sense, stockpile management can be used to cover the following areas:



- the definition of stockpile types;
- the determination of required stockpile levels;
- the location of stockpiles;
- the financial management of stockpiles;
- accounting for weapons, ammunition and explosives;
- arranging for the safety, storage and transport of weapons, ammunition and explosives;
- the disposal of surplus weapons, ammunition and explosives;
- the destruction of ammunition and explosives (see section 10).

There are well-established principles for the secure and safe storage of weapons, ammunition and explosives, which the TA should advise on. The security of collected weapons is one of the primary concerns in political terms. However, safety must be considered at the same time, for humanitarian and force protection reasons. An accidental explosion in storage leading to civil casualties would have an immediate negative impact on the credibility of the whole process. Post-collection storage shall be planned before the start of the collection phase.

The stockpile management phase shall be as short as possible, for the sooner that the recovered weapons and ammunition are destroyed the better in terms of: (1) security risks; (2) improved confidence and trust; and (3) a lower requirement for personnel and funding.

9.1. Stockpile security

The security of the weapons and ammunition that have been collected or surrendered during the collection and retrieval operations is of basic importance to the future of the DDR process.

Confidence needs to be maintained among the UN force, former warring factions and communities by ensuring that the weapons cannot be used and will quickly be destroyed.

Usually the short-term security methodology used is the use of lockable ISO containers, within a secured and guarded compound. Dual key procedures should be considered, as this is a transitional step between final surrender of the weapons and the giving up of all future access to them. Commanders of armed forces and groups, and the UN force should hold the keys to their own locks, which means that the weapons can only be accessed in

the presence of both parties, as both keys are required to open the containers. If an ISO-type container is used, the third key could be in the possession of a community representative as a means of securing the community's buy-in and proof of the improved local security. Alternatively 'once-only-use' seals may be considered.

Confidence needs to be maintained among the UN force, former warring factions and communities by ensuring that the weapons cannot be used and will quickly be destroyed.

9.2. Storage of weapons

Detailed SOPs for the storage and security of weapons shall be developed by the DDR team in accordance with the principles and guidelines contained within SEE RMDS/G 05.30: 'Weapons Storage and Security'.

9.3. Storage of ammunition and explosives

The reduction of risk and the provision of a safe working environment are basic principles of disarmament operations. In section 6 it is stated that risk reduction involves a combination of safe working practices and operating procedures, effective supervision and control, appropriate education and training, safely designed equipment, and the provision of effective personal protective equipment and clothing.

The provision of a safe working environment within disarmament operations includes the safe storage, transportation and handling of ammunition and explosives recovered during the collection process. This requires appropriate storage facilities, equipment and vehicles to be made available, and for the DDR team to develop and maintain appropriate policy and procedures, or assist the national authority in their development. Where existing national government regulations differ from those contained in IDDRS, the more stringent requirement should be met.

SEE RMDS/G 05.40: 'Ammunition and Explosives Storage and Safety' is designed to provide national authorities and disarmament organizations with guidance on the safe storage, transportation and handling of explosives and explosive materials.¹³ Specifications for the storage of explosives and safety distances are those provided by the US Institute of Makers of Explosives,¹⁴ which are consistent with the UN's Draft *Ammunition and Explosives Regulations*. These specifications should not normally be reduced without the advice of a professionally qualified explosives engineer.

Detailed SOPs for the storage and security of weapons shall therefore be developed by the DDR team in accordance with the principles and guidelines contained within SEE RMDS/G 05.40, until the formal acceptance of the draft *UN Ammunition and Explosives Regulations* by the Department of Peacekeeping Operations (DPKO).

10. Destruction phase¹⁵

The physical destruction of weapons must be approached as a separate issue from the destruction of ammunition and explosives. In comparative terms, the physical destruction of the weapons collected is much simpler and safer than the physical destruction of the ammunition.

The destruction of ammunition and explosives is a highly specialist task that can only be safely, efficiently and effectively carried out by appropriately trained and qualified staff. The United Nations Mine Action Service (UNMAS) has developed international mine action standards (IMAS) that cover the destruction of stockpiles of anti-personnel mines, but these are generic (general) standards and can effectively be applied to cover the stockpile destruction of most types of ammunition. Therefore IMAS 11.10–11.30 are the standard guidelines for this procedure, taking advantage of the work that has already been done by another international organization.

This module will, therefore, concentrate mainly on the physical destruction of weapons.

10.1. Destruction of weapons

The introduction of an immediate and systematic process for the destruction of recovered weapons will greatly help prevent the further spread of weapons. The continued presence of such weapons inevitably acts as a destabilizing influence in the area and the potential for illicit trade remains high. If the former warring factions and communities perceive that the weapons that they have handed in are merely being transferred elsewhere, either legally or illegally, then the essential public confidence in the programme could collapse. Again, the principles of transparency, accountability, safety and control must be followed during the disposal process to ensure that the process is legitimized in the eyes of all stakeholders.

Previous DDR programmes have often decided on the final disposal of the recovered weapons on an *ad hoc* basis. The lack of available finance and resources during many programmes has hampered this final process of destruction. For example, in Mozambique, the weapons were placed initially under UN control, but only a limited number of weapons were destroyed and the “mission could do no more because it had no budget for destruction and no donor could be found to fund the programme”.¹⁶ This is discouraging, because there was a wide range of available destruction techniques and technologies, and the required human and financial resources were not high as a percentage of the costs of a full UN peace-keeping deployment.

Before the physical disarmament process, there should be an agreement among all concerned parties about what will be done with the collected weapons. Local ownership, transparency and accountability must be a priority throughout the process to achieve credibility with all parties to the conflict and encourage long-term sustainability. Ideally, all collected weapons, ammunition and explosives should be destroyed as quickly as possible to build up confidence in the process through complete transparency. Occasionally, the national government or legitimate authority may prefer not to destroy certain collected weapons so that they can, after proper processing and registration, become part of the national government’s stockpile for legitimate use by national armed forces.

There are, therefore, many good reasons why the planning and resources for a final destruction process must be included in any disarmament component. Indeed, it could be argued that donors have a moral responsibility to ensure that such a process is included in the project plan before funding is authorized. Provisions for destruction are as important to the success of a programme as the initial political will and the methodology for weapon recovery.

10.1.1. Weapons destruction techniques and technologies

The destruction technology or technique selected for a particular programme will be dependent on a number of factors:

- the types of weapons;
- the quantity of weapons;
- the available local resources and technology;
- the availability of funds;
- the infrastructure available for moving weapons;
- any security problems;
- SALW awareness needs.

A summary of the currently available destruction techniques and technologies is given in Annex M for reference. The cost and efficiency of these vary widely, but the most important difference is the capacity of each to verify the destruction of the weapons.

Whatever the destruction technique used, a public destruction ceremony with mass media coverage is an important part of the process. Such a ceremony has tremendous symbolic power in helping the public develop confidence in both the DDR programme and in the broader peace-building and recovery process.

Whatever the destruction technique used, a public destruction ceremony with mass media coverage is an important part of the process.

10.1.2. Destruction planning and operations sequence

The following sequence should be followed for the destruction of weapons:

- the establishment of the type and quantity of weapons to be destroyed;
- an examination and selection of the most suitable destruction method (technical advice should be taken at this stage of the planning process);
- the establishment of the financial costs of destruction (technical advice will be necessary here to ensure that a fair price is established if a commercial destruction method is chosen);
- the development of the public information plan;
- informing international organizations, media and NGOs of the date and location of the destruction operation;
- the establishment of a security plan for the movement of weapons and destruction operations;
- the carrying out of any necessary weapons pre-processing operations (removal of components, accounting procedures,¹⁷ deformation, etc.), although these can also be done at the final destruction facility;
- the movement of weapons to the destruction location, ensuring that all appropriate security measures are in place to protect the weapons during transit;
- the establishment of an effective and accurate accounting system at the destruction facility;
- the physical destruction of the weapons;
- the monitoring and verification of the destruction operation, carried out by international observers, media and NGOs; and
- the maintenance of destruction records within the national authority.

10.2. Destruction of ammunition and explosives

The safe destruction of recovered or captured ammunition and explosives presents a variety of technical problems. At the lowest level, the demolition of a large number of explosive items that have been collected together, as opposed to the destruction of a single unexploded ordnance (UXO) at the place where it is found, is a complex subject, which requires a significant degree of training in addition to that which is usually provided to a field engineer or EOD technician. Incorrect procedures can lead to further UXO contamination of the local area if the demolition is not prepared correctly and ammunition is then subsequently ‘kicked out’ of the worksite during demolitions. This ‘kicked-out’ ammunition could have been subjected to external forces similar to those found when it is fired from a weapon. These forces (spin, set back, centripetal and set forward) are the forces used by the fuze designer to arm the munition, so that in effect, the ammunition could end up armed, and will therefore be unsafe.

A situation where munitions have been ‘kicked out’ would require a full, planned UXO clearance operation of the entire area around the demolition pits, an operation that is expensive, time-consuming and dangerous. The whole situation can be avoided by proper planning of the demolition at the risk assessment phase of the microdisarmament operation. A proper demolition ground should, wherever possible, be sited near every WCP to enable the immediate destruction of any unsafe or unstable ammunition or explosives that are handed in by the local population.¹⁸ Professional explosive engineering advice must be taken to ensure that the location of these areas does not endanger the civilian population, their property or other fixtures and services.

The industrial-level destruction of ammunition and explosives (demilitarization) combines the skills of production, mechanical, chemical and explosive engineering. Again, it is a highly specialist occupation, and appropriate independent technical advice shall be taken by DDR programme managers during the planning phase if stockpile levels suggest that industrial destruction may be the safest or most cost-effective option.

The following IMAS cover the stockpile destruction of ammunition and explosives and shall therefore provide standard guidelines in this module:

- IMAS 11.10: ‘Stockpile Destruction’;
- IMAS 11.20: ‘Open Burning and Open Detonation (OBOD) Operations’;
- IMAS 11.30: ‘National Planning Guidelines’.

National authorities and destruction organizations shall consult and follow the guidelines contained within the above IMAS when planning and conducting the destruction of ammunition and explosives. The latest IMAS can be found at <http://www.mineactionstandards.org>.

Further advice on the application of IMAS to wider ammunition and explosive stockpile destruction operations can be obtained from UNDP BCPR Small Arms and Demobilization Unit (SADU).

11. Sequential operations

Demobilization normally follows directly after disarmament, but if an encampment process has been used for disarmament, then disarmament and demobilization can take place at the same time.

In some cases, it may be better for demobilization to take place at a later date. However, allowing for a gap between disarmament and demobilization may upset those who have disarmed, and may lead to civil unrest (also see IDDRS 4.20 on Demobilization).

Annex A (Normative): Terms, definitions and abbreviations

Terms and definitions

Ammunition: See ‘munition’.

Demilitarization: The complete range of processes that render weapons, ammunition and explosives unfit for their originally intended purpose.¹⁹ Demilitarization not only involves the final destruction process, but also includes all of the other transport, storage, accounting and pre-processing operations that are equally as critical to achieving the final result.

Demobilization: “Demobilization is the formal and controlled discharge of active combatants from armed forces or other armed groups. The first stage of demobilization may extend from the processing of individual combatants in temporary centres to the massing of troops in camps designated for this purpose (cantonment sites, encampments, assembly areas or barracks). The second stage of demobilization encompasses the support package provided to the demobilized, which is called reinsertion” (Secretary-General, note to the General Assembly, A/C.5/59/31, May 2005).

Destruction: The process of final conversion of weapons, ammunition and explosives into an inert state so that they can no longer function as designed.

Diurnal cycling: The exposure of ammunition and explosives to the temperature changes caused by day, night and change of season.

Explosive ordnance disposal (EOD): The detection, identification, evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance. It may also include the rendering safe and/or disposal of such explosive ordnance, which has become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal.²⁰ The presence of ammunition and explosives during disarmament operations will inevitably require some degree of EOD response. The level of this response will depend on the condition of the ammunition, its level of deterioration and the way that the local community handles it.

Explosives: Substances or mixtures of substances that, under external influences, are capable of rapidly releasing energy in the form of gases and heat.

Harm: Physical injury or damage to the health of people, or damage to property or the environment (ISO Guide 51: 1999[E]).

Harmful event: Occurrence in which a hazardous situation results in harm (ISO Guide 51: 1999[E]).

Hazard: Potential source of harm (ISO Guide 51: 1999[E]).

Hazardous situation: Circumstance in which people, property or the environment are exposed to one or more hazards (ISO Guide 51: 1999[E]).

National authority: The government department(s), organization(s) or institution(s) in a country responsible for the regulation, management and coordination of DDR activities.

Reintegration: “Reintegration is the process by which ex-combatants acquire civilian status and gain sustainable employment and income. Reintegration is essentially a social and economic process with an open time-frame, primarily taking place in communities at the local level. It is part of the general development of a country and a national responsibility, and often necessitates long-term external assistance” (Secretary-General, note to the General Assembly, A/C.5/59/31, May 2005).

Render safe procedure (RSP): The application of special explosive ordnance disposal methods and tools to provide for the interruption of functions or separation of essential components to prevent an unacceptable detonation.²¹

Residual risk: In the context of disarmament, the term refers to the risk remaining following the application of all reasonable efforts to remove the risks inherent in all collection and destruction activities (adapted from ISO Guide 51:1999).

Risk: Combination of the probability of occurrence of harm and the severity of that harm (ISO Guide 51: 1999[E]).

Risk analysis: Systematic use of available information to identify hazards and to estimate the risk (ISO Guide 51: 1999[E]).

Risk assessment: Overall process comprising a risk analysis and a risk evaluation (ISO Guide 51: 1999[E]).

Risk evaluation: Process based on risk analysis to determine whether the tolerable risk has been achieved (ISO Guide 51: 1999[E]).

Risk reduction: Actions taken to lessen the probability, negative consequences or both, associated with a particular event or series of events.

'Safe to move': A technical assessment, by an appropriately qualified technician or technical officer, of the physical condition and stability of ammunition and explosives prior to any proposed move. Should the ammunition and explosives fail a 'safe to move' inspection, then they must be destroyed on site (i.e. at the place where they are found), or as close as is practically possible, by a qualified EOD team acting under the advice and control of the qualified technician or technical officer who conducted the initial 'safe to move' inspection.

Safety: The degree of freedom from unacceptable risk (ISO Guide 51: 1999[E]).

Small arms and light weapons (SALW): All lethal conventional munitions that can be carried by an individual combatant or a light vehicle, that also do not require a substantial logistic and maintenance capability. Note: There are a variety of definitions for SALW circulating and international consensus on a 'correct' definition has yet to be agreed. On the basis of common practice, weapons and ammunition up to 100 mm in calibre are usually considered as SALW. For the purposes of the IDDRS series, the above definition will be used.

Standard: A documented agreement containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics to ensure that materials, products, processes and services are fit for their purpose. To be effective, the standards should be definable, measurable, achievable and verifiable.

Stockpile: In the context of DDR, the term refers to a large accumulated stock of weapons and explosive ordnance.

Stockpile destruction: The physical activities and destructive procedures towards a continual reduction of the national stockpile.

Tolerable risk: Risk that is accepted in a given context on the basis of the current values of society (ISO Guide 51: 1999 [E]).

Unexploded ordnance (UXO): Explosive ordnance that has been primed, fuzed, armed or otherwise prepared for action, and which has been dropped, fired, launched, projected or placed in such a manner as to be a hazard to operations, installations, personnel or material, and remains unexploded either by malfunction or design or for any other cause.²²

Weapon: Anything used, designed or used or intended for use:²³ (1) in causing death or injury to any person; or (2) for the purposes of threatening or intimidating any person and, without restricting the generality of the foregoing, includes a firearm.

Weapons collection point (WCP): A temporary, or semi-permanent, location laid out in accordance with the principles of explosive and weapons safety, which is designed to act as a focal point for the surrender of SALW by the civil community.

Abbreviations

AASTP	Allied Ammunition Storage and Transportation Publications
BCPR	Bureau for Crisis Prevention and Recovery
D₁	disarmament site
D₂	demobilization site
DDR	disarmament, demobilization and reintegration
DPKO	Department of Peacekeeping Operations
EOD	explosive ordnance disposal
IDDRS	integrated disarmament, demobilization and reintegration standard/ standards.
IMAS	international mine action standard/standards
ISO	International Organization for Standardization
MCP	mobile collection point
MILOB	military observer
NCDDR	national commission on DDR
NGO	non-governmental organization
PUP	pick-up point
RV	rendezvous
SADU	Small Arms and Demobilization Unit
SALW	small arms and light weapons
SASP 2	SALW Awareness Support Pack 2005
SEE RMDS/G	South Eastern Europe Regional Micro-Disarmament Standards and Guide- lines
SEESAC	South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms
SOP	standard operating procedure
TA	technical adviser
UN	United Nations
UNDP	United Nations Development Programme
UNMAS	UN Mine Action Service
UXO	unexploded ordnance
WCP	weapons collection point

Annex B: Normative references

The following normative documents (i.e., documents containing applicable norms, standards and guidelines) contain provisions that make up the norms, standards and guidelines that apply to the processes dealt with in this module. In the case of dated references, later amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on standards laid down in this module are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC keep registers of currently valid ISO or EN publications.

International Standards Organization, ISO Guide 51: 'Safety Aspects: Guidelines for Their Inclusion in Standards'.

Small Arms Survey and South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms (SEESAC), SALW Survey Protocols, <http://www.seesac.org/resources/surveyprotocols>.

South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms (SEESAC), SALW Awareness Support Pack 2005 (SASP 2), <http://www.seesac.org/resources/sasp>.

—, SEE RMDS/G 05.30: 'Weapons Storage and Security', South Eastern Europe Regional Micro-Disarmament Standards and Guidelines (RMDS/G) Series, SEESAC, Belgrade, March 2004, http://www.seesac.org/resources/current_eng.

—, SEE RMDS/G 05.40: 'Ammunition and Explosive Storage and Safety', South Eastern Europe Regional Micro-Disarmament Standards and Guidelines (RMDS/G) Series, SEESAC, Belgrade, March 2004, http://www.seesac.org/resources/current_eng.

UN Department for Disarmament Affairs, UN Destruction Handbook: 'Small Arms, Light Weapons, Ammunition and Explosives', July 2001, <http://disarmament.un.org/DDAPublications/desthbk.pdf>.

UN Mine Action Service, IMAS 11.10–11.30: 'Stockpile Destruction', <http://www.mineactionstandards.org/>.

The latest version/edition of these references should be used. UN DPKO holds copies of all references used in this standard. A register of the latest version/edition of the IDDRS and references is maintained by UN DPKO, and can be read on the IDDRS Web site: <http://www.unddr.org>. National authorities, employers and other interested bodies and organizations should obtain copies before starting DDR programmes.

ISO Guide 51 defines the concepts of 'risk' and 'safety' and provides guidance for their use in other ISO documents. The definitions and procedures provided in Guide 51 are used in this standard and others in the IDDRS series of standards and guidelines.

Annex C: Bibliography

The following informative documents contain useful background information concerning disarmament operations.

Gleichman, Colin, Michael Odenwald, Kees Steenken and Adrian Wilkinson, *Disarmament, Demobilization and Reintegration: A Practical Field and Classroom Guide*, Swedish National Defence College, Norwegian Defence School, GTZ and the Pearson Peacekeeping Center, 2004, <http://www.unddr.org>.

Organization for Security and Co-operation in Europe (OSCE), *Handbook of Best Practices on Small Arms and Light Weapons*, OSCE, September 2003, <http://www.osce.org/item/12525.html>.

South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms (SEESAC), *Regional Micro-Disarmament Standards and Guidelines (RMDS/G) Series*, SEESAC, Belgrade, March 2004, http://www.seesac.org/resources/current_eng.

Annex D (Informative): Explosives hazards

1. Physical condition of ammunition and explosives

The local population are unlikely to have the technical knowledge necessary to describe the conditions under which the recovered ammunition has been stored when in their possession, or to say whether it has deteriorated or what state the fuzing systems are in. International standards for the safe storage of ammunition and explosives are necessarily strict. They cover areas such as the type and construction of explosives storehouses, surveillance of ammunition in storage, the types of ammunition that can be stored together, fire prevention measures and operational standards to be followed. The local population will inevitably not have access to this information, and will be unaware of the dangers that ammunition and explosives can pose if not properly stored when in their possession. If the ammunition is not stored properly, then it can be affected by conditions such as the presence of moisture and diurnal cycling.²⁴ This can so badly affect the stability of ammunition and explosives that under some circumstances they become unsafe to handle.

2. Movement of ammunition and explosives

Specialized training in the science of explosives, in the design of ammunition and in explosive safety principles is necessary to develop the technical expertise necessary to assess the physical condition, stability, and safety of ammunition and explosives. International explosive safety standards insist that all ammunition and explosives should be certified as being 'safe to move' before any form of transportation is allowed. This caution has often been ignored, and at least one disarmament programme has even suggested that the local population should move ammunition and explosives to a WCP without either such an inspection or risk analysis taking place.

This presents the organization conducting the disarmament programme with a major problem. Ideally the population should have access to a system whereby an ammunition expert can travel to the *ad hoc* storage or collection area to make a safety assessment, but the political situation may mean that this is not possible.²⁵ The worst-case scenario is that no advice can be given. The majority of programmes will require the production of simple 'safety cards' for distribution during the DDR awareness campaign.

3. Response to mine/UXO threats

Past experience has shown that there is always a possibility that civilians will take the risk to move laid mines or UXOs to local authority collection points in order to remove a hazard to their homes or land. Any suggestion that this activity 'rewards' the local community only makes the problem worse, and must not be permitted. Therefore an appropriate EOD response shall be planned in accordance with Annex H.

4. Safety guidelines

Guidelines are rarely made available by the national authorities to the civil population for the safe *ad hoc* storage and movement of ammunition and explosives. These shall therefore be provided by the organization responsible for the disarmament operation. One version of recommended 'safety cards' is shown in Appendix 1 to this annex.

It is important that a general safety policy and a quality policy are developed for the weapons collection component of the disarmament programme. A suggested approach can be found in Appendices 2 and 3 to this annex.

5. Explosion danger areas

There are international standards that define the explosion danger areas that should be established for all explosive storehouses, and explain the ways of establishing them. While these help to reduce the risk, they are seldom implemented in communities that are storing weapons, ammunition and explosives. The local authority storage locations are often in close proximity to local authority administrative locations or other inhabited areas, and are usually both unlicensed for the storage of ammunition and explosives, and unsecured. The ammunition and explosives in the hands of the local population will generally be hidden on their property, which presents a continual risk to human life.

Appendix 1 to Annex D (Informative): Safety cards

Safety Advice

Weapons, ammunition and explosives are designed to kill. Therefore they are inherently dangerous to untrained people unless simple safety precautions are followed. This advice card contains simple safety precautions that if followed, will reduce the risk to human life during the Weapons Amnesty and Collection Programme.

Weapons

Do not ever point a weapon at anyone whether it is loaded or not. You must always assume that it is loaded until proven otherwise.

The Safety Catch or Lever is to be in the SAFE position.

Ensure that magazines are not fitted to weapons when they are handed over for safe storage.

Ensure that the weapons are UNLOADED with no ammunition in the breech of the weapon.

Should ammunition be stuck fast in the weapon the technical staff are to be informed immediately. The weapon is to be clearly marked as containing ammunition.

The weapon is to be shown as empty to the person responsible for accepting the weapon into safe storage.

The storage area is to be locked at all times to protect the stocks. The location of the storage area should not be advertised by signs or any other visible markings.

Temporary Storage of Ammunition in Emergency Situations

It is important that ammunition collected in emergency situations is handled and stored safely. This advice on the temporary storage of ammunition and explosives is designed to reduce the risk to the implementing organisation and the local community. In emergency situations many different types of ammunition may have to be stored, and a few basic guidelines should be applied to reduce the risk as far as is practically possible.

Storage Buildings/Rooms

Storage buildings or rooms should be secure, dry, and without any electrical appliances or supply except for that of lighting. Stores should be in an isolated area without trees and overhead power cables.

It is accepted that in certain circumstances all of those listed may not be achievable but the more of these points that can be achieved the better the storage situation. Some form of

firefighting equipment should be close to the store site such as by the doors or the road to the store.

The store should be able to be guarded and have lights around it at night.

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

Ammunition

Ammunition should be divided into four categories, which are based on the UN hazard Divisions.

Category 1 Ammunition

High Explosive (HE) Risk

- High Capacity Shells (HE)
- Grenades (HE)
- Demolition Explosives
- Mortar Bombs (HE)
- Rocket Motors with Warhead
- Detonators of all types

Category 2 Ammunition

Burning and Fragmentation Risk

- Semi Armour Piercing Shots
- Cartridge Cases with Propellant
- 20mm – 37mm HE Shell/Rounds

Category 3 Ammunition

Burning Only Risk

- Bagged Propellant Charges
- Loose Propellant
- Rocket Motor without Warhead
- Pyrotechnics

Category 4 Ammunition

Little or no Hazard

Small Arms Ammunition (<20mm)

Appendix 2 to Annex D (Informative): General safety policy

The DDR team shall be committed to achieving the highest performance in occupational health and safety, with the aim of creating and maintaining a safe and healthy working environment throughout its operations, especially during weapons, ammunition and explosives collection; stockpile management; and destruction.

In order to ensure general safety during an SALW collection programme, the general safety principles below should be followed:

- *Decision-making*: Environmental, health and safety concerns are an integral part of the team's decision-making. All strategic and operational decision-making shall take into account environmental, health and safety implications;
- *Compliance*: The team shall comply with all environmental, health and safety regulations that are applicable within the country. Environmental, health and safety programmes shall be established and implemented. Audits shall be carried out to assess compliance with laws and regulations, as well as these principles;
- *Operational practices*: The team shall use internal procedures and adopt practices or other operating guidelines towards the goal of protecting the environment, as well as the health and safety of its employees and the public;
- *Emergency preparedness*: The team shall maintain emergency response procedures to minimize the effect of accidents, as well as to improve, maintain and review procedures to prevent such occurrences;
- *Reduction of pollution*: The team shall develop, maintain and review explosive waste management programmes. These programmes shall deal with the source and nature of wastes generated and, to the extent technically and economically feasible, apply methods to reduce the generation of these wastes or minimize their environmental effects;
- *Conservation of resources*: The team shall improve, maintain and review guidelines for the efficient production and use of energy and natural resources;
- *Legislative/Regulatory development*: The team shall participate, as appropriate, with legislative and regulatory bodies in creating responsible laws, regulations and standards to safeguard the community, workplace and the environment;
- *Research and development*: The team shall guide and support research and development towards the goal of environmental, health and safety improvement and excellence;
- *Communication with employees*: The team shall encourage the development among its employees an individual and collective sense of responsibility for the preservation of the environment and protection of the health and safety of individuals;
- *Communication with the public*: The team shall communicate its environmental, health and safety commitment and achievements to the public and shall recognize and respond to community concerns;
- *Measurement of performance*: The team shall continue to develop and improve methods to measure both current and future environmental, health and safety performance in meeting these principles;
- *Risk management*: The team shall manage risk by implementing management systems to identify, assess, monitor and control hazards and by reviewing performance.

Appendix 3 to Annex D (Informative): Quality policy

In order to ensure control and transparency during DDR programmes, it is essential that the following general quality principles are followed:

- clearly determine the needs and expectations of the local national authorities and civil population;
- ensure the continued development of an enthusiastic commitment to quality within the disarmament programme operations team;
- develop a philosophy within the DDR team that promotes and maximizes the satisfaction of the DDR participants, local national authorities and civil population;

- continually measure the needs of the DDR participants, local national authority and civil population against the performance of the team in order to identify opportunities for continual improvement;
- adopt a team approach to improvement activities to ensure long-term viability, transparency and sustainability through using quality operational practices.

To assist in achieving these objectives, the policy must be to maintain a comprehensive and practical quality management system, based on total local national authority and civil population satisfaction, and continuous assessment and improvement of operational practices.

The primary operational goals shall be realized through personal commitment to the team's quality policy and management system.

Annex E (Informative): Technical adviser: Terms of reference

1. Responsibilities

The technical adviser (TA) to the disarmament programme is responsible to the programme manager for the following:

- the provision of independent technical advice on weapons, ammunition and explosives;
- the assessment of the quality and condition of recovered weapons, ammunition and explosives;
- the establishment of the render safe procedures for unstable ammunition and explosives, where there is an immediate and direct risk to the civil population or the DDR operations team;
- the development of written procedures and advice to ensure that the UN mission, government organizations and the civilian population store any recovered weapons, ammunition and explosives as safely as is technically possible;
- the development of written procedures and advice to ensure that the UN mission, government organizations and the civilian population transport recovered weapons, ammunition and explosives as safely as is technically possible;
- acting as the security liaison officer for the DDR team (if appropriate);
- continuing the development of any supporting computer-based statistical collection, reporting and analysis systems;
- the development of plans that cover the following:
 - team security;
 - the security of recovered weapons, ammunition and explosives;
 - the security of information;
 - the provision of technical intelligence to the disarmament team in order that informed management decisions may be taken.

2. TA qualifications and experience

A suitable candidate for the position of TA requires specific experience and qualifications, which are listed below. The appointment would particularly suit ex-military personnel qualified in explosive ordnance disposal (EOD), explosive engineering and ammunition technology, although other candidates with the necessary operational experience and qualifications would be considered.

2.1. EOD operational experience

The candidate must have had extensive operational EOD experience in order to have credibility with the local national authority.

2.2. Other requirements

The candidate should have had extensive formal training, and be qualified and experienced in the following:

- ammunition storage (field and depot);
- ammunition inspection and repair;
- ammunition maintenance;
- unit ammunition inspections.

Annex F: Weapons survey basic information requirements

A weapons survey shall be carried out to support operational planning. It should be carried out as early as possible by independent and impartial staff. It should be carried out through questionnaires and interviews involving all stakeholders, including both public officials and private citizens (male and female). The analysis of all existing reliable data from military sources, as well as consultations with international and regional organizations, relevant focus groups, research organizations and NGOs, should form the basis of the weapons survey.

An information collection plan should be determined, and may be structured in a format similar to the following matrix:

Serial	Critical information requirement	Open sources			Human sources				Liaison sources					Technical sources ²⁶		
		Media	Internet	UN and IO reports	Civil authorities	Civilian/Household surveys	Journalists	Refugees	Community liaison/focus groups	Embassies and attachés	Deployed military forces	International observers	Warring factions	IMINT ²⁷	SIGINT ²⁸	ELINT ²⁹
Weapons possession and proliferation																
1.	How many weapons are to be collected/surrendered?			X	X						X	X	X		X	
2.	Who is expected to hand in weapons?			X	X	X			X	X	X	X	X		X	
3.	Who else controls weapons outside the warring factions? Do they need to be disarmed?	X	X	X	X		X	X	X	X	X	X			X	
4.	Are there any pockets of heavily armed resistance?	X		X	X		X	X		X	X	X	X	X	X	
5.	Do the warring factions have stockpiles, and where are they?	X		X	X		X	X		X	X	X	X	X	X	X
6.	Where are the warring factions?	X		X	X		X	X		X	X	X	X	X	X	X
7.	What are the SALW supply routes and mechanisms?			X	X			X		X	X	X	X		X	
8.	Is there a previous national inventory or register of SALW?		X		X	X			X	X						
9.	Is there any legal provision for SALW ownership?		X		X	X			X	X						

Serial	Critical information requirement	Open sources			Human sources				Liaison sources				Technical sources ²⁶			
		Media	Internet	UN and IO reports	Civil authorities	Civilian/household surveys	Journalists	Refugees	Community liaison/focus groups	Embassies and attachés	Deployed military forces	International observers	Warring factions	IMINT ²⁷	SIGINT ²⁸	ELINT ²⁹
10.	Is there local capacity to produce weapons, ammunition and explosives?	X	X	X	X		X		X	X	X	X				
Weapons impacts																
11.	What is the prevailing cultural attitude towards weapons?	X	X		X	X	X	X	X	X		X				
12.	How does the presence of SALW affect interpersonal relations?	X	X		X	X	X	X								
13.	What role do small arms play in the region/culture?	X	X		X	X	X	X	X		X					
14.	How does the presence of small arms affect social or interpersonal relations?	X	X		X		X	X			X					
15.	Is there any record of casualties/deaths provoked by small arms (disaggregated by age and sex)?	X	X	X	X			X		X						
16.	Is there any record of criminal activities/murders involving small arms?	X	X	X	X			X		X						
17.	Is there a 'culture' of weapons?	X	X		X	X	X	X	X		X					
18.	What are the local concepts of 'human security'?	X	X		X	X	X	X			X					

Annex G (Informative): Guide to risk management during disarmament operations

1. Annex scope

This annex provides guidance on risk management and its application to disarmament operations.

2. Background

One objective during disarmament operations is the achievement of zero, or at the very least minimal, casualties during the disarmament component (see section 4.1). To achieve this, an ethos of safety must be developed during disarmament operations, according to which the DDR team tries to achieve the objective by developing and applying appropriate management procedures; by establishing and continuously improving the skills of personnel; and by implementing safe, effective and efficient operational procedures.

This module contains a new approach to disarmament operations that takes into account best practice in risk management and quality management. When determining the appropriate resources to be committed to a disarmament operation, appropriate account shall be taken of the risks to all personnel during the process.

3. The concept of safety

Safety is achieved by reducing risk to a tolerable level, which is defined in this module as tolerable risk. There can be no absolute safety; some risk will remain and this is the residual risk (ISO Guide 51: 1999[E]).

Therefore, in the context of the disarmament component of a DDR programme, weapons and ammunition collection can never be absolutely safe; it can only be relatively safe (see Annex D for a summary of risks). This is an inevitable fact of life, which does not mean that the requirements of the UN's 'duty of care' to its staff and the armed groups are not to be met. It just means that it cannot be proved, with 100 percent confidence, that they are being achieved. The risk and quality management systems recommended in this module aim to be as close to that 100 per cent ideal confidence level as is realistically possible, while allowing national authorities and DDR programmes to determine what is the tolerable risk that they are prepared to accept in their particular environments.

4. Risk management

4.1. Determining tolerable risk

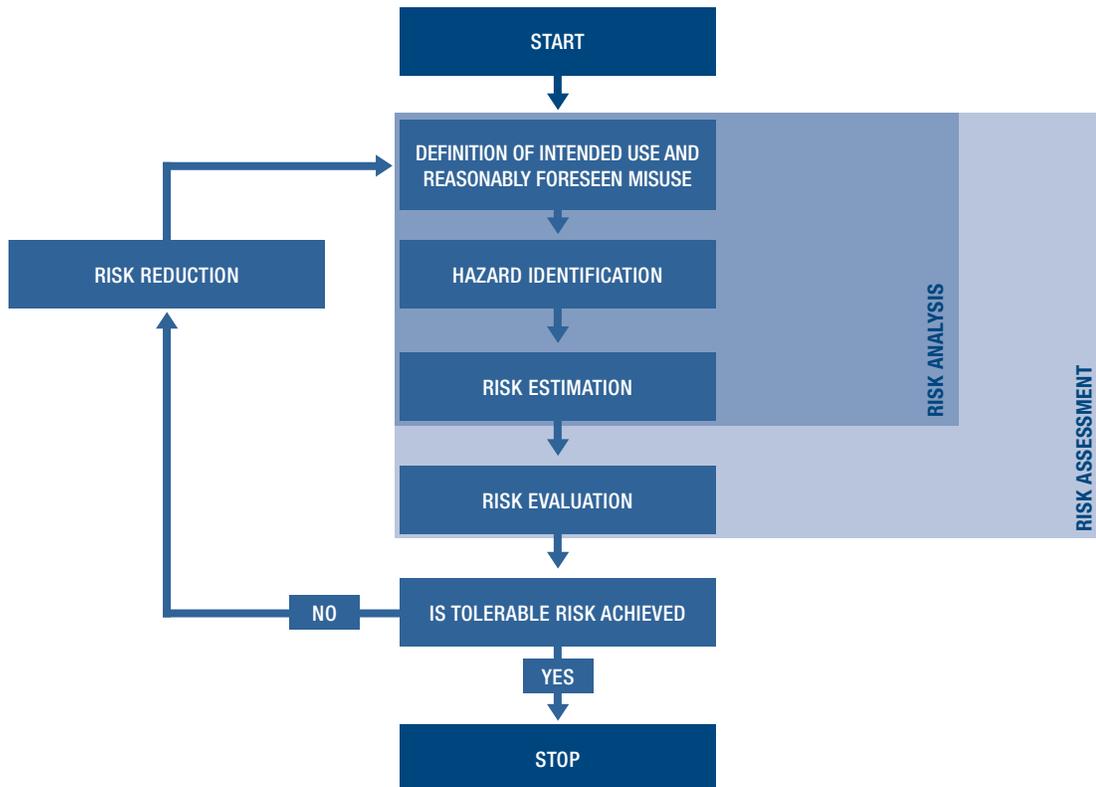
Tolerable risk is determined by the search for absolute safety that takes into account factors such as:

- available resources;
- the benefit to the armed forces and groups of entering the peace process through the disarmament component;
- the conventions of society;
- cost effectiveness;
- the technical threat (a combination of hazard and risk).

It follows that there is therefore a need to continually review the tolerable risk that applies to disarmament operations in a particular environment.

4.2. Risk assessment and reduction

Tolerable risk is achieved by continually carrying out the process of risk assessment (risk analysis and risk evaluation), and risk reduction:



4.3. Achieving tolerable risk

The following procedure should be used, in conjunction with this module, to reduce risks to a tolerable level:

- identify the likely user of, or participant group affected by, the proposed disarmament standing operating procedure;
- identify the intended use and assess the reasonably foreseeable misuse of the procedure;
- identify each hazard (including any hazardous situation and harmful event) arising in all stages of the process;
- estimate and evaluate the risk to each identified user or participant group;
- judge if that risk is tolerable (e.g., by comparing it with other risks to the user or participant group and with what is acceptable to society);
- if the risk is not tolerable, then reduce the risk (by changing the procedure or using relevant equipment if necessary) until it becomes tolerable.

When carrying out the risk-reduction process, the order of priority should be as follows:

- designing inherently safe disarmament procedures;
- using protective equipment and systems;
- supplying information for users and participant groups.

5. Conclusion

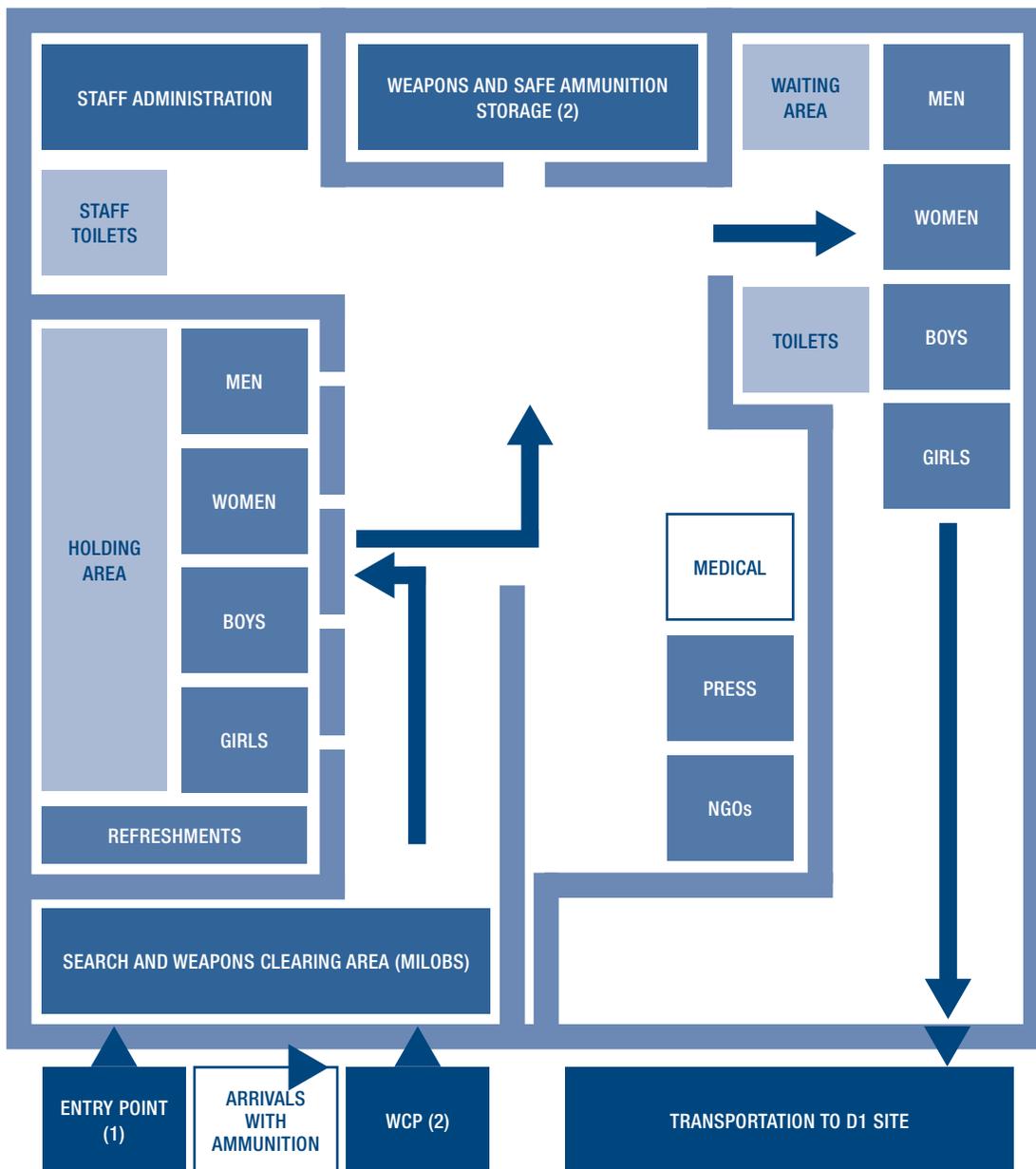
It must be emphasized that quality is NOT the same thing as safety, and consequently the roles of quality management and risk management should not be confused. The success of a disarmament operation is dependent on the integrated application of both quality management and risk management principles and procedures.

The beneficiaries of the disarmament component of DDR programmes must be confident that the process is safe, and that their personal safety and security needs have been fully taken into account. This requires management systems and disarmament procedures that are appropriate, effective, efficient and safe. Using best practice in risk and quality management will result in significant improvements to disarmament operations.

Annex H (Informative): Example of a combatant reporting card

1. Group:	Enter name/battalion/unit
2. To arrive at:	Enter pick-up point number
3. PUP location and directions:	Enter location and directions. Example: Grid 023678. Route 34, 3 km south of Greenville, at the abandoned fuel station.
4. Security and weapon safety:	Individuals MUST NOT carry weapons in an aggressive or challenging manner. Weapons should be unloaded and carried or slung from the shoulder. Muzzles should point to the ground. Magazines must be detached.
5. Formation:	The UNIT COMMANDER will lead his or her people in single file.
6. Reporting time:	No later than 12:00 hours (local time) on Tuesday 25 August 2006.

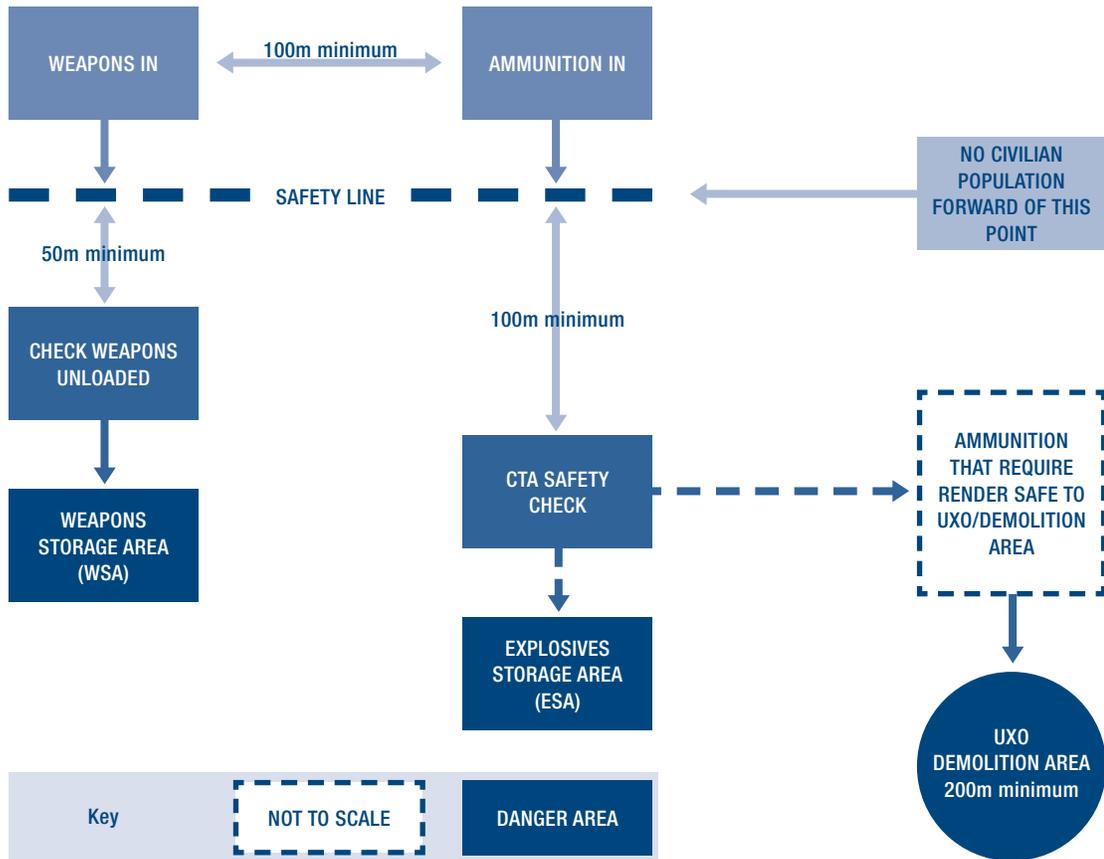
Annex I (Informative): Schematic layout of a pick-up point



Notes:

- (1) Combatants arrive at the PUP site with weapons, ammunition and explosives. MILOBs screen them to separate those with ammunition and explosives and send to WCP. Weapons processing location is a tactical decision, either at: (a) PUP clearing area; or (b) WCP.
- (2) Safe ammunition and weapons may be moved from the WCP to a holding area within the PUP if this will assist within security and administration. Again, this must be a tactical decision.

Annex J (Informative): Schematic layout of a weapons collection point



Annex K (Informative): Explosive ordnance disposal support³⁰

1. Introduction

Disarmament operations inevitably lead to the return of unstable and inherently dangerous ammunition and explosives together with the return of weapons. Not only does this create a physical threat to human life, but also it can be a threat to the whole DDR process. Any civilian casualties as a result of such programmes can have a negative effect on the credibility of the organization carrying out the operation, leading to a lack of confidence in its abilities by local community members and the subsequent withdrawal of their support for the process. Without appropriate weapon and explosive safety measures, past experience has shown that such casualties are inevitable. Past experience has also shown that these safety measures require support from explosive ordnance disposal (EOD) and personnel qualified to dispose of ammunition. Also, EOD and ammunition technical support and advice is necessary for the safe planning and conduct of logistic disposal operations.

Experience has shown that the integration of EOD and ammunition technical support into the wider DDR programme from the beginning can save time, ensure a more efficient use of resources and greatly improve safety. EOD and ammunition technical support was integrated into the Albania disarmament programmes during the period 1999–2002; the result was that there were no civilian or police casualties during the collection and destruction phases of the programme. This has not been the case in other previous DDR programmes, where there was either limited or no integral support.

Therefore this annex illustrates technical areas where EOD and ammunition technical support can have a positive effect on the development and implementation of the disarmament component of DDR programmes.

It is important that DDR programme managers understand the differences between EOD and ammunition technical support. EOD personnel are usually trained and qualified in the disposal of unexploded ordnance (UXO). On the other hand, at the operational level, while ammunition technical specialists, while still trained in UXO disposal, are also qualified to provide additional support for the destruction of ammunition at the logistic level, as well as advise on all aspects of ammunition storage and explosives safety. It is essential that programme managers consult the appropriate level of advice for particular phases of their programme. For example, an EOD technician will be highly unlikely to be able to provide the appropriate level of technical advice on the detailed risks of an undesired explosion in an ammunition storage area.

2. Synergy with other international activities

The technical complexity, vulnerability, inherent risks, and the wide distribution and large volume of UXO, ammunition and explosives in the community in post-conflict environments require that they be efficiently and expertly managed and that appropriate risk analysis be carried out. There are often specific concerns regarding the render safe, disposal, safe storage, handling and transport of UXO, ammunition and explosives, and these risks must be minimized, but be in accordance with the operational environment. Sound technical advice and support at all levels are a prerequisite for the future success of peace support operations. The balance and emphasis of this advice will be dependent on the quantity of UXO, ammunition and explosives in the community, the perceived risk in the area and the pace of operations.

The explosives threat to a community in many post-conflict environments covers three main areas: (1) mines and UXO; (2) small arms and light weapons (SALW); and (3) the stockpile safety and destruction of conventional ammunition. There is currently no integrated response to this threat from the international community and areas of responsibility between international and regional organizations are ill-defined. More importantly, no integrated threat analysis has been conducted by an international or regional organization before its intervention in a post-conflict environment. This is usually because such organizations do not utilize the experience and knowledge of EOD organizations during their response planning at the strategic level.

The technical background and training of some of the EOD specialists deployed on mine action programmes can make them ideally suited to provide further technical contributions to operations outside that of mine and UXO clearance operations.³¹ Again, recent experience in Albania provides many examples of such support, ranging from stockpile management support to the establishment of technical methodology for the weapons recovery phase of UN disarmament programmes.³² This recent experience has identified other areas of technical support that are necessary to ensure the safety of both a deployed UN force and the civil population in the area of operations from the threat posed by explosives; these can be considered to be post-conflict activities. The evolution and development of this technical support could be a vital factor in reducing the risk to life on future post-conflict operations.

Therefore programme managers of DDR (disarmament) operations shall investigate the possibility of working together with other programmes involved in the wider area of explosives safety in the community. This will make the best use of scarce technical resources and ensure that there will be no conflict of responsibilities from the start.

3. Functional areas of EOD and ammunition technical support

This part of the module illustrates those areas of technical support that appropriately qualified and trained EOD operators and ammunition specialists should contribute to during a disarmament operation. The degree of technical contribution shall be determined by the training and qualifications of the EOD operator or ammunition specialist.

3.1. Information gathering and survey

Technical advice and support should be provided to the following areas:

- the development of the collection and collation plan (see Annex F);
- the threat assessment and analysis during programme development;
- the training and technical capabilities of any local EOD or ammunition technical assets.

3.2. Conventional munition disposal

Technical advice and support should be provided to the following areas:

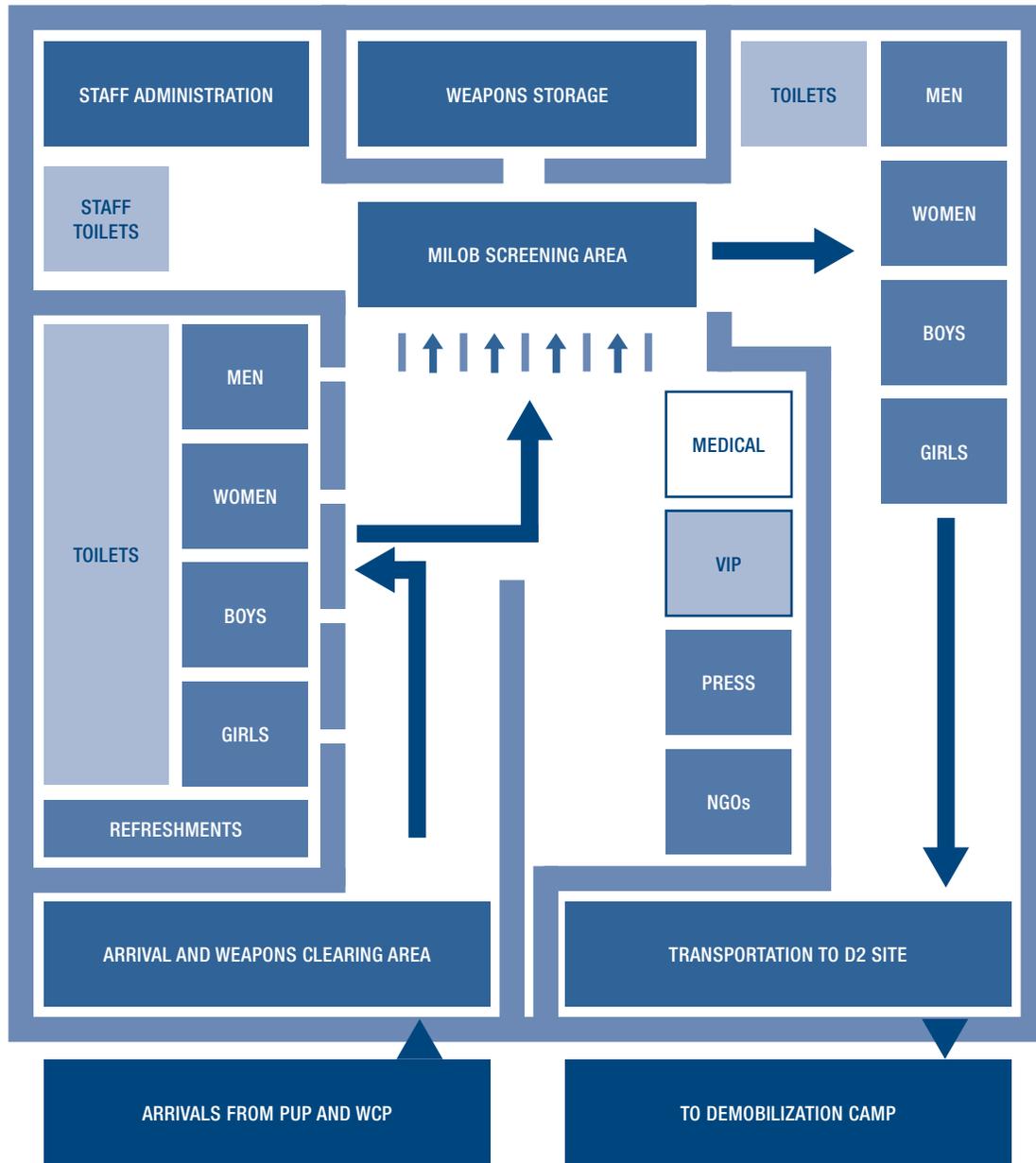
- the development (and provision if beyond local resources) of an EOD response capability for the render safe of UXO discovered during the collection phase;
- the development of a stockpile destruction system for large quantities of recovered ammunition and explosives;
- the EOD training of local EOD experts.

3.3. Explosives safety

Technical advice and support should be provided to the following areas:

- ammunition and explosives accounting;
- the calculation and establishment of danger areas at WCPs;
- 'safe to move' inspections of recovered ammunition and explosives;
- the safe movement and storage of ammunition and explosives;
- ammunition and explosives surveillance and management;
- during negotiations with national authorities for the destruction of SALW;
- the SALW awareness campaign.

Annex L: Schematic layout of a disarmament site



Note: Combatants will arrive at the disarmament site with weapons or with receipts for weapons and ammunition surrendered at the PUP/WCP.

Annex M: Weapons destruction techniques and technology

Serial	Technique/ Technology	Explanation	Example country	Advantages	Disadvantages
1.	Smelting and recycling	The use of industrial steel- smelting facilities to melt down complete processed weapons	<ul style="list-style-type: none"> ■ Costa Rica ■ Moldova ■ Montenegro ■ Peru ■ Serbia 	<ul style="list-style-type: none"> ■ Limited training period ■ Simple ■ Cheap and efficient ■ Limited pre-processing ■ Minimal labour required ■ Highly visible and symbolic ■ Destruction guaranteed ■ Some costs recovered by sale of scrap 	<ul style="list-style-type: none"> ■ Requires suitable industrial facility ■ Limited pre-processing required
2.	Bandsaw or circular saw	The use of industrial bandsaws to cut SALW into unusable pieces	<ul style="list-style-type: none"> ■ Albania ■ Costa Rica ■ Republic of Congo 	<ul style="list-style-type: none"> ■ Limited training period ■ Simple 	<ul style="list-style-type: none"> ■ Labour-intensive ■ Minimum of three cuts per weapon, dependent on type ■ Inefficient
3.	Burning	The destruction of SALW by open burning using kerosene	<ul style="list-style-type: none"> ■ Cambodia ■ Mali ■ Nicaragua 	<ul style="list-style-type: none"> ■ Cheap and simple ■ Highly visible and symbolic ■ Limited training requirements 	<ul style="list-style-type: none"> ■ Labour-intensive ■ Environmental pollution ■ Not particularly efficient ■ Visual inspection essential, but difficult
4.	Cement	Cast weapons into cement blocks	<ul style="list-style-type: none"> ■ Kuwait 1991 	<ul style="list-style-type: none"> ■ Cheap and simple ■ Limited training period 	<ul style="list-style-type: none"> ■ Recovery possible, but very labour-intensive to achieve this ■ High landfill requirements ■ High transport requirements to landfill ■ Final accounting difficult
5.	Crushing by armoured fighting vehicles (AFVs)	The use of AFVs to run over and crush the SALW	<ul style="list-style-type: none"> ■ Brazil 	<ul style="list-style-type: none"> ■ Cheap and simple ■ Highly visible and symbolic ■ Limited training requirements 	<ul style="list-style-type: none"> ■ Not particularly efficient ■ Visual inspection essential
6.	Cutting by oxy-acetylene or plasma	The use of high-temperature cutting technology to render the SALW inoperable	<ul style="list-style-type: none"> ■ Albania 	<ul style="list-style-type: none"> ■ Established and proven method ■ Cheap and simple ■ Limited training requirements ■ Equipment available worldwide ■ Maintenance-free 	<ul style="list-style-type: none"> ■ Labour-intensive (one operative can process 40 weapons per hour) ■ Risk of small functioning components (bolts, etc.) not being destroyed
7.	Cutting using hydro-abrasive technology	The use of hydro-abrasive cutting technology	<ul style="list-style-type: none"> ■ UK (trial) 	<ul style="list-style-type: none"> ■ Limited training requirements ■ Technology readily available ■ High production levels possible using automation ■ Environmentally benign 	<ul style="list-style-type: none"> ■ Medium initial capital costs ■ Equipment requires transporting to affected country

Serial	Technique/ Technology	Explanation	Example country	Advantages	Disadvantages
8.	Cutting by hydraulic shears	The use of hydraulic cutting and crushing systems	<ul style="list-style-type: none"> ■ Afghanistan ■ Australia ■ Canada ■ Kenya ■ South Africa 	<ul style="list-style-type: none"> ■ Limited training requirements ■ Technology readily available ■ High production levels possible using automation ■ Environmentally benign 	<ul style="list-style-type: none"> ■ Medium initial capital costs ■ Equipment requires transporting to affected country
9.	Deep-sea dumping	The dumping of SALW at sea in deep ocean trenches	<ul style="list-style-type: none"> ■ Many pre-1992 	<ul style="list-style-type: none"> ■ Traditional technique ■ Efficient 	<ul style="list-style-type: none"> ■ Constraints of Oslo Convention ■ More environmentally benign than many other techniques
10.	Detonation	The destruction of SALW by detonation using donor high explosives	<ul style="list-style-type: none"> ■ NATO SFOR ■ NATO KFOR 	<ul style="list-style-type: none"> ■ Highly visible and symbolic ■ Destruction guaranteed if sufficient donor explosive used 	<ul style="list-style-type: none"> ■ Labour-intensive ■ Environmental pollution ■ Requires highly trained personnel ■ Expensive in terms of donor explosive
11.	Shredding	The use of industrial metal-shredding technology	<ul style="list-style-type: none"> ■ Germany ■ South Africa 	<ul style="list-style-type: none"> ■ Highly efficient ■ Limited training requirements ■ Technology readily available ■ High production levels possible using automation ■ Environmentally benign 	<ul style="list-style-type: none"> ■ High initial capital costs ■ Equipment requires transporting to affected country
12.	Safe storage	The storage of recovered weapons in secure accommodation	<ul style="list-style-type: none"> ■ Albania 	<ul style="list-style-type: none"> ■ Cheap and simple ■ SALW move under direct control of national government or international organization 	<ul style="list-style-type: none"> ■ Potential for proliferation in the future exists if there is a significant political change of circumstances ■ Requirement for adequate and secure infrastructures

Endnotes

- 1 This responsibility may be carried out by the UN mission in those areas with non-functioning government until the government is in a position to assume responsibility.
- 2 In this particular module, the term 'weapons' is assumed to include ammunition and explosives unless otherwise stated. It is inevitable that former combatants will surrender ammunition and explosives together with their weapons, and this must be planned for.
- 3 UN and non-UN staff are, of course, also in direct contact with armed individuals, forces and groups throughout the DDR process, as it cannot be assumed that these individuals and groups will all disarm, as requested, at the same time.
- 4 ISO Guide 51.
- 5 ISO Guide 51: 'Safety'.
- 6 Available at <http://www.seesac.org/resources>.
- 7 This is in addition to a weapons survey (section 7.4).
- 8 Collection, collation, analysis and dissemination (distribution).
- 9 <http://www.seesac.org/resources/surveyprotocols>.
- 10 A PUP can also be referred to as a rendezvous (RV).
- 11 It can be argued that at the point of weapons surrender the individual's status changes to that of an ex-combatant.
- 12 More technical detail is contained within SEE RMDS/G 05.50: 'Ammunition Management', <http://www.seesac.org/resources>.
- 13 <http://www.seesac.org/resources>.
- 14 An alternative source of detailed information is the NATO Allied Ammunition Storage and Transportation Publications 1 and 2 (AASTP 1 and 2): 'Safety Principles for the Storage and Transport of Military Ammunition and Explosives' (available from the NATO Publications Branch).
- 15 Taken from SEE RMDS/G 05.20: 'SALW Destruction'.
- 16 Herbert Wulf, Bonn International Center for Conversion Workshop on Small Arms, 18–20 February 1999.
- 17 Ideally, each weapon's information (i.e., type, calibre, serial number, country and/or manufacturer monograms/markings) should be registered in a database. This information could be useful in future weapons tracking. See section 8.8 for information on DREAM.
- 18 There will often be a need for informed balance, as this requirement may badly affect the conduct of operations. If the decision is taken not to have an appropriate safe demolition area, then a formal threat assessment shall be carried out to identify the risks.
- 19 IMAS 11.10.
- 20 *UN Guidelines for Stockpile Destruction*, June 2000.
- 21 NATO definition.
- 22 NATO definition.
- 23 Criminal Code of Canada, sec. (S) 2: 'Interpretation', para. 2.
- 24 Diurnal cycling is the exposure of ammunition and explosives to the temperature changes resulting from day, night and change of season. For example, in the eastern European region, ammunition and explosives can be subjected to diurnal cycling from -20°C to +40°C. Under desert conditions, the diurnal cycling upper limit can exceed 60°C.
- 25 *Ad hoc* storage is the location where the civil population have concealed and stored ammunition.
- 26 Dependent on the capability of deployed military or UN force and their willingness to share information.
- 27 Imagery intelligence.
- 28 Signal intelligence.
- 29 Electronic intelligence.
- 30 Derived from SEE RMDS/G 05.60: 'EOD Support'.
- 31 There are wide differences in the training and education, and hence the technical competence, of EOD specialists. Advice should be taken from UNDP BCPR SADU before deciding on the detailed contributions in the areas of EOD or ammunition technical support that an individual can make to a microdisarmament operation.
- 32 NATO, *EODASTT Post Operation Report*, 5 May 1999.