Gaza Debris Management Framework

Version 6 of 29th January 2025

Endorsement

The following organisations have participated in the development of the Debris Management Framework and hereby endorse the Framework. These organisations have committed to perform all demolition and debris removal and management works in accordance with this Framework by ensuring their implementing agencies, partners and contractors are made aware of the Framework and the requirements herein. The Framework is open for adoption to new interested partners.

Current Members

MoPW&H	Mine Action AOR	UN Habitat
BINAA	NRC	UNMAS
DRC	OCHA	UNOPS
Gaza Municipality	PNGO	UNRWA
Halo Trust	Shelter Cluster	WFP
HI	UNDP	World Bank
HLP TWG	UNEP	
MAG	UNESCO	

I. Introduction

The enormous quantities of debris generated by the war on Gaza and use of explosive weapons in the Gaza Strip pose significant risks to human health and the natural environment. The amount of debris from the war on Gaza is orders of magnitude more than that of all the debris from previous wars in the Gaza Strip since 2008. The debris situation is unprecedented not only in terms of its quantity, but equally in terms of the extent of damage to the housing stock; its geographic spread and spatial density across almost the entire territory; the rate at which debris is being generated; and the expected high levels of explosive ordnance (EO) contamination coupled with the risk of asbestos particularly in the refugee camps. Compounding these challenges are critical Housing, Land, and Property (HLP) issues. These include ownership verifications, the loss and recovery of HLP documentation, obtaining owners' consent to initiate debris removal, permits from landowners for debris disposal, relinquishing ownership of removed debris, and the loss of clear boundary demarcations for destroyed properties, among others.

A new way of thinking and working is required to deal with this exceptional situation in a coordinated and coherent manner.

II. Objective

The objective of this Framework is *to promote and adopt a sustainable debris management* approach for the Gaza Strip whereby the international agencies working with debris enable safe provision of humanitarian relief and facilitate early recovery and reconstruction efforts, while protecting public health, safety and the natural environment.

The Framework provides minimum requirements and a structured process to help guide debris management activities. It requires participating organisations to ensure that debris arising from demolition and debris removal works are safely disposed of and to the extent possible, recycled into new (re)construction materials as encapsulated in the debris management hierarchy.

Additionally, the Framework emphasizes the need to consider HLP issues throughout the debris management process, ensuring that ownership rights are considered and that landowners are involved in decisions regarding debris disposal and recycling.

III. Coordination

To coordinate and facilitate risk-managed, timely and cost-effective debris management works in Gaza as a support to the humanitarian and recovery efforts by local and international stakeholders, a Gaza Debris Management Working Group (DWG) has been established.

The DWG is co-chaired by UNDP and UNEP, with expanding membership to relevant entities and actors over time. As a lead agency for debris management in Gaza, the Ministry of Public Works and Housing (MOPWH) is key to the facilitation of the DWG for both planning and implementation of debris works as well as integration with other relevant local stakeholders.

The DWG provides a platform for coordination, development of standard protocols and information exchange for all relevant stakeholders and partners. One of the first deliverables of the DWG is this Gaza Debris Management Framework.

IV. Prioritisation

Debris management works are to be 'demand driven' based on coordination with relevant local stakeholders and international agencies for the purpose of facilitating humanitarian assistance and recovery works in Gaza. It will be integrated within the planning of Area-Based Coordination (ABC) groups to support humanitarian response to the extent feasible.

Prioritisation is expected to encompass the following immediate needs to clear and make safe the following:

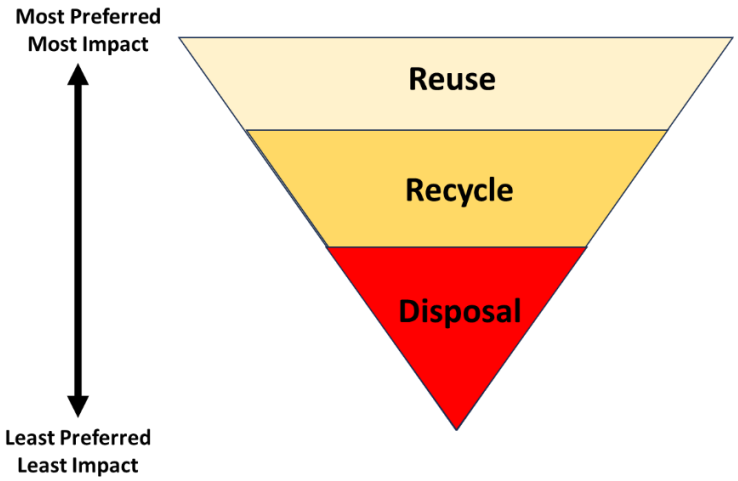
- ✓ Critical routes for public and humanitarian access;
- ✓ Damaged critical infrastructure to facilitate repair and rehabilitation works; and,
- ✓ Areas designated for the establishment of temporary shelters and other humanitarian activities.

V. Debris Management

For the purpose of this Framework, debris is hereby defined as that waste which arises from the removal of debris and/or subsequent demolition of buildings and infrastructure. This debris is categorized into the following main waste streams:

- ➢ Recyclable, i.e. concrete, masonry bricks, metals etc.;
- ➢ Protected, i.e. structures, objects and archival materials found at Cultural Heritage sites;
- ➢ Generally non-recyclable, i.e. general internal and external building contents including fixtures and fittings, furniture, personal belongings etc.; and,
- ➢ Hazardous wastes such as oil and chemical waste, asbestos and contaminated soils

These categories are presented in more detail in Annex A to this Framework document, with their optimal handling requirements. The optimal handling requirements are based on the internationally recognised waste hierarchy as presented below.



Debris Hierarchy

VII. Guiding Principles

Planning

1. Ensure works are aligned, coordinated and in agreement with the relevant local stakeholders, especially municipalities at the technical level, and in compliance with relevant national legislation.
2. Notwithstanding the exceptional levels of damage, ensure legal procedures for all types of buildings and structures with land and property rights are respected, protected, and fulfilled throughout the debris management process to the extent practical.
3. Coordinate debris management activities with humanitarian and recovery activities to maximize synergies and effectiveness through area-based programming.

Community Liaison

4. Facilitate a participatory, community-based approach to debris management thereby ensuring engagement and consultations with local communities during the design and implementation of the works.
5. Raise awareness on Protection against Sexual Exploitation and Abuse at community level, including where to go / what to do if faced with Sexual Exploitation and Abuse, ensuring awareness sessions/activities and material are inclusive (incl. in terms of disability inclusion).
6. Strengthen local capacities on debris management and enable sustainable handover of debris management and recycling operations focusing on community engagement.

Design

7. Promote creation of livelihood opportunities for women and youth groups to the extent possible.
8. Coordinate with mine action organizations to reduce the risk of EO within debris to levels as low as reasonably practicable.
9. Coordinate with the HLP Technical Working Group (TWG) to align debris management with HLP considerations for debris removal from private property.
10. Conduct rapid environmental and social screening assessments for debris siting and management operations to identify potential adverse effects and develop safeguards and mitigation strategies.
11. Foster partnerships with local and international organizations specializing in debris management, recycling technologies, and environmental conservation and explore funding opportunities and collaborations to support sustainable debris management operations.

Safety and Awareness

12. Establish a risk-managed, healthy working environment for demolition and debris workers, facilitating safety in the works, including where the presence of asbestos and/or chemicals are a risk. Detailed health and safety protocols are required for all works addressing specific risks, safety training and guidelines for the use of personal protective equipment with regular health screenings for workers.
13. Ensure that due preparation and engineering surveys are conducted before any demolition takes place and that necessary precautionary measures are taken to deal with the possibility of unplanned collapse.
14. Ensure all relevant debris actors and contractors' staff are aware and compliant with UN zero tolerance policy on Protection against Sexual Exploitation and Abuse.
15. Ensure the protection of general public and neighbouring activities / structures to the extent possible during the works.
16. Promote and disseminate awareness raising around building safety and debris risks, hazards and opportunities with feedback mechanisms for reporting debris-related issues and suggest improvements.

Debris and Waste

17. Adopt circular approach to debris management prioritizing reuse and recycling of debris (when possible) to support recovery and reconstruction efforts - reduce debris disposal to the minimum (and only as a last resort) and ensure proper management of hazardous wastes.
18. Ensure debris storage, recycling and disposal sites are suitably located and established with measures in place for safety, environmental protection and correct operations.
19. Undertake material testing of recycled materials for quality assurance purposes and to identify appropriate end use applications.
20. Obtain necessary permits from landowners and address any potential impacts on local communities.

Cultural Heritage Sites

21. Ensure debris from cultural heritage sites are safely recovered, sorted and stored for potential future restoration works of structures, objects and archival materials under the guidance and support of relevant experts and authorities.

Explosive Ordnance (EO)

22. Debris management personnel shall receive Explosive Ordnance Risk Education, and each site shall have a trained EO banks person for initial decision-making when EO is encountered.
23. Any EO encountered shall be assessed by EOD technicians who will decide on the course of action to minimise risk for debris management personnel and minimise disruption to the debris removal process.

Human Remains

24. Human remains found during debris operations should be immediately marked, documented and reported to the competent national authorities (judicial, police, health, municipality, etc).
25. All necessary authorizations and clearances should be obtained before handling any human remains, which should be dealt with in a careful and dignified manner.
26. Specific guidance and precautions should be provided to debris workers to minimize safety and occupational risks associated with human remains.

Reporting

27. Utilize digital tools and open-source information, to document and share information on regular basis concerning debris removal, recycling, and disposal activities, including reporting on hazards identified.

VII. Key Steps in Debris Management

1. Sorting of Debris and Demolition Waste

The debris arising from demolition and debris removal works is to be ideally sorted at the site of demolition and/or debris removal into the 4 main categories (as presented in Annex A).

Where the debris cannot be sorted at the site of demolition and/or debris removal, the debris may be taken to an established debris recycling site for subsequent sorting and recycling.

2. Reuse and Recycling of Debris and Demolition Waste

During the demolition and debris removal works, the homeowners are to be supported in separating out any materials they wish to remain at site for future reuse and recycling. This includes the reuse of bricks and stones as well as the use of debris as fill material for non-load bearing applications such as site road or landscaping. Furthermore, where safe to do so, homeowners are to be provided safe access to retrieve personal belongings.

Recyclable debris materials that are not used onsite can be used locally as a fill material, for example for raising land or use in access roads or other priorities identified by local communities. For all other remaining recyclable materials, these are to be taken to a suitably established debris recycling site for reuse and recycling, and where not feasible, for safe disposal.

3. *Disposal of Debris and Demolition Waste*

Where no debris disposal site has been established, the debris is to be preferably stockpiled for potential future recycling in collaboration with municipalities and/or local authorities with proper protection measures to avoid contamination of the environment. If recycling is ultimately not feasible, debris to be disposed of safely to prevent risk to public health and the natural environment. Debris is not to be disposed of into or near water courses, nor near residential areas nor dumped along roads.

All non-recyclable debris and demolition wastes are to be disposed of safely at an authorized waste disposal facility, ensuring that the waste does not escape into water courses, groundwater nor the natural environment. The disposal areas shall be prepared in accordance with relevant Palestinian regulatory requirements and relevant international best practice, to ensure environmental impacts from both site operations as well as over the longer term are minimized.

Additionally, it is essential to consider HLP issues throughout the disposal process. This includes obtaining the necessary permits from landowners for debris disposal and ensuring that the rights and interests of affected communities are respected. Noting at the same time that given the exceptional debris situation in Gaza, some HLP aspects may be waivered in the public interest as decided by the local authorities.

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Annex A: Summary of reuse, recycling and disposal options for debris

Debris and Demolition waste category	Optimal Handling	Prioritised Disposal Routes
Recyclable		
Concrete	Sorted from debris and downsized to max. 50cmx50cmx50cm for recycling	Options in list of priority: 1. Onsite reuse and recycling at site of damaged building 2. Concrete, brick and stone used locally as engineering fill 3. Brought to established Debris Recycling site 4. Safely disposed of with no risk to public health and the natural environment
Masonry bricks and roofing tiles	Cleaned and left at site for reuse or removed for recycling	
Rough cut stones	Cleaned and left at site for reuse or removed for recycling	
Timber and combustible materials	Sorted from debris and either left at site for reuse or removed for recycling/recovery	
Metals	Ideally handed over to owners and if not, then prepared at site for local reuse (i.e. reinforcement bars straightened for reuse)	
Plastics	Sorted where possible and removed for recycling or left within debris	
Asphalts	Sorted where possible and removed for recycling or left within debris if smaller quantities	
Protected		
Structures, objects and archival materials found at Cultural Heritage sites	Sorted and stored securely on site for future use in rehabilitation of site	Stored securely on site for future use
Generally non-recyclable		
General internal and external building contents including fixtures and fittings, furniture, personal belongings etc.	Owner (if present) enabled to recover personal items with remaining left in debris for removal	Disposal at authorized waste disposal site
Excavation soil	Removed from site	
Other non-combustible materials	Removed from site	
Hazardous wastes		
Oil and chemical waste, as well as hazardous waste including asbestos	Sorted from debris (where safe to do so) with correct packaging, labelling and disposal	Disposal at authorized waste disposal site
Contaminated soils and gravel	Removed from site	