



BSI Standards Publication

Damage management – Code of practice for the organization and management of the stabilization, mitigation and restoration of properties, contents, facilities and assets following incident damage

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Published by BSI Standards Limited 2015

ISBN 978 0 580 85622 8

ICS 03.100.01; 13.200

The following BSI references relate to the work on this document:

Committee reference CAR/1

Draft for comment 15/30296351 DC

Publication history

First published November 2015

Amendments issued since publication

Date	Text affected
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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2015. It was prepared by Technical Panel CAR/1/-/6, *Damage management*, under the authority of Technical Committee CAR/1, *Continuity and resilience*. A list of organizations represented on this committee can be obtained on request to its secretary.

Relationship with other publications

This code of practice builds on the existing BDMA Standards: Guidelines relating to the protocols and procedures for dealing with incidents or perils that damage properties [1].

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

0 Introduction

0.1 General

This British Standard document aims to provide recommendations for good practice in organizing and managing stabilization, mitigation, remediation and restoration procedures necessary to control and recover such damage and restore equilibrium to those affected.

The recommendations can be used in cases of property damage or contamination caused by a wide range of incident types such as fires, floods, explosions and trauma scenes. It identifies generic processes applicable to specific incident types but does not advocate specific technologies or methodologies.

The standard does not extend to providing guidance on building repair and reinstatement. However, it is recognized that damage management is the primary phase of the overall repair and reinstatement process and is likely to involve interaction with other parties involved at various stages.

The standard's structure ensures it is relevant to all interested parties and covers all activities from incident occurrence to completion of the recovery phase (see Figure 1). It also provides users with a means of establishing whether these activities have been carried out and ensures those aiming to comply with the standard can demonstrate they have done so by means of the project records. Additionally, it will facilitate communication between those who might need to be aware of an incident's status at any stage of the process.

Depending on the type of incident, such interested parties might include government departments, the Environment Agency, emergency responders, local authorities, insurance industries, risk and facilities management sectors, emergency planners, surveyors, business continuity managers, recovery/restoration and damage management practitioners, building and property sectors, property owners or occupiers, managing agents and members of the public.

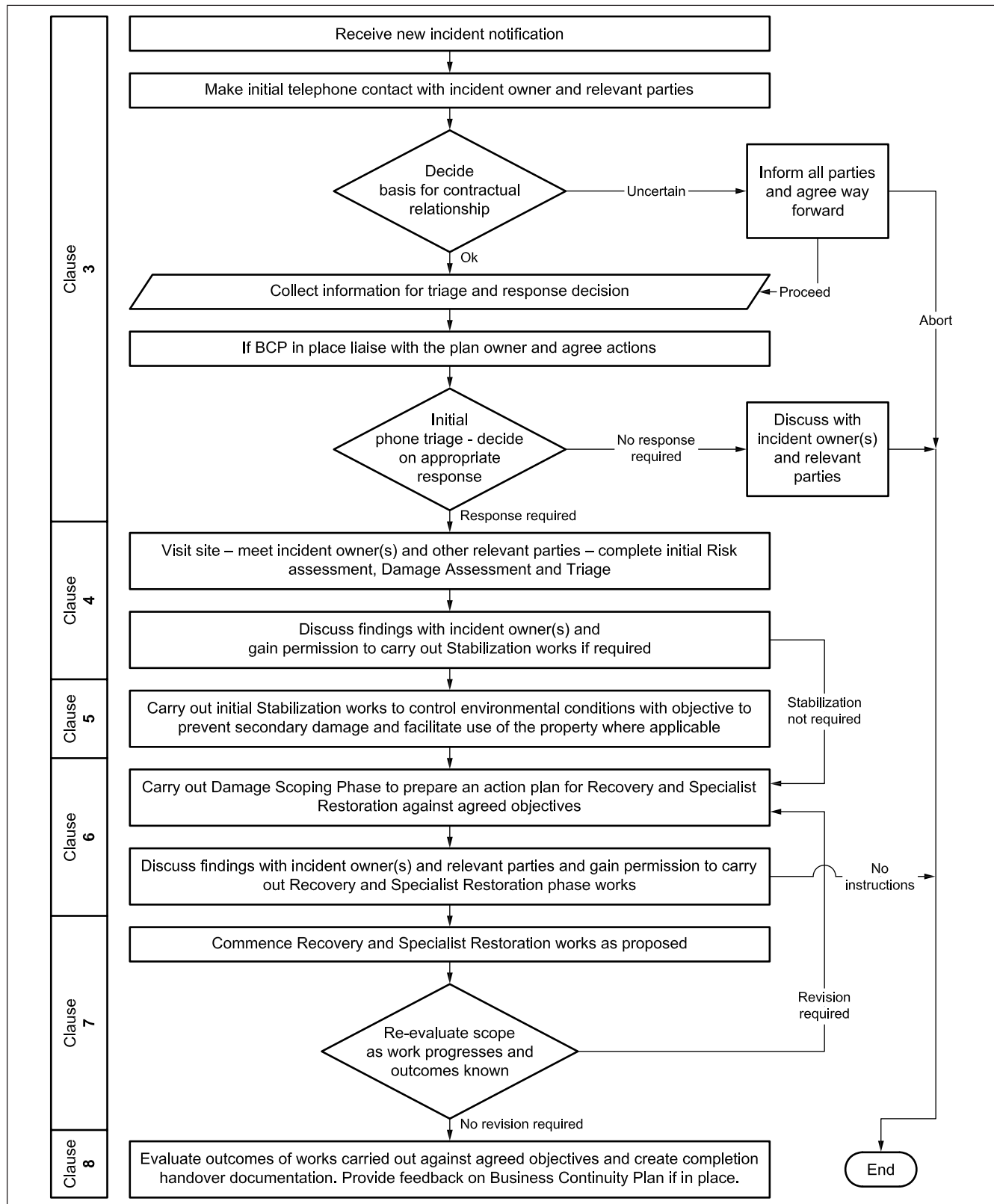
This standard encompasses the relevant information and current generic best practice in a format that is transparent, accessible and supports the consistent and systematic management of post-incident activities.

0.2 Damage management

Damage management encompasses the activities undertaken to assess and manage damage to properties and contents following an incident or peril in order to mitigate, stabilize, remediate, recover and restore said properties and contents to their pre-incident condition, up to the point of reinstatement works if these are required.

Professional damage management practitioners are expected to have the knowledge and expertise to deliver these activities in accordance with current best practice and available technology, aiming to provide solutions that are cost effective for the incident owner and restore normality for the affected parties. Damage management might be referred to alternatively by some sectors as damage restoration/disaster restoration (DR) or recovery and restoration (R&R).

Figure 1 Overview of generic incident stages (flowchart)



1 Scope

This British Standard gives recommendations for the organization and management of assessment, stabilization, mitigation and restoration of properties, contents, facilities and assets following incident damage.

This standard is intended to provide recommendations to individual damage management practitioners and organizations involved in carrying out damage management. It is applicable to domestic, commercial and public buildings.

NOTE This standard might be of interest to property owners, their insurers and their respective agents; risk and business continuity managers and other interested parties identified in 0.1.

2 Terms, definitions and abbreviations

2.1 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

2.1.1 asbestos register

pre-existing document that contains information about asbestos containing materials that have been identified within a building

2.1.2 beyond economic restoration

category or item that is considered not able to be restored cost effectively when compared to the insurer's liability or the full replacement cost

2.1.3 completion

point at which agreed outcomes have been achieved

2.1.4 contractual relationship

basis on which the damage management company or the damage management practitioner (DMP) is employed and remunerated

2.1.5 customer

instructing party and/or the owner(s), occupier(s) or managing agent of the property (buildings and/or contents)

2.1.6 damage management

management of damage to properties and contents resulting from an incident or peril

NOTE Referred to by some sectors as damage restoration/disaster restoration (DR), or recovery and restoration (R&R).

2.1.7 damage management practitioner

individual carrying out damage management activity

2.1.8 environmental stabilization

to bring environmental conditions under control so that secondary damage is avoided or reduced, and that environmental conditions are suitable to return normal use to the property

2.1.9 handover

returning the property or part of the property and/or content items to an authorized third party

NOTE This could be the incident owner or it could be other parties contracted to carry out further work such as reinstatement.

- 2.1.10 incident owner(s)**
customer or individual/organization appointed by the customer to act on their behalf
- 2.1.11 mitigation**
steps to reduce the risk of further loss or damage occurring
- 2.1.12 peril**
specific risk or cause of loss covered by an insurance policy
NOTE Examples include fire, flood, escape of water, windstorm or theft.
- 2.1.13 reinstatement**
work carried out to replace structural materials, fixtures and fittings, services, and finishes damaged beyond economic restoration
- 2.1.14 restoration**
act of returning the property or content item to acceptable or pre-incident condition
NOTE Acceptability is agreed by the DMP and the incident owner.
- 2.1.15 secondary damage**
damage resulting from the residual effects of the original incident or peril but not directly caused by the incident itself at the time of occurrence
EXAMPLE Damage, such as mould growth and timber distortion, caused by continued elevated humidity, or corrosion or staining caused by extended exposure to highly acidic fire residues.
- 2.1.16 sign off**
agreement by the customer that agreed outcomes have been achieved
- 2.1.17 stabilization**
successful control of the post incident environment to reduce or eliminate the likelihood of secondary damage occurring
NOTE See 6.1 for information on damage scoping.
- 2.1.18 strip out**
removal of interior structural materials, fixtures and fittings, services, finishes and contents damaged beyond economic restoration
NOTE Might also be required to give access to damaged areas.
- 2.1.19 subrogated recovery**
financial recovery of losses where a third party is held legally liable for causing the damage
- 2.1.20 targeted drying**
process by which drying conditions are locally controlled and directed at a specific part of the building structure
- 2.1.21 triage**
process for categorizing and prioritizing the most urgent actions to be taken, when delay is likely to lead to further deterioration, especially when resources are limited
- 2.1.22 utilities**
supply of water, gas, electricity, telecommunications, and storm/waste water removal

2.2 Abbreviations

For the purposes of this British Standard, the following abbreviations apply.

BCP	business continuity plan
BER	beyond economic restoration
BIA	business impact analysis
CMC	claims management company
DM	damage management
DMP	damage management practitioner
MAO	maximum acceptable outage
MTPD	maximum tolerable period of disruption
OEM	original equipment manufacturer
R&R	recovery and restoration
SOW	scope of work

3 Damage incident instructions, intake and response planning

COMMENTARY ON CLAUSE 3

In order for the project to be correctly completed, certain essential information is required (3.1). It is essential that this is amongst the first information to be gathered to enable the early response decisions to be made. These unexpected incidents are very disruptive to the incident owner/building occupants and users so the DMP needs to be prepared to respond promptly to each incident and to respond in a systematic and orderly manner.

3.1 Initial information

The following initial information should be obtained by the DMP:

- a) contact details for the incident owner;
- b) evidence of any special circumstances/vulnerabilities that might necessitate a prioritized response;
- c) contact details for a representative if one has been nominated by the incident owner;
- d) the property address;
- e) the usage and type of property;
- f) incident date and details (including incident type, date, nature of event, what has been affected and any site access issues);
- g) existence and nature of any insurance policy (if applicable);
- h) contact details for relevant interested parties and references with their relationship to the incident and incident owner identified;
- i) details of BCP if one exists; and
- j) risk register if one exists.

NOTE 1 *This information may come from intermediaries or directly from the incident owner. It could be partly available from an intermediary before the first contact is made with the incident owner.*

NOTE 2 *See Annex A for information on interested parties and intermediaries and their roles.*

NOTE 3 See Annex B for information on BCPs.

3.2 Initial contact with the incident owner and relevant parties

Contact should be made with the incident owner or their nominated representative, to enable the initial information to be checked and further details clarified (see 3.4).

NOTE In particular the details of the incident owner's experience of the impact of the incident on their personal, or working life, and on the operation of the entity involved in the incident if a non-domestic property. Knowledge of this impact and of the incident owner needs at this time is essential to inform the initial response plans; and to ensure the most effective response is provided to all parties involved.

3.3 Basis for a contractual relationship

The incident owner should be made aware at the start of the engagement who the DMP is, who they work for, what role they play in the damage incident, who they report to and how they can be contacted.

Instructions to proceed with any work required can only be received, and the required work progressed, with the consent of the incident owner.

NOTE 1 Any work carried out would normally be based on a commercial contractual relationship for the services being provided and the service provider remunerated accordingly.

NOTE 2 It is possible that this standard could be followed under a non-commercial, non-contractual relationship. It is essential that the nature and the potential character of the relationship are established at an early stage so that all parties can agree on what basis the service provider is employed and remunerated.

3.4 Information for desk-top triage and response decision

During the initial contact with the incident owner (see 3.2), the DMP should evaluate the incident owner's current situation, the way in which they have been affected by the incident, the disruption that they are experiencing, and an early indication of their priorities and expectations for resolution and timescales.

NOTE 1 This information could include but is not limited to:

- a) *more information on the incident to understand the general disruption that the incident owner is experiencing; and*
- b) *the current perceived levels of damage/contamination/disruption according to the incident owner (or their nominated representative or involved parties) in respect of:*
 - 1) *the building (especially any effect that is preventing use of an area);*
 - 2) *the contents (especially to items of significant value or function);*
 - 3) *the business (especially in their ability to continue in operation).*

The DMP should gather the following information (for desk-top triage purposes):

- i. the current environmental conditions within the affected property;
NOTE 2 In order to determine the control measures required to mitigate the damage and prevent the onset of secondary damage.
- ii. information on the extent of the damage;
NOTE 3 Number of rooms affected, number of floors, etc.
- iii. the observable damage to the building in the areas affected;
- iv. any access restrictions;
- v. ongoing business/trading requirements;

- vi. dangerous structures;
- vii. listed or historic building status;
- viii. the nature of the contents affected, and the observable damage or contamination;
- ix. information on any observed or known environmental contamination issues;
- x. if a commercial building, the existence and availability of its buildings health and safety file, asbestos register and details of other hazardous substances known to be present;
- xi. for commercial and public properties, the existence of a BCP and whether it prioritizes any damage response issues;
- xii. if a tenanted property, either residential or commercial, the nature of the tenancy agreement and liabilities/obligations under that agreement;
- xiii. if an owned apartment within an apartment block, where the incident has had an effect on the building structure in any way, information on the management company and contact details for the persons who is dealing with the incident;
- xiv. the likely financial impact of the incident disruption on the incident owner;
- xv. a re-statement of the needs and priorities of the incident owner;
- xvi. the potential for storage on-site of contents from the affected area, i.e.: upstairs, when the ground floor is water damaged;
- xvii. any pre-existing defects or disrepair affecting the properties structural or functional integrity;
- xviii. any health and safety issues that might need to be taken into account;
- xix. any known action taken by other parties that could impact on the damage management activity.

The DMP should take steps to resolve any conflicting or contradictory information supplied by the different parties.

NOTE 4 Often a situation is unfolding at this time and so more information can become available over quite short periods of time. It's important to recognize this dynamic element and be alert to these changes and be prepared for updates. It is at this point that good communication is established to both reassure all relevant parties, and to ensure collaboration between all involved parties.

Once all of the required information has been gathered and considered an appropriate initial response plan should be formulated and recorded. The planned response should be confirmed with the incident owner and, if found to be acceptable, an appointment should be made for the initial site visit.

3.5 Interface with BCP

For commercial and public properties, once the DMP has established that a BCP is in place contact should be made with the BCP plan owner at the earliest opportunity. A copy of the relevant part pertaining to initial response damage management operations and recovery objectives, as well as business impacts, business priority activities and maximum acceptable outage should be reviewed and then discussed with the BCP plan owner. All actions to be taken should be in close collaboration with the BCP plan owner. It would be assumed that this collaboration would continue throughout the project when a BCP plan is in place.

NOTE See Annex B for business continuity and commercial property considerations.

In incidents affecting commercial property, if no BCP is available the DMP should consider using business continuity management principles when advising the incident owner. Application of these principles can be beneficial when defining scope and deliverables (see Table B.1).

4 On-site damage assessment

4.1 Purpose of the on-site damage assessment and preparedness to commence work

COMMENTARY ON 4.1

The purpose of the initial site visit is to verify that the information already received is accurate and up-to-date, to carry out a visual and technical inspection of the damage, and to determine which measures need to be applied immediately to mitigate the damage and prevent the onset of secondary damage.

Any initial site visit should take into account that for some incidents the police normally co-ordinate the activities of those responding to a land-based sudden impact emergency, at and around the scene.

NOTE 1 There are however exceptions, for example, a fire and rescue authority would co-ordinate the response at the scene for a major fire.

NOTE 2 For the police, as for other responders, the saving and protection of life is the priority. However, they also ensure the scene is preserved, so as to safeguard evidence for subsequent enquiries and, possibly, criminal proceedings. Once life-saving is complete the area is likely to be preserved as a crime scene until confirmed otherwise.

NOTE 3 For major incidents the local authority plays an enabling role in close collaboration with a range of bodies which are not routinely involved in emergency response, e.g. building proprietors, land owners, etc.

In other incidents, where there are variables such as significant impact on building structure and/or contents and more complex needs/priorities of the building users, there is usually a need for a more detailed inspection and analysis and, potentially liaison with a wider range of involved parties, to take place before any damage mitigation/restoration work can commence.

During the inspection process a response plan should be formulated by the DMP and appropriate resources placed on standby to enable an efficient response to be made once approval for action is obtained.

NOTE 4 The purpose of this “preparedness” and the potential for the prompt arrival of damage management practitioners equipped with the resources to stabilize the environment is a key benefit to the incident owner in terms of overall project duration and cost, where the quick response can reduce secondary damage, further loss and timescale and facilitate earlier reuse of the property.

4.2 Initial site visit introductions and risk assessments

On this visit the DMP normally meets with the incident owner or their representative(s) and should re-state their role in the management of the incident, to ensure this is clearly understood.

The first stage of the inspection process is to validate the information received during the desktop assessment with the incident owner. The site visit should provide a first opportunity to validate the client’s understanding of the situation and their needs. This applies to personal priorities and vulnerabilities, and key elements of any BCP or recovery plan.

The DMP should ensure the information is accurate and up-to-date, note any discrepancies and inform all relevant parties.