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Security and resilience — Community resilience — Guidelines for planning recovery and renewal

Sécurité et résilience — Résilience communautaire - Lignes directrices pour la planification de la relance et du renouveau

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Contents

Page

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 292, *Security and resilience.*

This first edition cancels and replaces ISO/TS 22393:2021, which has been technically revised throughout.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The invasive and often far-reaching impacts of major emergencies, disasters and crises can bring the need for short-term recovery and ambitious renewal of communities. Such events disrupt normal conditions, expose system fragilities and have impacts that can cause widespread suffering. This document provides a framework for how to govern, coordinate and assess the impacts of any type of major emergency, disaster and crisis no matter what their impact on communities, and address these by planning transactional recovery activities and strategizing transformational renewal initiatives.

Despite the sometimes complex and prolonged nature of responding to a crisis, the general planning for recovery starts before a crisis happens. Tailoring those general recovery activities to the specific conditions being faced in the crisis is initiated early, during the response. Thinking about recovery can begin while the crisis is ongoing so that swift action can be taken at an appropriate time and scale to begin the journey of recovery. In this context, recovery delivers transactional activities to quickly overcome the negative impacts of the crisis and prepare for the next incident. Recovery is delivered in the short term with the aims of, for example, re-starting basic services (such as electricity and water), rebuilding damaged infrastructure, temporarily supporting livelihoods, providing governance, and encouraging the new behaviours needed to enable work and social lives. These transactional activities address immediate needs by reflecting on the crisis and learning lessons to inform future activities, reviewing preparedness for future crises and reinstating parts of the system impacted by the crisis. While compelling in some situations, the goal of quickly "getting back to normal" is often too simplistic, underestimates the disruption and damage caused and fails to reflect the opportunity to address chronic underlying issues that have been exposed by the crisis. Recovery reinstates preparedness following a crisis, informed by a business continuity management, quality management or competent persons.

Beyond such transactional activity, the disruption caused by crises creates conditions that can encourage major strategic change; what is called in this document "renewal". Renewal seeks to transform a system through ambitious strategic initiatives that have been co-developed with communities. Renewal is not part of the emergency management cycle (of mitigate, prepare, respond, recover) because the scale of impacts from recent crises go beyond what transactional recovery of emergency management can address. Such impacts require widespread system change as renewal seeks to reconcile broken relationships with communities, and to improve and amend the shortcomings, inequalities and strategic vulnerabilities that were laid bare by the impacts of the crisis and shown now to be insufficient as a basis for the future. This involves changing the environment to create more favourable conditions or reshaping operations in the light of those conditions. Renewal enhances resilience following a crisis.

Actions for recovery and renewal are aligned to ensure that opportunities and improvements for each are not undermined by a lack of coordination. While the group which works on recovery can differ to that which works on renewal, there will be some overlap of personnel to ensure that coordination and communication is effective. Recovery activity cannot be done in isolation of renewal, nor vice versa, so communication is essential. Indeed, a coordinated strategy can help to ensure that recovery and renewal define who will lead their effort, who will act as central coordination and how cross-group communications will happen so that the specialist tasks associated with recovery and renewal take place while understanding the needs and requirements of each other.

The term "build back better" is known in disaster management. Recovery and renewal aim to build a fairer society in the future where renewal, especially, seeks to address the inequities and inequalities that have been exposed by a crisis. In this sense, recovery and renewal seeks to "build forward fairer" to create, in the aftermath of a crisis, a future society that is fairer for all.

In terms of what needs to be recovered and renewed, this document focuses on the people who have been affected by the crisis, the places where the impact/damage and response has happened, and the processes that have been configured to meet the needs of the response – all underpinned by power and partners. Key to addressing the people, places and processes is the need to have the right partners to support recovery and renewal, and acknowledge the emerging power relations to ensure that meaningful recovery and renewal can happen.

The effectiveness of recovery and renewal will be aided by the quality of data available on population demographics and vulnerabilities to consider who needs what support and when. This will ensure that recovery of the most vulnerable people can be supported and that renewal opportunities will be better aligned to the needs of those most in need.

Recovery and renewal can aim to establish a new way of life that, in some cases, resembles life before the crisis but that is also adapted to, and conditioned by, the crisis. For this, it is necessary to learn during the crisis from what has happened as well as how communities and organizations in other cities/countries have dealt with similar effects in their context.

A summary of the content of this document is provided in Figure 1.

CLAUSE 4: Concepts
— **Recovery:** transactional and short-term activity to enhance preparedness after a crisis
— **Renewal:** strategic, transformational, systemic endeavour to build resilience after a crisis
— **Resilience:** Ability to absorb and adapt in a changing environment

CLAUSE 5: Set up Recovery Coordination Group
— Membership, terms of reference, resources, initiate work, communication, ambition

CLAUSE 6: Assess the impacts of the crisis and community needs

Impact/Needs Assessment (INA) themes
1. Communities
2. Economic
3. Infrastructure management
4. Environment
5. Health
6. Governance

Check INAs for systems themes
1. People involved
2. Places affected
3. Processes disrupted
Underpinned by:
4. Power
5. Partners

Analyse relations with all levels:
National government and departments
Sub-national and local government partner
Local communities
Individual organizations
Individual members of the public

Prioritize impacts / needs to be addressed

CLAUSE 7: Develop transactional RECOVERY ACTIVITIES
— **Restart** halted operations
— **Return** operations to pre-crisis state
— **Renovate** to do things differently
— **Retain** in their new form

CLAUSE 8: Develop transformational RENEWAL INITIATIVES

Identify transformational initiatives that renew:

Relationships with people: Redesign Reconcile Reparation
Places: Repurpose Relocate Regenerate
Processes: Reshape Reorganize
Repair the system across people, places, processes

Design strategies given other pressures
1. Intensity of response
2. Recovery
3. Renewing other issues
4. Political challenges
5. Financial pressures
6. Fatigue

Encourage commitment to renewal initiatives
— Co-produce positive vision
— Engage partnerships, politics, and communities

Manage delivery
1. Governance structure
2. Identify delivery partners
3. Publicize initiatives
4. Monitor delivery

CLAUSE 9: Learn and act to improve
1. Strategy, vision and leadership
2. Intelligence
3. Management of systems and planning
4. Coordination of operations
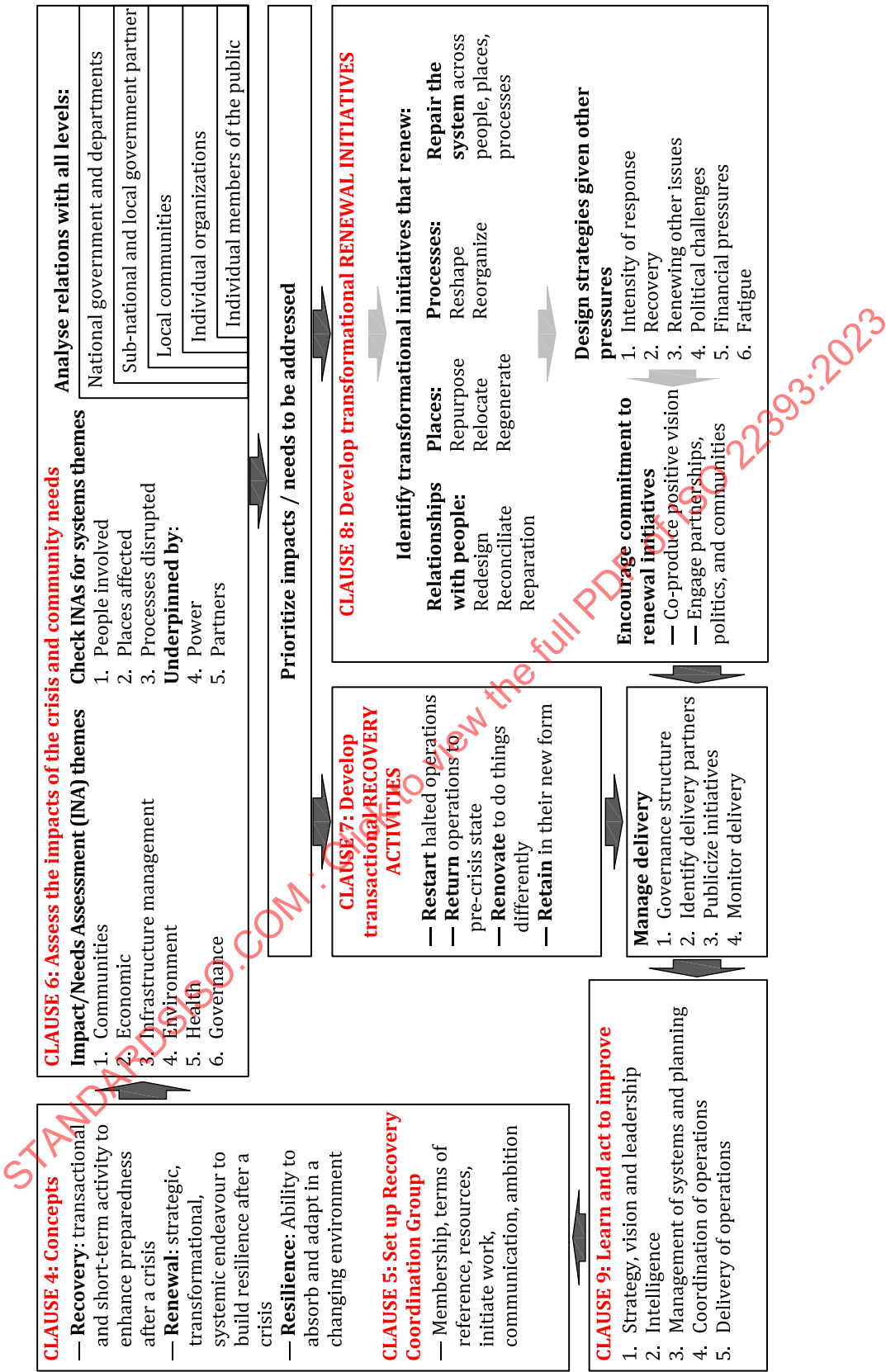5. Delivery of operations

Figure 1 — Content of this document

Security and resilience — Community resilience — Guidelines for planning recovery and renewal

1 Scope

This document gives guidance on how to develop meaningful recovery activities and renewal initiatives from any type of major emergency, disaster or crisis, no matter what type of impact or damage it has. It provides guidelines on how to identify the short-term, transactional activities needed to reflect and learn, review preparedness of parts of the system impacted by the crisis, and reinstate operations to build preparedness to future emergencies. It distinguishes a longer-term perspective, called "renewal", and provides guidelines on how to identify visionary initiatives to be addressed through transformation to change lives and futures.

The guidelines cover how, in both recovery and renewal, there is a need to identify scalable activity on people, places, processes, power and partners.

This document is applicable to all organizations, particularly those involved in recovery and renewal and that are responsible for human welfare and community development (e.g. public, voluntary, community and social enterprise sectors).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22300, *Security and resilience — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22300 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
recovery
operational, transactional and short-term activity to enhance preparedness following an emergency, disaster or crisis

Note 1 to entry: Recovery is focused on communities, i.e. the people, places and processes, and is underpinned by power and partnerships.

Note 2 to entry: Recovery should be informed by the business continuity processes and the strategic objectives of the organization for recovery following a crisis.

3.2
renewal
strategic, transformational, systemic endeavour to enhance resilience following an emergency, disaster or crisis

Note 1 to entry: Renewal is more ambitious than *recovery* (3.1), potentially tackling chronic societal issues that the crisis has exposed as offering significant opportunities to enhance people, places and processes.

3.3
resilience partner
collaborating entity that provides services to the community to retain or enhance its ability to absorb and adapt in a changing environment

Note 1 to entry: Services may be provided in its day-to-day work and/or in the context of recovery or renewal activities.

3.4
local resilience partner
resilience partner (3.3) that collaborates with other resilience partners in a geographic area

4   Concepts in recovery and renewal

4.1   General

The depth and breadth of impacts on communities from a major emergency, disaster or crisis can be so widespread that "recovery" as a term is not suitably descriptive of the full spectrum of dealing with the aftermath of the crisis. This document differentiates the short-term, transactional recovery of communities from their ambitious, transformational, strategic renewal.

This clause covers:

— characteristics of recovery (see 4.2);

— characteristics of renewal (see 4.3);

— role of resilience partners for recovery and renewal (see 4.4);

— differentiating recovery and renewal (see 4.5);

— impacts and needs to recover and renew (see 4.6);

— cross-cutting systemic themes for planning recovery and renewal (see 4.7);

— information for planning recovery and renewal (see 4.8);

— arrangements to activate recovery and renewal (see 4.9).

4.2   Characteristics of recovery

Recovery:

— aims to design positive outcomes to enhance preparedness following a crisis by addressing the impacts of the crisis and the fragilities and opportunities it has exposed;

— is a social and developmental process of supporting communities towards the management of their own immediate future in a way that recognizes their different needs and priorities;

— is evidence-led in recovering the system based on a detailed appreciation of the impacts of the crisis;

— involves a series of short-term actions, each of which can be addressed by a transactional activity delivered by an organization or by a small group of collaborating organizations;

— occurs at a pace that depends on the residual impact of the crisis, ongoing demands, backlogs, fatigue and continuing supply difficulties;

— begins being planned during the preparedness phase so that recovery can begin as soon as is feasible, even though it does not always seem appropriate or possible to discuss it during the response;

— is applicable to all levels of society (e.g. from national government through to individuals);

— covers a wide range of activities (e.g. environmental, cultural, technological, partnership working, health, social, political, economic);

— reports to a group of local resilience partners that create and ensure local preparedness for crises.

The actions that aim to achieve recovery should:

— reflect and learn to understand what has happened during the crisis and its impacts, and to identify where transactional change is needed to renovate the system and reinstate preparedness;

— review preparedness to assess where the system can be made more ready for other crises or future waves of the same crisis, such as by replenishing and pre-positioning resources;

— reinstate operations in parts of the system impacted by the crisis as soon as possible, such as getting services, businesses and schools back working again, informed by business continuity management, quality management or competent persons.

4.3 Characteristics of renewal

Renewal:

— co-develops, with communities, the ambition for transformation to deal with strategic impacts and opportunities created by the crisis as well as pre-existing challenges;

— is based on transparency, but realizes that informal systems and alliances will form which seek to influence renewal – those systems, alliances and their agendas should be identified, their influence documented, and their agendas considered to avoid the influence of hidden agendas;

— focuses on existing vulnerabilities, whether they are socio-economic, environmental or physical exposure to hazards;

— focuses on ambitious transformational change that can bring significant improvements, e.g. to create a more resilient society through improved technology, resilient infrastructure, equality, equity, sustainability, prosperity and reducing environmental risks;

— recognizes that inequalities can persevere after a response and should be redressed as quickly as possible;

— addresses enduring human, physical, environmental and economic strategic impacts and opportunities through a complex social, developmental and political approach that takes a holistic, interdisciplinary view of the system (i.e. the people, places and processes);

— addresses impacts and opportunities that are so complex that wider partners should work together to address them;

— begins with a period of reflection to appreciate what has happened during the crisis, giving time for strategic thinking, and wider strategic partners to be established;

— continues with a period of multiple strategic partners working to implement transformational initiatives that are coordinated according to their priority.

The actions which aim to achieve renewal should support:

— reconciliation with people by encouraging healing after the crisis, particularly with those who have suffered under the circumstances of the crisis which have left them more vulnerable;

— reparations to people by compensating those affected by the crisis to make amends for their losses;

— repurposing places by reimagining how spaces can be used, their purposes, how people interact with places and how places make them feel;

— relocating to new places from understanding new local needs and by moving services into new places where they are needed, or away from areas where they are no longer needed;

— regenerating places to improve the resilience, prospects and strength of places to tackle inequalities by, for example, encouraging preparedness and improving business continuity;

— reshaping the external environment to create an operating context that better accommodates external influences on internal activities, e.g. through influencing the expectations of services users, or changing guidelines or systems;

— reorganizing processes by changing how activities are done to respond to environmental requirements, e.g. to accommodate new behavioural, cultural, technical or process-related needs;

— repairing the system through enhancing the resilience of people, places and processes by rethinking services, locations and supporting infrastructure.

4.4   Role of resilience partners for recovery and renewal

Some resilience partners will already participate in planning and exercising so will be well-placed for ongoing collaboration to recover and renew from a crisis. In general, resilience partners should:

— share information, coordinate efforts, and promote consistent media and communications messaging;

— coordinate the co-production of recovery activities and renewal initiatives with communities to ensure their contextual suitability;

— collaborate in the delivery of recovery activities and renewal initiatives;

— co-produce renewal with multiple resilience partners due to the scope and scale of the ambition;

— include new partners if needed and give additional support to them to increase their understanding of the crises, procedures, and collaborative working in recovery and renewal;

— include neighbouring countries, regions or other entities across borders if the crisis is far-reaching;

— collaborate with interested parties, such as:

    — national government and departments;

    — sub-national and local government partners;

    — local communities, including small place-based community organizations and local initiatives;

    — individual organizations, in particular those involved in the intervention during the crisis;

    — individual members of the public, in particular those with special knowledge or skills.

In addition to these roles, interested parties will have specific roles according to the nature of their interests.

National government and departments should:

— provide guidance on the process of recovery planning;

— in recovery, lead on restoring national services, e.g. in health and social care, by addressing the backlog of normal treatments created during the response;

— in renewal, contribute to, for example, national economic and infrastructure programmes, and policy and legislative changes.

Sub-national and local government partners should:

— contribute to planning the recovery of essential services across the partners, e.g. to recover crisis preparedness, transportation, public works;

— contribute to strategizing renewal, e.g. of well-being services, health provision and local economic regeneration.

Local communities should:

— self-organize to recover as appropriate;

— co-produce renewal initiatives in conjunction with other partners;

— drive local recovery and renewal through the people and the places where they are based.

Individual organizations should:

— recover their own operations and service delivery, including:

— re-establish processes where they remain economically viable or value-added;

— reinstate normal statutory and business functions;

— attend to the welfare and well-being of their people;

— develop new ways of delivering services where ongoing effects of the crisis remain (e.g. social/physical distancing);

— strategize renewal to exploit new opportunities or respond to new constraints (e.g. reconfiguring supply chains).

Individual members of the public should:

— recover themselves with support from other partners, e.g. a groundswell of local initiatives to provide mental health services and strengthen financial futures;

— influence renewal through public opinion and behaviour, but their ability in this regard is likely to vary greatly.

In some cases, international organizations will participate as partners, for example, if they are funding activity.

4.5 Differentiating recovery and renewal

Designing recovery activities and working with communities to co-develop renewal initiatives should be approached differently. Table 1 explains the differences between recovery and renewal. Clause 7 explains how the recovery coordination group (RCG) should be convened to plan transactional recovery activities, while Clause 8 explains how renewal initiatives can be designed by a wider range of strategic partners.

Table 1 — Differentiating recovery and renewal

Differentiators	Recovery	Renewal
Activities designed under the authority of:	RCG formed of local resilience partners	community, political and strategic leaders
Role of authority to design activities:	coordinate information gathering, design and monitor activity implementation	co-produce community and political alignment behind an ambitious vision for change
Activities based on:	understanding the impacts of the crisis on local communities and services	prioritizing the widest strategic impacts and opportunities revealed by the crisis
Type of problems being addressed:	discrete and comparatively straightforward	systemic, complex and political
Type of actions being designed:	limited scope contained to an organization	broad scope interwoven across multiple partners
Actions delivered by:	single organization or small group of resilience partners	wider set of partners including resilience, economic, society, healthcare, etc.
Type of activity:	transactional	transformational
Example of enablers for action:	an organization's will and resource	a strategic partnership's collective ambition for transformational change

4.6 Impacts and needs to recover and renew

Not all crises will create impacts in every part of a system, but their impacts are typically far-reaching and intense for those involved. Crises can create new impacts on the system and expose needs that existed before the crisis. Recovery and renewal should address such impacts and needs. The topics that impacts and needs cover include:

— communities: e.g. the impact or need for support regarding services to alleviate suffering, maintain the dignity of affected persons, protect at-risk groups, support vulnerable people, and volunteering;

— economic: e.g. the impact or need for support regarding finances, commerce, national programmes, restricted operations, supply chains, job markets and sectors (e.g. hospitality, leisure, manufacturing);

— infrastructure: e.g. the impact or need for support regarding drinking water, food, transport systems, information and communication technologies, cyber security, education provision;

— environment: e.g. the impact or need for support regarding the use of public spaces, new behaviours in the built environment, air quality and natural hazards;

— health: e.g. the provision of healthcare to those affected by the crisis as well as to other services users, managing the demand for particular services (e.g. for people with new short-term ailments or chronic conditions created/exacerbated by the crisis) and managing excess death;

— governance: e.g. the impact or need for support regarding legislation, restrictions, resourcing and financial frameworks, supporting new partnerships, new approaches to communicating with interested parties.

4.7 Cross-cutting systemic themes for planning recovery and renewal

When considering the impacts and needs identified in 4.6, there are cross-cutting systemic themes for recovery and renewal, including:

— people involved in the crisis, including:

 — those who are affected, such as vulnerable people, marginalized communities, children and other members of the public;

— those who respond, such as crisis-related staff, critical workers and volunteers;

— places and infrastructure affected by the crisis, including:

— areas that have infrastructure, such as utilities, water supply, sanitation and waste treatment, health and care systems, organizations, housing and neighbourhoods;

— areas of human activity, such as cities and rural areas where people live, work and visit;

— processes affected by the crisis, including:

— access to, and constraints on, services and infrastructure for people who are affected, vulnerable or marginalized;

— ways of working, rules and procedures, especially those that were changed during the response or should be changed using learning from the response.

Underpinning people, places and processes are key enablers for planning recovery and renewal which should also receive particular focus:

— power, and the formal and informal influence including that from legislative power at national and sub-national government levels, power of local government and elected officials, and people power from groups of individuals united by a cause;

— partnerships, and the relationships developed during the response that underpin recovery and renewal activities, enabling action through multi-departmental and cross-organizational working, underpinned by power.

Recovery and renewal should use these five cross-cutting systemic themes when planning transactional activities and transformational initiatives based on the impacts and needs topics in 4.6, i.e. communities, economic, infrastructure, environment, health and governance.

4.8 Information for planning recovery and renewal

Information should be collected to ensure that work on planning recovery and renewal begins with a clear understanding of the context, including, for example:

— national and local expectations, e.g. policy, non-statutory guidance, standards;

— situational awareness and intelligence, e.g. what has happened so far in the crisis, what response mechanisms have been activated and the effect they have had;

— the six topics for impact and need outlined in 4.6, to understand more about the ongoing local issues and current work;

— the five cross-cutting systemic themes outlined in 4.7, to understand more about the challenges and enablers.

4.9 Arrangements to activate recovery and renewal

The general arrangements to activate recovery and renewal work that are described in Clauses 5 to 9 should:

— be planned, agreed in principle, exercised and improved by partners as much as is possible in advance of a crisis, including preparations to:

— establish the basis to initiate an RCG (see Clause 5);

— assess impacts and needs (see Clause 6);

— design recovery activities (see Clause 7) and renewal initiatives (see Clause 8);

— continuously improve (see Clause 9);

— include the governance mechanisms, organizational structures, policies, procedures, partnerships and processes needed by resilience partners to support their work;

— clarify the role of partners;

— be activated in the early stages of a crisis so gain the earliest understanding of the challenges.

Clauses 5 to 9 provide more detail on establishing how these general arrangements can be adapted to the specific context of the crisis.

5 Setting up a recovery coordination group

5.1 General

The general arrangements in 4.8 should prepare the groundwork on which to establish an RCG to coordinate the impact and need assessment (see Clause 6) and develop the recovery activities (see Clause 7). To initiate the RCG, local resilience partners should:

— agree the membership of the RCG (see 5.2);

— agree the terms of reference of the RCG (see 5.3);

— initiate the work of the RCG (see 5.4);

— establish access to resources for recovery and renewal (see 5.5);

— communicate with interested parties (see 5.6).

The RCG should not coordinate the renewal initiatives (see Clause 8) but should support the identification of potential renewal initiatives and encourage resilience partners to pursue those opportunities.

5.2 Agreeing the membership of the RCG

Local resilience partners should agree on the RCG's membership, which should include:

— a chairperson who:

— is from an organization that is responsible for human welfare and community development (e.g. local government) so they understand the local context of community impacts, needs, lessons, recovery and renewal;

— has leadership skills (e.g. soft skills, political acumen) along with the authority and confidence of the group and other partners;

— understands the statutory requirements on the RCG;

— can develop strategic partnerships if needed for recovery and renewal;

— can establish and maintain relationships based on cooperation and communication, not only command and control;

— is able to analyse, solve problems and make important decisions during uncertainty;

— has personal endurance (e.g. treats people with respect as fatigue sets in);

— can brief those who are involved with renewal on the work of the RCG and ensure coordination across recovery and renewal;

— members who:

   — are local strategic recovery leads with statutory responsibilities for resilience, communities, infrastructure and environment;

   — are subject matter experts with particular skills and knowledge, e.g. understand how people, places and processes have been affected by the crisis;

   — are knowledgeable about the impact and needs of society, including women and people who have been disproportionately affected by the crisis;

   — can commit their organization's resources and data;

   — can brief their constituents of the work of the RCG;

— project management support to the group;

— strategic recovery and renewal advice (e.g. alignment with policy and regulation).

The membership should be constantly reviewed by local resilience partners and the RCG to ensure appropriate representation as new information becomes available.

5.3 Agreeing the terms of reference of the RCG

5.3.1 General

Before the RCG begins its work, local resilience partners and the RCG should agree:

— the shared information and intelligence on the crisis;

— the language and vocabulary for recovery and renewal;

— the terms of reference of the RCG, including:

   — aims, objectives (see 5.3.2), scope and parameters of recovery and renewal;

   — its constitution, e.g. the RCG as a commissioning body that:

      — draws on the knowledge, expertise and lived experiences of others;

      — approves the recovery activities and renewal initiatives;

      — monitors progress on implementation;

      — provides assurance;

   — its local, national and international statutory and non-statutory duties as well as good practices;

   — its place in the structure of committees that are dealing with the crisis;

   — its role to recommend renewal initiatives;

   — when the RCG can end its work, e.g. when aims have been achieved, disruption rectified and demands normalized (see 5.3.2);

— what training is needed to enable members to fulfil their duties and responsibilities, including:

   — training needed for the RCG's members and the timescales for this;

   — areas of responsibility for partners and the organizations, constituents and perspectives they represent;

— how organizations and structures are to support recovery and resource implications;

— the identity of other interested parties, including:

— their power and interest in the recovery process (e.g. which interested parties to involve and which to consult);

— the relationships the RCG has with other interested parties (e.g. its influence and [in]dependence, and current/future relationships with national, local and community bodies);

— a structure for the RCG, including:

— the arrangement of working groups to feed information and intelligence into the RCG;

— where intelligence about local and national response can be collected to support its work;

— the pace and rhythm of the RCG's work;

— an approach to develop recovery activities, including to establish:

— a shared vision, aims and objectives for recovery;

— criteria/thresholds for when each of the following phases begin and end: response, recovery and renewal (see 5.4);

— collaboration, resourcing and funding opportunities;

— a media and communications strategy.

5.3.2 Objectives for the RCG

The objectives for the RCG are:

— ensure preparedness for the next crisis;

— reinstate services as soon as practicable;

— review impact and need assessments;

— develop recovery activities prioritized from the impact and need assessments, including:

— identifying impacts to return, retain, resist, renovate or recommend;

— co-producing recovery actions with interested parties;

— support implementation of the recovery activities, including:

— identify funding sources, protocols for political involvement and support two-way communications;

— identify best practice and lessons learned;

— identify transformational opportunities to include as renewal initiatives;

— develop an exit strategy, including a handover process from recovery to renewal.

The fulfilment of these objectives can signal that the RCG has completed its work and can close.

5.4 Initiating the work of the RCG

The response to the crisis should continue for as long as needed to reflect the ongoing danger to life, property and the environment. Intelligence should be used to understand how the response effort is reducing that ongoing danger and when the work of the recovery phase will be initiated.

Recovery and renewal should be considered as phases that should be initiated while the response continues. To facilitate this, the local resilience partners and the RCG should:

— establish clear criteria to initiate recovery;

  EXAMPLE   The crisis is contained with no significant risk or resurgence, no significant risk of harm or environmental hazards remain, there is a clear need to start planning recovery and renewal, and the structure of the RCG has been agreed.

— agree a shared understanding of the nature of the crisis and of all significant information that has been collated and made available from the response phase;

— recommend a formal handover process from response to recovery is described in planning;

— assess any pre-prepared recovery plan to compare pre-crisis state against the situation faced.

5.5   Establish access to resources for recovery and renewal

Resilience partners should begin to identify access to resources to support the delivery of actions for recovery and renewal, including:

— existing local resources (e.g. trusted information, equipment, knowledge, direct funding from current budgets);

— resources from national government (e.g. intelligence, government grants);

— support from philanthropic organizations;

— donations from charities and community-led sources.

The allocation of these initial resources should be partly based on the perceived relative importance of actions that support recovery activities and renewal initiatives. Identification of resources will continue through the design and delivery of renewal initiatives.

5.6   Communicating with interested parties

Communications during recovery and renewal are critical to ensure resilience partners, interested parties and communities are informed of recovery activities and renewal initiatives. The RCG should have communications processes that:

— disseminate information to internal and external (local and national) interested parties to:

  — provide a consistent, agreed message from all RCG partners;

  — enable them to monitor progress on recovery;

— support two-way communications with interested parties to:

  — receive feedback from interested parties;

  — follow protocols for engaging elected officials;

  — ensure that communications are being received and understood by interested parties;

— are coordinated by media and communications professionals in a multi-agency information management group;

— engage affected communities in the design and implementation of renewal initiatives (e.g. via consultation, surveys and representation).

6 Assessing the impacts of the crisis and community needs

6.1 General

The general arrangements in 4.8 should prepare the groundwork for one of the first activities for the RCG, i.e. to commission an evaluation of the impacts of the major emergency, disaster or crisis on, and the wider needs of, people, places and processes.

The assessment of impacts should focus on the consequences of the crisis. In contrast, assessing needs should focus on important requirements that existed before the crisis and can be addressed through recovery and renewal. Such needs would not be identified as impacts or consequences of the crisis; nevertheless, those needs can inform the RCG of important improvements.

The assessment of impacts and needs should be conducted through the following activities:

— understand the context of the crisis (see 6.2);

— identify impact themes on which to commission impact and need assessments (see 6.3);

— design and set up the impact and need assessments (see 6.4);

— collect information for the impact and need assessments (see 6.5);

— calculate net economic loss (see 6.6);

— analyse and present results from the impact and need assessments (see 6.7);

— select action areas to recover and renew (see 6.8).

6.2 Understanding the context of the crisis

To design impact and need assessments, the RCG should:

— understand the context of the assessment by reviewing the general information that has already been collected during the response by strategic and tactical operations;

— identify gaps in the general information available and fill those gaps through collecting new information, conducting workshops for interested parties, desktop reviews, field assessments, interviews and surveys;

— understand general information about impacts and needs, as well as specific data about the communities that have been affected (e.g. population characteristics of a geographic area, the locations of vulnerable people).

The RCG should be regularly updated through the production of shared situational awareness and a common operating picture to ensure information on the current situation, impacts and needs informs the assessment and supports decision-making. This information, from trusted sources (e.g. management systems, official guidance, regulations), should cover, for example:

— the crisis and the response (e.g. its details, rhythm, capabilities deployed, resources used);

— the people, places and processes that have been affected by the crisis;

— the disproportionate impacts of the crisis on people, places and processes, and their nature (e.g. positive or negative, tangible or intangible);

— where major impacts have/will arise and what measurement techniques are being used to monitor these;

— existing partners and their contribution to the response.

The RCG should use this information to identify the impact themes for (see 6.3), and the design of (see 6.4), the impact and need assessment.

6.3 Identifying impact themes on which to commission impact and need assessments

The RCG should commission impact and need assessments that:

— identify important impact themes to be recovered or renewed;

— align with current knowledge of the crisis (as determined in 6.2);

— are appropriately scoped using impact themes (see Table 2).

To describe each impact theme, Table 2 provides examples to be considered by the impact and need assessments.

The detail of these impact themes can be used to analyse the impacts and needs, to ensure comprehensive coverage of the information collected.

Annex A provides examples for each impact theme in Table 2. The RCG can use Annex A to provide additional detail to the scope of the impact and need assessments.

Table 2 — Impact themes to consider in impact and need assessments

Communities	Economic	Infrastructure
— Vulnerable people — Volunteers — Community participation — Public protection — Emergency housing (including homeless) — Welfare (including social care) — Education and skills — Cultural	— Economic strategy (national and local) — Business regeneration/rejuvenation — Public sector support mechanisms — Voluntary, community and social enterprise sector — Personal finance — Innovation — Labour/workforce	— Infrastructure providers — Infrastructure customers — Energy (utilities) — Telecommunications (including digital) — Urban and rural infrastructure — Transport — Waste management — Supply chain and logistics
Environment	**Health**	**Governance**
— Spatial planning (including public spaces) — Environmental health — Living sustainably — Resilience to climate change	— Healthcare — Public health and well-being (including psycho-social support) — Excess death management — Connectivity between health and the wider system	— Legislation, policy, guidance — Civil protection and emergency management — Information and data — Resourcing and financial frameworks — Partnerships and coordination (national, subnational, local) — Strategic communications — Governance of delivering recovery and renewal

6.4 Designing and setting up the impact and need assessments

The RCG should use the output from understanding the context of the crises (see 6.2) and identifying the impact themes on which to commission impact and need assessments (see 6.3) as a basis to design the impact and need assessments. Different impact and need assessments should be conducted to address different impact themes. For each impact and need assessment, the RCG should:

— identify its purpose, including:

— what the assessment is to be used for;

— the desired level of refinement needed to accomplish the purpose;

— organize consultation and information collection, including:

— decide the workplan;

— identify the information needed about the impact themes in Table 2 and how that can be collected (e.g. from discussions, conducting surveys, analysing database information and existing reports);

— identify sources that can provide expert information to the impact and need assessment (e.g. from response cells/structures, representatives of affected groups, trusted experts);

— define the boundary and time frame of the impact and need assessment:

— consider a narrow boundary to increase clarity (e.g. focus on specific systems);

— consider the people who can be disproportionately affected by a crisis including women and other categories of people (see Annex B for examples) and how to collect the appropriate range of important impacts from these;

— define how long after the crisis the assessment will consider;

— select the type of impact and need assessment to be made:

— agree how to measure impacts from a crisis (e.g. assessments based on similar previous crises, synthetic approaches based on estimations of losses/impacts, survey approaches based on establishing actual losses/impacts);

— decide whether to count actual or potential losses/impacts and agree how the actual or potential impacts can be used (e.g. actual losses can discriminate against well-prepared communities or discriminate against poorer communities that have fewer assets, actual and potential losses change as circumstances change);

— design criteria to assess the impacts, which:

— are measured on a 1 to 5 scale to gauge relative importance;

— consider the impacts of the crisis (e.g. 1 = minor impact; 2 = limited; 3 = moderate; 4 = significant; 5 = catastrophic) on, for example:

— health impacts (e.g. number of casualties, hospitalizations, fatalities);

— psychological impacts (e.g. public outrage, anxiety);

— social disruption (e.g. loss of civil protection and rescue, transport services, food and water, fuel, gas, electricity, finance, communications, education, housing, healthcare);

— social needs (e.g. number of evacuees, people needing shelter);

— environmental impacts (e.g. damage to wildlife, land, water, air);

— consider the likelihood of the impact (e.g. 1 = very low; 2 = low; 3 = medium; 4 = high; 5 = very high).

The RCG should design a template to collect information on how the crisis has impacted affected groups (see Annex B for examples of affected groups) according to impact themes (see Table 2) and using the criteria to assess these (see Annex C for an example impact and need assessment template).

6.5 Collecting information for the impact and need assessments

The RCG should:

— use the template designed in 6.4 to collect information on impacts;

— identify and use measures to assess the impacts/losses through additional data available from survey, synthetic or averaging approaches;

— on an ongoing basis, review if the impact and need assessments are still asking the correct questions and if information is being collected on all relevant groups, and update as appropriate;

— update the impact and need assessments with new information as it becomes available during the planning and implementation of recovery (i.e. the assessment is not a one-off activity).

6.6 Calculating net economic loss

When the RCG expects communities to be reimbursed for the local disruptions brought by the impacts of the crisis, it should calculate the financial cost of losses from those impacts.

The RCG should:

— calculate economic loss through identifying economic losses and the justifiable need of investment for economic redevelopment and crisis mitigation;

— calculate net economic loss through identifying the economic effect of:

— savings from the crisis that will offset the economic losses and will inform an assessment of post-crisis aid and insurance claims;

— net economic losses of the crisis by subtracting the assessed economic benefits/opportunities from the assessed economic losses;

— collate and present the results of the economic loss assessment:

— present results from the impact and need assessments;

— identify important intangibles to consider alongside economic loss to ensure they are considered when planning recovery.

The RCG should use the calculated net economic loss when considering the financial impact of the crisis, e.g. when claiming or distributing compensation. The RCG should appreciate that some impacts are difficult to monetarize and some impacts are positive so bring gains.

6.7 Analysing and presenting results from the impact and need assessments

The RCG should:

— analyse all the qualitative information by categorizing impacts and needs according to:

— the impact themes (see Table 2);

— categories of people who have been affected and how (see Annex B);

— analyse all the quantitative information to quantify the extent of impacts/financial losses;

— clearly present the analysed impact and need assessments to communicate a comprehensive understanding of the impacts of the crisis and wider needs (see Reference [2] for an example).

6.8 Selecting action areas to recover and renew

As the coordinating body for the impact and need assessment, the RCG will receive a large amount of information and should use this to:

— understand potential action areas where activity can be helpful to address the impacts of the crisis and needs of the community;

— group all the impacts, opportunities and needs from across different respondents to appreciate the diversity of impacts and opportunities within an action area and across action areas;

— select action areas to address by considering:

  — the needs of people, including those who have been disproportionately affected by the crisis or who can still be disproportionately affected;

  — the desired outcome;

  — the likelihood that the action will achieve the desired outcome;

  — the availability of capability and capacity to achieve the desired outcome;

  — the duration and effort needed to achieve the desired outcome;

  — the partners' motivation for change and general fatigue with the crisis;

  — the impact on reputation from (not) addressing the action area;

  — the resources needed and those available;

  — the urgency, e.g. based on risk;

  — the priority, relative to other action areas;

— identify which selected action areas to pursue through:

  — transactional recovery activity, i.e. a limited action to be addressed as part of recovery (see 7.2);

  — transformational renewal initiatives, i.e. an ambitious initiative to be addressed as part of renewal (see 8.3);

— decide the scale of intervention of transactional recovery activities and transformational renewal initiatives.

Annex D presents examples of how three action areas can be pursued as transactional actions and transformational initiatives.

7 Developing recovery activities

7.1 General

The general arrangements in 4.8 should prepare the groundwork for planning recovery. Planning recovery aims to support the people, places and processes that have been impacted by the major emergency, disaster or crisis, recognizing the importance of power and partners, potentially working across the five interested party groups of national government, local partners, organizations (e.g.

local authorities, emergency services), local communities and people. The short-term activities should reflect on the crisis to learn lessons, review preparedness for future crises, and reinstate operations in affected parts of the system.

There are three actions to develop recovery activities:

— identify transactional activity to implement as part of recovery (see 7.2);

— manage delivery of recovery activities (see 7.3);

— commemorate loss from the crisis (see 7.4).

7.2   Identifying transactional activity to implement as part of recovery

To address each action area selected for recovery (from 6.8), the RCG should consider whether the aim for its recovery is to:

— restart operations that were halted due to the crisis;

— return operations that were modified during the crisis back to their more desirable pre-crisis state so they can function as before;

— renovate operations to improve their performance to reflect new demands or ways of working;

— retain in their new form of operations that were modified during the crisis.

Recovery activities should be designed to accomplish their aim and have the maximum impact on:

— benefits to vulnerable communities;

— benefits to other demographic groups, communities and sectors;

— benefits to the recovery of multiple important impacts and needs;

— enabling multiple beneficial outcomes for renewal and resilience;

— balancing value for money (i.e. the initial and ongoing investment needed in the context of available resources and funds).

Annex E presents examples of transactional, short-term recovery activities for people, places and processes.

7.3   Managing delivery of recovery activities

The RCG should:

— record the short-term actions to articulate how RCG partners will recover from the impacts of the crisis;

— publish and publicize recovery activities so that interested parties can understand what recovery will address;

— have oversight of how delivering recovery activities involves local people and people who have been affected by the crisis;

— use a project management methodology to monitor delivery of activities;

— meet periodically to monitor delivery, agree how to overcome challenges and adjust where needed.

7.4 Commemorating loss from the crisis

For some crises one recovery activity may focus on activities that will help to memorialize losses of people or places (e.g. the loss of life, livelihoods, relationships, spaces, heritage, liberties). In these cases, the RCG should recognize that:

— there is no one way to remember, i.e. each individual's experience of a crisis is a personal one, so commemoration activities should carefully consider ways to bring people together to collectively remember while recognizing the uniqueness of everyone's experience;

— the co-production of activities can provide a way to ensure commemoration is inclusive of all of those who would like to be involved (i.e. to create a collaborative and bottom-up as well as top-down delivery of remembrance to enable communities to take ownership of their remembrance);

— memorials can take many forms (e.g. plaques, spaces, buildings, artwork, musical or dance compositions, public events, gatherings);

— consideration for who will lead and participate in conversations about commemoration is important, as this person will mediate and support communities to find ways to compromise on differing views and perspectives on commemoration;

— the timing of commemoration is a challenge (i.e. a crisis that creates a long-term chronic problem will not have an end point), and therefore commemoration can be required during the crisis (e.g. public displays of thanks to responders) and in the weeks or years that follow (e.g. remembrances such as memorials or scholarships);

— memorials can be political and gestures such as monuments can fade or be contested, which reinforces the need for co-produced commemoration, enabling the voices of those who will benefit most from commemoration activities to be heard and/or them to actively participate;

— education is a form of remembering, through storytellers or by creating spaces (online or in local newspapers) where people can share individual experiences which can be recorded to provide authentic materials to support education in years to come;

— it is important to consider how those who have lower agency in communities will remember (e.g. children who have lost grandparents) and that commemoration can be done by creating spaces in schools/community youth groups for teachers/youth volunteers to support children;

— issues of resilience, self-help and supporting others should be integrated into commemoration if it is possible to do so without disregarding personal tragedy.

8 Developing renewal initiatives

8.1 General

The general arrangements in 4.9 should prepare the groundwork for developing renewal initiatives. The process of developing the renewal initiatives involves specifying the wider, longer-term endeavour that addresses challenges that are not easily defined and agreed, and addressing them through an interconnected web of activities forming a portfolio of action by multiple partners. An example is creating a new customer journey, which cannot be defined as sitting within only one of the broad categories of people, places and processes because the transformation needed to address the customer journey crosses all three categories. Other examples are summarized by the United Nations' 17 Sustainable Development Goals (SDGs), all of which should be addressed locally, nationally and globally through multi-partner collaboration across people, places and processes.

Given that some of the potential renewal initiatives are identified from the results of the impact and need assessments, the RCG should be initially involved in selecting action areas to be addressed through transformational, renewal initiatives (see 6.8). Other potential renewal initiatives will be identified by a wider set of interested parties and there is a need to learn from scenario planning activities to contemplate the new conditions that are desired. Thus, the wide-reaching nature of renewal suggests

that other partners (beyond the RCG) are needed to galvanize political backing. However, it is also critical that the activities of the RCG are coordinated with the work of renewal.

The design of renewal initiatives should:

— be organized by interested parties (see 8.2);

— identify transformational initiatives to implement as part of renewal (see 8.3);

— consider challenges to renewal (see 8.4);

— encourage commitments to deliver the renewal initiatives (see 8.5).

8.2 Organizing how renewal initiatives are designed

Interested parties beyond the RCG should be engaged in discussions about designing renewal opportunities through:

— the ongoing work of a renewal commission;

— a one-off event such as a renewal summit;

— other forms of futures exercises.

The design of renewal initiatives should:

— engage key strategic interested parties in a thoughtful and consultative approach to co-produce the vision for delivering the renewal of local people, places and processes;

— aim to:

— align the thinking of partners around an agreed vision, a shared narrative and collective responsibility for renewal;

— co-produce a positive vision and ambition for what longer-term change is to accomplish;

— engage partners on the activities they should collaborate on to deliver the vision;

— agree common actions, funding sources and what needs to be done together;

— provide information inputs on:

— the recovery work ongoing and planned;

— the facts of the crisis and the need for healing;

— lessons learned and details from the impact and need assessment;

— local inequalities and chronic problems;

— opportunities to build resilience to future threats;

— funding sources;

— have wider priorities such as global or national priorities, e.g. alignment to the SDGs;

— have an agenda to discuss:

— what happened to people, places and processes during response, e.g. as understood through the impact and need assessments;

— existing visions, development programmes and change programmes;

— the desired scale of ambition for collaboration, renewal and resilience;

— collaboration opportunities for working together with other interested parties;

— other local strategies and how they align with renewal opportunities;

— renewal opportunities that are new or do not align with existing local strategies;

— be enabled by:

— involving partners in co-production and not only engaging them through arms-length consultation;

— an ambition for common action and resolving competing views of transformation;

— optimism, i.e. aligning a renewal agenda to positive opportunities rather than the negativity or fatigue of the crisis;

— the sharing of good practices to align and engage interested parties on what is possible;

— thoughtfulness to provoke ideas and productive challenges;

— the facilitation of wide-ranging and influential relationships with interested parties (e.g. with elected leaders, chief executives and officers, leaders from the faith, community, business and voluntary sectors);

— discovering the imperatives for change and the arguments for why;

— learning from past and current crises and exercises;

— the work of the RCG so that coordination and communication between recovery and renewal ensures that silos do not emerge.

8.3 Identifying transformational initiatives to implement as part of renewal

Renewal strategies (selected from 6.8) should outline the ambition and route map for renewal, be consistent with the SDGs and cover the renewal of:

— relationships with people, such as the need for:

— redesigning: initiatives to change services offered to people so they better match their new needs;

— reconciliation: initiatives that address systemic challenges that are exposed by the crisis which have left people vulnerable and services undermined; reconciliation develops a means for collective healing through a renewed relationship with interested parties;

— reparation: initiatives that surrender resources to those affected during the response to make amends for their loss, e.g. a lack of effective service delivery;

— places, such as the need for:

— repurposing: initiatives to change the use of places to meet new needs, such as expanding the role of community networks to collaborate differently with local groups to better identify persistent vulnerabilities, risks and mitigations;

— relocating: initiatives to move services to meet changing needs, such as moving retail and transport provision according to new demands and operating conditions;

— regenerating: initiatives to enhance the prosperity of places, such as securing new national investments to attract new industry, encourage job creation and increase well-being;

— processes, such as the need for:

— reshaping: initiatives that seek to influence the external environment to better align it with internal operations, such as requesting policy change, influencing customer expectations, changing product compliance requirements and embracing new digital platforms to enhance technology resilience;

— reorganizing: initiatives to change internal processes to accommodate pressures from the external environment, such as reducing staff due to fewer customers, creating new products to meet new demands, reducing bureaucracy to meet new urgencies;

— people, places and processes, such as the need for:

— repairing: initiatives that reconceptualize a service's proposition, purpose, value, location and ethics through appreciating that it is broken, has violated its relationship with interested parties, and needs to change broadly and fundamentally.

8.4 Considering challenges to renewal

Challenges which can disturb or undermine the delivery of renewal initiatives should be considered. These include the challenges of renewing while simultaneously tackling other priorities such as:

— responding, by providing crisis response during the crisis, during its second and subsequent waves, and to other crises, and the intensity of response demands on resilience partners and the public;

— recovering, by reflecting and learning from the response, reviewing preparedness and reinstating operations in preparation for the next crisis;

— renewing other important issues, by delivering other major ambitions previously agreed;

— addressing wider local, national and global political challenges, by working within new and ongoing political challenges;

— considering wider financial pressures, by understanding local and national economic implications of the crisis and global financial downturns;

— combating fatigue, caused by the effects of the prolonged crisis, that has led to responders, resilience partners and members of the public just wanting the focus on the crisis to end.

To combat these challenges, renewal can be embedded in a wider narrative which is not directly linked to the losses and stresses of the crisis but is connected to a positive vision of a better future.

8.5 Encouraging commitments to deliver the renewal initiatives

Designing renewal initiatives should:

— agree appropriate governance structures to deliver those initiatives;

— identify interested parties to deliver the transformational initiatives (selected from 6.8), e.g. statutory agencies, elected officials, a strategic partnership.

Following the design of renewal initiatives, the interested parties who commit to delivering the transformational initiatives should:

— publicize the renewal initiatives so that other interested parties understand what renewal will address;

— use a project management methodology to monitor delivery of the renewal initiatives;

— meet periodically to monitor delivery, agree how to overcome challenges and adjust where needed.

9 Continuous improvement

9.1 General

This clause outlines the ongoing activities needed to continuously improve recovery and renewal to a major emergency, disaster or crisis:

— identify lessons (see 9.2);

— act on lessons (see 9.3);

— scenario plan and exercise future crises (see 9.4).

9.2 Identifying lessons

9.2.1 General

After action reviews, hot debriefs and debriefs of recovery and renewal are among the activities that are conducted during and after a crisis (or exercise) to identify lessons to enhance resilience. When the crisis requires a whole system response, the identification of lessons needs to reflect the experiences of the whole system. The RCG should identify lessons from:

— resilience partners and others that have responded to the crisis;

— interested parties (e.g. customers, the public, elected officials), including those who are not obvious partners;

— external local, national and international sources that have experienced a similar crisis;

— analysing all available lessons to understand the performance of the system as a whole.

The system can be a country, a region/province, a group of resilience partners, a city, a collection of organizations or a delivery unit within a small organization. For each of these examples, the same systems principles hold true: that delivery is coordinated and supported by management, informed by intelligence and led by strategy. Thus, and following the structure in ISO 22392, the RCG should learn lessons on the performance of the system during a response by analysing:

— strategy, vision and leadership, by assessing the effectiveness of the system's strategy, leadership and focus;

— intelligence, by assessing the effectiveness of the system's use of external and internal data, strategic collaborations, and understanding of its social and physical environment;

— management of processes, systems and planning, including auditing, by assessing the effectiveness of the system's management structure, planning of operations, sustainable resource management, management of corporate risks, supporting functions, continuity of service arrangements, regular performance monitoring, auditing, and learning from itself and others;

— coordination and communication of operations, by assessing the effectiveness of the system's coordination of resources and partners, communications internally and externally, and system for notifying senior leaders quickly of issues;

— delivery of operations, by assessing the effectiveness of the system's delivery approaches, management of effective and efficient on-site delivery, decision-making autonomy of its operating units, and interpretation of feedback from beneficiaries and other interested parties.

Analysing lessons using the framework in ISO 22392 (and using the questions in 9.2.2) allows the RCG to pinpoint opportunities for improvement of preparedness to identify:

— areas of high effectiveness to find where actions should embed good preparedness;

— areas of low effectiveness to find where corrective actions should address underpreparedness.

9.2.2 Questions the RCG can ask of the performance of the response system to improve preparedness

a) How can we improve our strategy, vision and leadership?

b) How can we improve our provision and use of intelligence?

c) How can we improve our management of processes, systems and planning, including audit?

d) How can we improve our coordination and communication of operations?

e) How can we improve our delivery of operations?

9.3 Acting on lessons

Once lessons are identified, the RCG should:

— identify actions to embed good performance and address underperformance (and monitor the delivery of actions);

— record how lessons have been addressed, which is especially important for public accountability and formal independent review;

— share actions with other local, national and international parties so they can learn how to improve.

9.4 Scenario planning and exercising future crises

It is important to think about current, cascading and future risks – a range of alternative possibilities given the uncertainty of the future. Thinking about alternative futures will help to:

— identify how to strengthen the general recovery arrangements that are planned before a crisis;

— consider a range of impacts to identify more opportunities for gathering information, improving resilience and preparing for those uncertainties;

— identify where system pressures are likely to strain the situation if alternative futures happen;

— ensure that recovery and renewal actions implemented now will help (or not exacerbate) the situation if alternative futures happen;

— strengthen interested parties' involvement in thinking about the future and their role in preparing for it;

— instil confidence that planning is creating a resilient system even if the situation changes.

To consider alternative futures, the RCG should:

— involve knowledgeable parties to identify how future conditions can evolve over time;

— include scenarios and conditions that have never been encountered;

— agree which future conditions to consider as part of the scenario planning activity;

— design a number of different scenarios about the future, focusing on the impact of the new conditions in those scenarios;

— use a scenario planning approach to evaluate the ability of the response plans and recovery and renewal actions to build a more resilient society in each of the different scenarios;

— identify learning from the scenarios, amend plans accordingly and share lessons.

Annex A
(informative)

Examples of impact themes to consider in an impact and need assessment

A.1 General

This annex provides a menu of impact themes which should be the focus for an impact and need assessment as described in 6.3.

The RCG should use Clauses A.2 to A.7 to decide which impact themes should be covered by an impact and need assessment. Clauses A.2 to A.7 are set out as follows:

— Impact theme: The menu is organized around the six impact themes: communities (see Clause A.2), economic (see Clause A.3), infrastructure (see Clause A.4), environment (see Clause A.5), health (see Clause A.6), and governance (see Clause A.7).

— Detail of the impact theme: For each impact theme, the area where impacts have been felt are stated and, for each, two examples are provided as bullet points. Each example can be put into the question "What has been the impact on [content]?" and the subsequent text provides additional insight to what this covers.

A.2 Communities

A.2.1 Vulnerable people

— Support to people who need special help: sourcing food/water/sanitation; paying for heating; medicine delivery; befriending; cash society; groups of impoverished people, civil protection and rescue for affected and endangered people; transportation needs.

— Knowledge of at-risk groups: hard to reach groups (e.g. homeless people, asylum seekers); data sharing.

A.2.2 Volunteers

— Spontaneous volunteers: organized volunteering; self-organizing networks; governance of processes; safeguarding; pop-up volunteer groups.

— Corporate offers of support: matching offers of help with need; governance; donations management.

A.2.3 Community participation

— Community capacities: changing identity/pride; community schemes; online networks; use of social areas.

— Community needs: wider inequalities; lived experiences of the crisis; fragile community groups.

A.2.4 Public protection

— Need for protection: adherence to protection advice; enforcement; abuse against people affected by the crisis and frontline workers.

— Health management: providing healthcare services; surge management; continuity of healthcare; healthcare staffing.

A.2.5 Emergency housing (including homeless)

— Shelter: messaging of shelter locations; transportation to and from shelters; in-shelter service provision; safeguarding; returning home.

— Homeless provision: supporting homeless people; safety of people who are abused; charity and local government continuity of service provision.

A.2.6 Welfare (including social care)

— Poverty: access to welfare support systems; energy/food poverty; hidden communities.

— Care homes: hospital discharges; safety control design; provision of personal protective equipment (PPE); access regime; staff skills.

A.2.7 Education and skills

— Providers: school closures; regional variations (equalities, culture); educational provision (childcare to university, vocational).

— Safety fears: concerns (student, teacher, parent); building access; attendance rates; alternative schooling provision.

A.2.8 Cultural

— Preservation of heritage: recovering antiquities and cultural heritage; preservation of disaster artefacts; recording memories.

— Commemoration: tangible and intangible memorialization, e.g. public art, memory walls, collective performances, social media, intergenerational resilience stories.

A.3 Economic

A.3.1 Economic strategy (national and local)

— Inward economies: trade; tourism; travel; international/national students; foreign labour; investment.

— City/region reputation: perception of safe city/region; relationships and influence; economic uncertainty; momentum.

A.3.2 Business regeneration/rejuvenation

— Staff: safe business practices; health and safety; attitude to risk; fairness; staff availability; transport to work; furlough; upskilling and reskilling.

— Operations: supply/demand; new activities (disruption, opportunities, logistics); business continuity; construction; cash flow.

A.3.3 Public sector support mechanisms

— Political priority: confidence in elected members; subsidiarity practices; funding link to strategic priorities.

— Finances: uncertain income (budget, generation, recouping cost) and expenses (normal, exceptional).

A.3.4 Voluntary, community and social enterprise sector

— Fragility: uncertainty of income; limited income streams; staff/volunteers shielding; new volunteers.

— Activities: rapid response; overwhelming demand; local government collaboration; training; commissioning.

A.3.5 Personal finance

— Income: salaries; job security; dividends; sole trader finances; savings; demographics; impact of support.

— Household assets: security of savings; investments (pension/house value); cost of living; disposable cash.

A.3.6 Innovation

— Enablers: investment/funding; staff availability; market opportunities; infrastructure; sharing intelligence.

— Industrial environment: business initiatives (furlough staff, grants, tax interventions); business confidence; industrial policy.

A.3.7 Labour/workforce

— Behavioural: safety practices; staff fears; perceived safety; effects of new safe working regimes.

— Measures: adequacy of hygiene/safety measures; safety control; availability of staff; safe working conditions.

A.4 Infrastructure

A.4.1 Infrastructure providers

— Provider: worker safety; capacity/demand of service; partners; crisis impact control; innovation capacity.

— Maintaining provision: resilience; repair; staff/skills availability; investment; planning/response/ recovery; cascading failures; secondary effects.

A.4.2 Infrastructure customers

— Users: risk perception; safe operating practices; customer service; inclusion/exclusion of customer groups.

— Alternatives: comparison/popularity of alternatives; adapting to new routines; barriers to adoption.

A.4.3 Energy (utilities)

— Demand: changing private use (peak usage, extended home working); changing organizational use (business closure, reduced staff, flexible operations).

— Environmental impact: use of different utility sources; supplier cooperation; emphasizing carbon neutral.

A.4.4 Telecommunications (including digital)

— Use: hardware availability; accessibility; digital skills; bandwidth; digital infrastructure roll-out; company ability to migrate online; whole system.

— Cyber safety: confidence; data protection; investment in resilient infrastructure; data sharing protocols.

A.4.5 Urban and rural infrastructure

— Utilization: public confidence; footfall; event safety; night-time industries; legislation on unused space.

— Space management: effect on construction; investment; leisure; homelessness; housing; culture; digital.

A.4.6 Transport

— Commuting: adaptation to new routine; accessibility; alternatives; perception of safety; protection regimes.

— Adaptations: repurposing car parks; bicycle storage; utilization of public transport; social distancing; repair.

A.4.7 Waste management

— Behaviour change: recycling; food waste; effect of panic/impulse buying; reconstruction waste.

— Health protection: cleaning/disinfecting surfaces; treating medical waste (e.g. PPE); personal hygiene in handling waste; sanitation.

A.4.8 Supply chains and logistics

— Competing agendas: innovation; social responsibility; international cooperation; inventory management.

— Flexibility: new markets; demanded items; pre-position for second wave crises; repurpose supply chains.

A.5 Environment

A.5.1 Spatial planning (including public spaces)

— Sustainable urbanization: new infrastructure (retention areas for flooding, redundant power supply, fire-water reservoirs, bus lanes, safe cycle routes); pedestrianization; pocket parks; building approval, agricultural land.

— Health benefits/losses: changes in physical/mental fitness regimes; public access to green spaces and pathways; protection of the natural environment.

A.5.2 Environment health

— Health and safety: fewer traffic incidents; clean streets; vulnerabilities; effect of social restrictions and use.

— Clean infrastructure: low carbon agenda (electrification of transport); low waste; reduced pollution; car use.

A.5.3 Living sustainably

— Green spaces: space access (use, proximity, leisure); cultural shift (attitude, behaviour, community spirit); accelerating green policies.

— Fundamental human needs: food; water; sanitation; energy; safety.

A.5.4 Resilience to climate change

— Reducing climate impacts: measuring climate impacts; green homes; tree planting; appreciation of green space; carbon neutral commuting; working from home.

— Building resilience: technical and physical defences; funding disaster resilience; local resilience capabilities; political support.

A.6 Health

A.6.1 Healthcare

— Primary/elective treatment: demand (surges, backlogs, delays); health complications; health inequalities; difficulty of accessing care provision.

— Service delivery: changing the consultation process; staffing; health planning; available institutions and resources; health insurance; public and private service providers.

A.6.2 Public health and well-being (including psycho-social support)

— Mental health: crisis-related causes of stresses; post-traumatic stress disorder of frontline staff; increased public dependency on drugs or alcohol; health service capacity and resilience.

— Community care: providers and commissioned services; combined vulnerabilities; patient advocates; education; disease prevention.

A.6.3 Excess death management

— Processes: mortuary provision; body management; disposal; effect on death management professionals.

— Bereavement support: faith and cultural norms; support/counselling; commemorating/memorializing deaths.

A.6.4 Connectivity between health and the wider system

— Public communication: scientific advice; confusion; clarity/confidence in strategy; receptivity to messages; trusted people.

— Partner communication: sharing data/information for decision-making; partner strength; transparency.

A.7 Governance

A.7.1 Legislation, policy and guidance

— Public response: confusion; adherence to control measures; unified national approaches; compliance.

— Transition to pre-crisis legislation: potential for rapid innovation; science-led policy; consultation.

A.7.2 Civil protection and emergency management

— Risk management: risk identification; understanding cascading risks; measurement and monitoring risk profiles; risk reduction activities.

— Crisis planning: multi-agency partnership working; planning response; exercising; after-action reviews.

A.7.3   Information and data

—   Risk profiles: key vulnerabilities; resilience levels; predicting public behaviours; planning for concurrent/future crises; second wave; concurrent crises or emergencies.

—   Partnership working: data sharing; lessons learned; debriefs; resource availability (PPE, facilities); system performance; trends (crime, abuse, compliance).

A.7.4   Resourcing and financial frameworks

—   Staffing: knowledge and skills required; capabilities available; capacity available; mutual aid; contingency resource planning.

—   Financing: emergency assistance; response/recovery budgets; strategic investment; short-term needs.

A.7.5   Partnerships and coordination (national, subnational and local)

—   Political: where influence lies; local power; national/local alignment; ongoing national initiatives, cross-sector dialogue.

—   Leadership: aligned interests; budgets; reduced bureaucracy; responsibilities; perception of competence; reflexivity; international and national practices.

A.7.6   Strategic communications

—   Public channels: engagement/receptiveness of audiences; multiple media; message clarity; languages; receiver fatigue; public co-design of response strategies; victim liaison.

—   Trust: public trust in officials; local versus national messages; public trust in advice; contradictory action by public figures; misinformation.

A.7.7   Governance of delivering recovery and renewal

—   Recovery: reflect and learn system-wide lessons; review preparedness for the next crisis; reinstate operations.

—   Renewal: ambition for recovery; reconciliation; reparations; repurpose; relocate; regenerate; reshape; re-organize; repair; co-production with the public.