Audit of disaster-related aid

Please note that this document includes:
1- Foreword
2- ISSAI 5520 main document
3- Appendix
Foreword

I. ISSAI 5520 has been prepared by the INTOSAI Working Group on Accountability for and the Audit of Disaster-related Aid (WG AADA). It contains guidance and good practice on the audit of disaster-related aid. It should be read in conjunction with the other ISSAIs in the series on disaster-related aid (ISSSAIs 5000-5999), especially the introductory ISSAI 5500.

II. ISSAI 5520 covers both the emergency activities which begin immediately after the occurrence of disaster and are concerned with saving lives, alleviating suffering, maintaining and protecting human dignity and reducing the impact of the disaster and the longer-term activities of rebuilding communities and restoring normal life. These activities include recovery, relief, rehabilitation and reconstruction.

III. When disaster strikes, the ability of the affected individuals and communities to take care of themselves is surpassed. In the days, weeks, months and even years following the disaster, assistance is provided by the outside world. In the aftermath of disaster, governments in afflicted countries have the primary responsibility for assisting disaster-affected populations and for disaster management. They can be supported in this to a greater or lesser degree by other governments, Non-Governmental Organisations (NGOs), international agencies and individuals. Assistance comes in the form of in-kind or financial aid with the goal of reducing the human and economic impact of disasters and helping those affected by the disaster to return to normal life as quickly as possible.

IV. SAIs auditing disaster-related aid are supported in their work by INTOSAI’s Fundamental Auditing Principles (level 3) and General Auditing Guidelines on Financial, Performance and Compliance Audit (level 4). ISSAI 5520 guides auditors of disaster-related aid with references to the appropriate ISSAIs within the context of the specific circumstances of a post-disaster situation and provides supplementary guidance and good practice for SAIs auditing disaster-related aid. To this end, ISSAI 5520 incorporates the experience offered by a number of SAIs and collected by means of surveys, parallel audits and widespread consultation. The text of the ISSAI and the annexes include examples to illustrate the specificity of disaster-related aid auditing.

V. INTOSAI thanks the SAI of Indonesia, the Audit Board of the Republic of Indonesia, for drafting the guidance and carrying out surveys and leading a parallel audit in support of its contents. It is also grateful to the SAIs which replied to the surveys and participated in the parallel audit, other members of the WG AADA\(^1\) for their contributions and assistance, and other commentators such as the Development Assistance Committee of the Organisation for Economic Cooperation and

---

\(^1\) Since it was established in 2008, the Working Group has had a membership of between 18 and 23 SAIs with a balance of representatives from donor and potential aid recipient countries and from a wide variety of geographical locations. Membership has remained fairly constant over the six years of the life of the Working Group. In 2013, the following SAIs were members: Austria, Chile, China, the European Court of Auditors, France, Georgia, India, Indonesia, Jamaica, Japan, Kenya, Korea (Republic of), the Netherlands, Norway, Pakistan, Peru, the Philippines, Romania, Russian Federation, Sri Lanka, Turkey, the Ukraine and the United States of America. The Working Group was chaired throughout its existence by the European Court of Auditors, which also provided its secretariat.
Development, the World Bank, and the SAIs of Australia, Denmark, Kuwait, New Zealand, Spain and Thailand.
Table of content

Foreword (separate document)

Part 1: Disaster and disaster management
1. Background 4
2. Purpose, scope and structure 5
3. Definition of terms 6

Part 2: Disaster-related aid
4. Definition of disaster-related aid 11
5. Roles and responsibilities 11
6. Features of disaster-related aid for consideration by auditors 14
7. Risk factors for different disaster-related aid activities 15

Part 3: Good practice and examples of auditing disaster-related aid
8. Preparing the audit 21
9. Cooperation between auditors of disaster-related aid 23
10. Information and data gathering 24
11. Selection of audit topics 26
12. Types of audit 31
13. Financial audit and disaster-related aid 32
14. Performance audit and disaster-related aid 33
15. Compliance audit and disaster-related aid 35
16. Reporting audits of disaster-related aid 37
17. Audit tools for disaster-related aid 38

Appendices (separate document)
1. Characteristics of disasters
2. Risk-based strategy for auditing disaster-related aid management
3. Audit design matrix
4. Example of disaster auditing guidelines for private sector auditors
5. Examples of audits of disaster-related aid
6. Financial audit of the emergency response following the earthquake in Pisco, Peru
7. Financial audit of recovery and reconstruction following the Wenchuan earthquake in China
8. Performance audits of recovery and reconstruction after the Great East Japan Earthquake
9. Performance audit of the European Commission response to the South East Asian tsunami
10. Performance audit of relief and rehabilitation after the 2004 tsunami
11. Performance audit of disaster-related aid following hurricane Katrina
12. Compliance audits of emergency, rehabilitation and reconstruction disaster-related aid
13. Acronyms and abbreviations
14. Glossary
15. References and bibliography
Part 1 Disaster and disaster management

1 Background

1.1 Disaster can strike any part of the world at any time. It may be the result of natural (e.g. floods) or man-made (e.g. nuclear accidents) causes, or a mixture of the two and can occur suddenly (e.g. earthquakes) or develop slowly (e.g. drought). Whatever the cause, the human and economic impact of disaster can be considerable.

1.2 Since 2001, the annual average number of deaths from disasters is 106,891 and the yearly average number of reported victims is 232 million people.¹ The overall number of victims is typically the highest in Asia. However, in 2011 African countries dominated the top ten in terms of disaster victims as a proportion of total population size.² Economic damage in 2011 was the highest ever registered, at an estimated USD 366.1 billion. This was largely due to the Great East Japan Earthquake, but reflected the increasing occurrence of disasters in high-income and middle-income economies.³ The United Nations estimates that in the first 12 years of the twenty-first century alone disasters claimed 1.1 million lives and caused USD 1.3 trillion in economic damage.⁴

1.3 In a disaster situation, individuals, communities, governments and international agencies act very quickly. Assistance and aid flow toward the affected area. The emphasis is on saving lives, alleviating poverty and hardship and maintaining human dignity. Throughout the emergency response, relief, rehabilitation and reconstruction activities of the post-disaster phase, order has to be maintained and normality has to be regained. SAIs have a vital contribution to make in keeping governments and others managing disaster-related aid accountable to parliaments and citizens for the use of resources. The issue of accountability is fundamental to the legitimacy of the state and the continued operation of the political system. This has been recognised in recent years, for example, by the Inter-Agency Standing Committee Transformative Agenda.⁵ INTOSAI is part of the worldwide movement for greater transparency and accountability.

² Ibid., page 13
³ Ibid., page 1
⁴ http://www.flickr.com/photos/isdr/6853316682/in/set-72157628015380393/
2 Purpose, scope and structure

2.1 The 5500 series of ISSAIs includes three ISSAIs on auditing the different parts of the disaster management cycle. The pre-disaster phase is covered in ISSAI 5510. ISSAIs 5520 and 5530 cover the post-disaster phase (recovery and relief activities, national and international response to emergency, rehabilitation and reconstruction). ISSAI 5520 addresses the audit of the whole of the post-disaster phase while ISSAI 5530 focuses on taking account of the increased risk of fraud and corruption in the emergency activities following disaster. The disaster management cycle shown in figure 1 divides the activities supported by disaster-related aid into six segments. Two of these relate to the preventive and preparatory measures which government can establish and operate in advance of potential disaster. The other four segments describe the activities which follow the occurrence of disaster.

Figure 1: Disaster management cycle showing pre- and post-disaster phases

Source: Prepared for WG AADA by the SAI of Indonesia

2.2 The post-disaster phase begins as soon as disaster strikes or an emergency is declared. Initially the focus is on recovery and relief activities. These are followed by rehabilitation and reconstruction activities. The activities supported by disaster-related aid can last only a few days where physical and economic damage are not great and
the main focus is on recovery and relief, or many months and even years where the reconstruction effort required is considerable.

2.3 The 5500 series of ISSAIs on disaster-related aid focuses on natural disasters, although the guidance and good practice cited is equally relevant to the audit of man-made disasters. The ISSAIs have been prepared for SAI auditors but can be used by other auditors or stakeholders in the field of disaster-related aid. ISSAI 5520 is not compulsory for SAIs and should not be used as standalone guidance. It should be used to supplement the level 3 and level 4 ISSAIs, which are published by INTOSAI and available on the website of the Professional Standards Committee.  

2.4 ISSAI 5520 provides examples of auditing disaster-related aid and includes an example of guidelines for private sector auditors of disaster-related aid (Appendix 4). ISSAI 5520 is structured as follows:

Part 1 defines disaster and the different phases of disaster management.
Part 2 defines disaster-related aid and key players and features of disaster-related aid and develops a matrix of the key topics and risks in the management of disaster-related aid.
Part 3 highlights aspects of the audit process illustrated by the experiences of SAIs which have audited disaster-related aid: cooperation between auditors, information and data gathering, selection of audit topics, financial, performance and compliance auditing of disaster-related aid, reporting disaster-related aid and tools for auditing disaster-related aid.

3 Definition of terms

3.1 The UN ISDR defines disaster as follows:

“A serious disruption of the functioning of a community or a society causing widespread human, material, economic, or environmental losses which exceed the ability of the affected community or society to cope using its own resources.”  

3.2 Disasters exhibit different characteristics depending on a number of factors.

Length of forewarning – how much advance notice is given to people at risk at disaster.
Magnitude of impact – the extent of losses of people, infrastructure and buildings and disruption to the social structure and essential functioning of a community.

---

6 www.issai.org
7 The SAI of Indonesia conducted a survey to collect examples and led a parallel audit to test ISSAI 5510. The other participants in the parallel audit were the SAIs of India, Pakistan and Turkey. See WG AADA final report.
Geographical scope of impact – geographical features susceptible to designation of a disaster area. A natural hazard without human vulnerability—such as a landslide in an uninhabited zone—will not result in the designation of a natural disaster area.

Duration of impact – the period (short or long) during which the effects of a disaster are felt.

Speed of onset – how fast a disaster strikes an area. For example, floods may strike rapidly, while a volcanic eruption or a drought may take longer to have an impact.

3.3 Disasters have a number of consequences.9

Disruption to the normal pattern of life. Such disruption is usually severe and may also be sudden, unexpected and widespread.

Human effects such as loss of life, injury, hardship and adverse effects on health.

Effects on social and physical structures such as destruction of or damage to government systems, buildings, communications and essential services.

Community needs such as shelter, food, clothing, medical assistance and social care.

3.4 For inclusion in the International Emergency Disasters Database (EM-DAT) maintained by the Centre for Research on the Epidemiology of Disasters (CRED) a disaster should meet at least one of the following criteria:10

10 or more people reported killed;
100 people reported affected;
declaration of a state of emergency; or
a call for international assistance.

3.5 Disasters can occur as a result of natural or man-made causes, or a mixture of the two. Natural disasters can result from geophysical, hydrological, climate-related, meteorological or biological phenomena. Technological or man-made disasters are events caused by humans and occurring in or close to human settlements and may include environmental degradation, pollution and accidents. The Asian Development Bank (ADB) divides disasters into 11 types: earthquake, volcanic eruption, tsunami, tropical cyclone (typhoon, hurricane), flood, landslide, bushfire (or wildfire), drought, epidemic, major accident and civil unrest. The characteristics of different types of disaster, their counter measures and problem areas are explored in Appendix 1.

3.6 The International Federation of Red Cross and Red Crescent Societies (IFRC) defines disaster management as:

“the organisation and management of resources and responsibilities for dealing with

10 http://www.emdat.be/
all humanitarian aspects of emergencies, in particular preparedness, response, and recovery in order to lessen the impact of disasters. The main focus of disaster management is to reduce or avoid loss caused by disasters, assure prompt assistance to victims, and achieve rapid and effective recovery."\textsuperscript{11}

While countries define their own disaster management policies to establish and maintain adequate arrangements to deal with their vulnerability to disaster, disaster management is also a shared responsibility between government, the private sector and civil society. Effective coordination between these different actors is a prerequisite for successful disaster management.

3.7 The disaster management cycle in figure 1 shows activities in the pre-disaster and post-disaster phases. In practice, there is no clear division between these phases and disaster management activities are carried out in the different phases as appropriate to each disaster and to the way in which and the extent to which the population is affected. For example, rehabilitation activities may continue to be carried out in emergency circumstances months after the occurrence of the disaster and disaster preparedness activities may begin immediately after the occurrence of a disaster to take better account of the lessons learnt from that disaster.

3.8 The aim of pre-disaster activities is to reduce the potential loss of life and property caused by a disaster and the development of disaster management plans at the household and community level. Such activities include the prevention of hazards from developing into disasters or the reduction of the effects of disasters when they occur. These measures can be structural such as flood barriers or the strengthening of weak buildings and infrastructure, or non-structural such as legislation, land-use planning (for example the designation of non-essential land, such as parks, to be used as flood zones) and insurance. Other pre-disaster activities involve the development of action plans for what to do if a disaster strikes, for example:

- preparing and communicating action plans;
- developing a multi-agency coordination mechanism and line of command for post-disaster structures;
- carrying out maintenance and training of emergency services resources and personnel;
- developing and testing emergency warning methods;
- maintaining supplies and equipment related to emergency shelters and evacuation plans.\textsuperscript{12}

3.10 In recent years some SAIs have themselves experienced severe disruption following the occurrence of disaster. In the aftermath of a disaster, SAIs may not only need to recover the ability to function quickly and easily, but also to provide appropriate assistance to government in responding to the disaster.\textsuperscript{13} Due to the potential impacts of disasters it is important for SAIs to plan in advance and put arrangements in place.

\textsuperscript{11} www.gdrc.org/uem/disasters/1-dm_cycle.html

\textsuperscript{12} See Audit New Zealand’s account of “Audits in challenging times” following the Canterbury earthquakes in 2010 and 2011 http://www.auditnz.govt.nz/who-we-are/scott-tobin-feature
that will help them recover and start functioning as soon as practically possible. For that reason, SAIs, and particularly those located in disaster prone areas, develop their own business continuity plan. INTOSAI’s Capacity Building Committee has published a guide on business continuity to assist SAIs.14

3.11 When disaster strikes urgent action is necessary to ensure that victims' needs are met and losses are minimised. The post-disaster phase begins with emergency activities which focus on recovery, relief and initial rehabilitation. The type of response depends on the immediate requirements of the affected people and can include rescue, medical attention, water, food and communication. These activities are mainly directed towards saving lives, protecting property and dealing with the immediate disruption, damage, and other consequences of the disaster. They can continue for just hours or days after the disaster takes place up to several months, depending on the nature and extent of the disaster and on how well-prepared the affected region and population were for the possibility of disaster.

3.12 Once the urgency abates, activities concerned with the continued rehabilitation and reconstruction of affected areas or communities commence. Rehabilitation is a short-to medium-term activity and involves taking care of the victims of the disaster and re-establishing basic facilities. Urgent, initial rehabilitation activities can begin during the emergency. Reconstruction has the longer-term objective of restoring living conditions to a level equal to or better than before the disaster struck. There will inevitably be overlapping activities that can be classified as rehabilitation or reconstruction. Rehabilitation and reconstruction activities aim to rebuild destroyed property, repair of other essential infrastructure and re-establish the functioning of the local economy.

3.13 ISSAI 5520 is concerned with the post-disaster emergency recovery and relief, rehabilitation and reconstruction activities summarised in Table 1.15 Auditors of the pre-disaster phase should consult ISSAI 5510 for guidance and good practice. 16

14 http://cbc.courdescomptes.ma/index.php The Capacity Building Committee prepared and published this guide in association with the Pacific Association of Supreme Audit Institutions and the Caribbean Organization of Supreme Audit Institutions

15 Table prepared by the SAIs of the Netherlands and Indonesia

16 http://www.issai.org/composite-280.htm
### Table 1: Post-disaster phase activities: Emergency (recovery and relief) and non-emergency (rehabilitation and reconstruction)

<table>
<thead>
<tr>
<th>Timing/Period</th>
<th>Emergency Recovery and Relief</th>
<th>Rehabilitation</th>
<th>Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urgent</strong></td>
<td>Immediately during or shortly after disaster. Normally counted in days up to 3 months after disaster</td>
<td>Up to 1 year after emergency phase</td>
<td>Up to 5 years or more after rehabilitation phase</td>
</tr>
<tr>
<td><strong>Short term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium-long term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target</th>
<th>Saving lives</th>
<th>Taking care of victims</th>
<th>Restoring living conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Developing basic public facilities (at a minimum level)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Victim search and rescue</th>
<th>Treating the sick and injured</th>
<th>Construction of permanent housing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burial of the dead</td>
<td>Preventing outbreaks of cholera, malaria, and other communicable diseases</td>
<td>Development of economic sectors (production, trade, banking sectors)</td>
</tr>
<tr>
<td></td>
<td>Supply of food and drinking water</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emergency medical care</td>
<td>Rebuilding:</td>
<td>Restoration of public infrastructure (transportation and telecommunication systems)</td>
</tr>
<tr>
<td></td>
<td>Provision of basic facilities</td>
<td>Basic infrastructure and facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delivery of materials to the affected areas</td>
<td>Economic facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trauma care facilities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples</th>
<th>Emergency food and medical aid</th>
<th>Provision of health care supplies</th>
<th>Rebuilding social/cultural systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emergency distress relief</td>
<td>Establishment of temporary housing and sanitation facilities</td>
<td>Re-establishing human capacity</td>
</tr>
<tr>
<td></td>
<td>Meeting basic needs of refugees</td>
<td>Establishment of access between affected area and the chain of supply and support</td>
<td>Rebuilding housing, schools, clinics, sanitation systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible entity</th>
<th>Government</th>
<th>Government</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reduced, but still</td>
<td>Reduced but still</td>
<td>Reduced but still</td>
</tr>
<tr>
<td></td>
<td>important role: donors,</td>
<td>important role: donors,</td>
<td>important role: donors,</td>
</tr>
<tr>
<td></td>
<td>NGOs/INGOs</td>
<td>NGOs/INGOs</td>
<td>NGOs/INGOs</td>
</tr>
<tr>
<td></td>
<td>Other parties</td>
<td>other parties</td>
<td>other parties</td>
</tr>
</tbody>
</table>
Part 2: Disaster-related aid

4 Definition of disaster-related aid

4.1 The UN defines **disaster-related aid** as:

“aid provided to help people, who are victims of a natural disaster or conflict, meet their basic needs and rights.”

Disaster-related aid is provided to the victims of disaster who are unable to get enough of the help they need from their own community or local authorities. Disaster-related aid is mostly humanitarian aid designed to save lives, alleviate suffering and protect human dignity, but also includes aid which is non-humanitarian (e.g. to protect wildlife). Global Humanitarian Assistance defines **humanitarian aid** as: “the aid and action designed to save lives, alleviate suffering, and maintain and protect human dignity during and in the aftermath of emergency”. The Development Assistance Committee of the OECD reports humanitarian aid as making up around 9% of Official Development Assistance in 2009. It is provided for specific emergency situations and is intended only for the victims of the disaster concerned. United Nations General Assembly Resolutions 46/182 of 1991 and 58/114 of 2004 stipulate that humanitarian aid should be provided in accordance with the principles of humanity, neutrality, impartiality and operational independence. This marks it out from development aid which can be subject to some conditionality.

4.2 Disaster-related aid can be provided to an individual, community, organisation or government as cash or financial aid and in-kind aid, or a mixture of these. **Financial aid** is cash or other monetary assistance. **In-kind aid** is assistance in the form of materials or services, such as food, tents, and the secondment of staff or international military assistance. Different types of aid are appropriate depending on the nature of the disaster, the affected region and the needs of the population. Disaster-related aid may be from public or private sources. The type of donor varies with the type of disaster, the nature and magnitude of the disaster’s impact and on public reaction to the disaster.

5 Roles and responsibilities

5.1 Many individuals and entities are involved in providing, coordinating, delivering and reporting on disaster-related aid. This is illustrated in figure 2 reproduced from the Global Humanitarian Assistance website.
Figure 2: Financing, delivering and reporting on the response to humanitarian crises
5.2 UN Humanitarian Resolution 46/182 of 1991 states that the country affected by disaster has the primary role in the initiation, organisation, coordination and implementation of humanitarian assistance within its territory.\textsuperscript{23} When the capacity of national and local government is surpassed, the timely involvement of the international humanitarian system can significantly alleviate the hardship suffered by stricken communities. Central governments can anticipate such scenarios by preparing regulatory frameworks at national level to minimise bureaucratic obstacles to disaster-related aid. The IFRC has produced guidance on this.\textsuperscript{24}

5.3 For all types and magnitudes of disasters, central government should seek to provide a coordinating role and pass on information on the needs of the affected communities. When disaster strikes, rapid needs assessments should be made and the appropriate information should quickly be made available to donor entities and international agencies. Entities have been created to speed up the communication of such vital information, for example the Central Emergency Response Fund (CERF). This is a humanitarian fund established by the United Nations General Assembly in 2006 to enable more timely and reliable humanitarian assistance to those affected by natural disasters and armed conflicts.\textsuperscript{25}

5.4 When the international community becomes involved the key players adopt one or more of the following roles as aid providers:

- **Donors** are entities which provide either financial or in-kind contributions, either directly to beneficiaries (those affected by disasters) or to governments or operational agencies who will provide goods and services to beneficiaries. Donors thus comprise governments (international, domestic and local) and private donors (philanthropic organisations, corporate donors and individuals).

- **Operational agencies** use the funds from donors to provide goods and services to at-risk and affected populations. They include the various components of the Red Cross Red Crescent movement, United Nations agencies, faith based organisations and NGOs – both international and national. Operational agencies can be intermediary entities which receive aid and pass it on to other entities for implementation, or they can carry out activities directly themselves.

- **Others** may include the multilateral development banks, which play a major role as donors and in managing multi-donor funds, and the armed forces, which may be called to intervene when a situation is beyond the capacity of the local civil administration.

5.5 Aid **recipients** can either be individuals or communities affected by the disaster, or entities which act as intermediaries and dispense aid to victims or pass it on to operational agencies:

\textsuperscript{23} Harvey, Paul. Towards Good Humanitarian Government: The Role of the Affected State in Disaster Response. HPG Policy Brief 37. 2009


\textsuperscript{25} See [http://www.unocha.org/cerf/about-us/who-we-are](http://www.unocha.org/cerf/about-us/who-we-are)
multilateral organisations - United Nations agencies and the World Bank, etc.,

NGOs and Civil Society Organisations (CSOs) – these can be based in the donor or recipient countries,

International Federation of the Red Cross and Red Crescent (IFRC), or other entities.\(^{26}\)

5.6 **Final beneficiaries** of humanitarian aid are individuals and communities of the affected population for whom the disaster-related-aid is donated.

6  **Features of disaster-related aid for consideration by auditors**

6.1 Disasters can create unique and unprecedented situations with complex aid flows and multiple actors. SAIs need to address these challenges to conduct their audits effectively. SAIs of both recipient and donor governments audit disaster-related aid which passes through public accounts. In many cases this can involve examining aid paid directly to operational agencies which are not part of government. Whether SAIs have an obligation or a right to audit disaster-related aid and the type and extent of that audit depends on the mandate of each SAI. However, public expectations are clearly that SAIs work to report on whether the intentions of donors and the interests of aid recipients are being met. For more on this, auditors can consult a tool prepared by the Active Learning Network for Accountability and Performance in Humanitarian Action based on OECD guidance on evaluating humanitarian assistance.\(^{27}\)

6.2 Special consideration should be given to post-disaster emergency activities. The nature and circumstances of an emergency response require a degree of flexibility and immediate decision-making that may mean disregarding existing procedures or laws or applying them via abbreviated processes in order to save lives. Despite this, it would still be expected that there would be a legal framework underpinning emergency procedures.\(^{28}\) There is often an increased risk of fraud and corruption in emergency situations. Auditors can recommend improvements in disaster management to minimise the risks or fraud and corruption in the event of a future disaster.\(^{29}\)

6.3 When the emergency is over the need for flexibility should diminish and auditors can check the prompt return to normal rules and procedures. Once rehabilitation and reconstruction activities commence, auditors may consider the risk of fraud and corruption in procurement associated with high volumes of public expenditure on reconstruction projects. There are also important issues around tax revenues and insurance recoveries which may require careful examination by auditors.\(^{30}\)


\(^{27}\) [http://www.alnap.org/resources/guides/evaluation/ehadac.aspx](http://www.alnap.org/resources/guides/evaluation/ehadac.aspx)


\(^{29}\) See ISSAI 5530 [http://www.issai.org/composite-280.htm](http://www.issai.org/composite-280.htm)

\(^{30}\) See for example the New Zealand experience [http://www.auditnz.govt.nz/who-we-are/scott-tobin-feature](http://www.auditnz.govt.nz/who-we-are/scott-tobin-feature)
6.4 Auditors need to understand the entire process of disaster management, including the management of disaster-related aid and to be aware of how the main participants and stakeholders operate. They should also be aware of each main participant’s arrangements for audit and be familiar with any disaster management plan which exists (including any revisions), as well as accounting practices and national legal requirements. SAI auditors may need to be trained in the key skills required to audit disaster-related aid. They may consider the use of a multi-disciplinarian team which could include methodologists, engineers, economists, etc., to supplement their need for key skills required for the audit. All of these aspects should be taken into consideration by auditors when planning the audit.

6.5 A unique feature of disaster-related aid is the impact it can have on saving lives and property and restoring human dignity. This is because however well-prepared governments, communities or individuals plan to be, they can never be prepared enough to avoid all adverse effects of major disasters. Auditors can measure the effectiveness of disaster-related aid in terms of results, the most direct examination of which can be achieved by consulting the intended final beneficiaries of the aid. To do this SAIs can actively seek the input of the affected population by use of interviews and surveys and by consulting civil society organisations. SAIs can consider sending auditors on-the-spot at an early stage of the emergency to record evidence of the way in which disaster-related aid was implemented from the point of view of the disaster victims.

7 Risk factors for different disaster-related aid activities

7.1 In planning and conducting their audit work, SAI auditors should identify risk factors and conduct a risk assessment. Risk can be expressed as the possibility of future harm - where harm is taken to mean any undesired event or outcome. In this context, auditors can focus on:

- the establishment by government of legal and institutional frameworks,
- the definition and implementation of policies and
- the management of disaster-related aid by governments and disaster management agencies.

7.2 The following paragraphs describe nine activities related to the management of disasters and disaster-related aid. Seventeen risk factors are then highlighted which relate to the environment, organisations, systems, controls and people operating in the field of disaster-related aid. The activities and risk factors are summarised in a matrix shown in Table 2. Auditors can select topics and explore the risks associated with each of them to plan and conduct an audit of disaster-related aid.

---

31 ISSAI 100/50 (unrevised)
The management of disasters and disaster-related aid

1) **Damage and needs assessment**

The damage and needs assessment process is a means of identifying the damage caused by a disaster, the location of the victims and their basic requirements. The assessment is then used to guide those providing shelter, emergency food and water and distributing donations or financial relief.

2) **Aid selection**

The aid provided should meet the victims’ particular needs. Damaged or obsolete stocks should be avoided. The selection of aid is more effective if it is based on a proper needs assessment.

3) **Aid collection**

Aid is collected from donors. Aid collection begins with the agreement between donor and recipient countries, followed by the commitments made by parties engaged in the agreements and ends with the disbursement itself.

4) **Procurement**

Financial aid can be used for procuring the necessary goods and services to meet the victims’ needs. Procurement processes should be as cost-effective as possible with due attention to questions of quality, quantity and timeliness.

5) **Storage**

Goods and materials, whether donated in kind or purchased using financial aid are inventoried and stored so that they can be retrieved as required to meet the victims’ needs.

6) **Distribution**

Distribution is the process of moving goods and materials from storage to the disaster victims, either directly or through the appropriate distribution channels.

7) **Infrastructure building**

Infrastructure damaged or destroyed by disaster must be repaired or rebuilt and made operational. At the same time, new infrastructure can be constructed to prevent and mitigate future potential disasters.

8) **Reporting**

Recipients of disaster-related aid should report on the management and use of financial and in-kind contributions received.

9) **Accountability**

Donors require recipients of disaster-related aid to account for their management and use of funds and in-kind contributions received. This can result in multiple reporting by recipients who are expected to comply with the individual accountability and audit requirements of each donor. This can create a heavy burden on recipients and may
lead to the diversion of resources away from relief and reconstruction activities. The provision of information for the purposes of accountability, whether in an *ex ante* investigation or an *ex post* requirement of disclosure may improve transparency.

**Risk factors**

**A. Delay**

When a disaster occurs, the first priority is that aid be given promptly in order to save lives and meet victims’ needs. Delays in the collection and distribution of aid may be caused by unfamiliarity with the immediate disaster response protocol, infrastructure damage or unsuitable human and organisational resources.

**B. Unintended recipients**

Disaster managers should conduct a needs assessment to ascertain the number of victims and determine their specific requirements. The definition of victims and the procedure for registering them should be clearly set out. Unintended recipients are people who are not entitled to receive aid. Inadequate demographic data may result in misleading information on victims and ultimately cause aid to be channelled away from needy individuals/communities.

**C. Undistributed funds/materials/aid**

Financial and in-kind aid not distributed to the victims is of no use. Inappropriate human or organisational resources, a lack of information on the procedure for requesting and distributing aid and damaged infrastructure may cause aid to remain in storage. Another reason for non-distribution might be an inappropriate needs assessment, resulting in the delivery of aid or materials that are unnecessary or unsuitable for the culture or circumstances of the affected population.

**D. Fiduciary controls**

Rapid response to disaster-aid is critical in the effort to minimise damage from natural or man-made disasters. To deliver services and goods swiftly to the affected population, the procurement processes and flow of funds must be well-defined and tested in advance and include sufficient flexibility to accommodate unexpected events in post-disaster environments. These processes should have built-in mechanisms to detect delivery bottlenecks and to make adjustments to processes during implementation.

**E. Fraud and corruption**

Appropriate internal control standards and mechanisms to prevent fraud and corruption should be established and operational. Following disasters, substantial flows of aid arrive quickly, which may provide the opportunity for fraud and corruption in the form of overstated needs and data manipulation (for example

---

33 INTOSAI GOV 9250 proposes a framework for unique reporting of humanitarian aid. See [http://www.issai.org/composite-194.htm](http://www.issai.org/composite-194.htm)
exaggerating the number of victims), demands for kickbacks from suppliers and those applying to receive aid, as well as mark-ups and embezzlement or asset theft.  

F. **Poor economy**

Particular attention should be paid to questions of economy when using disaster-related aid to procure goods and services for disaster victims (i.e. not paying significantly more than the normal market price). During the emergency phase, lives should not be risked for the sake of economy, but such purchases should be clearly documented. In the reconstruction phase, when the main purpose is to rebuild infrastructure, procurement procedures must follow the established rules and regulations and any exceptions provided for during the emergency phase can no longer apply.

G. **Inflation**

In the aftermath of disaster there is high demand for skilled labour, building materials, building equipment and housing. High demand for scarce resources leads to higher prices and thus to the risk of overspend of available budgets. High prices can lead to lower output and/or poor quality (for example, houses).

H. **Inefficiency**

Disaster-related aid should be used efficiently (i.e. maximum success in meeting victims’ needs with aid received. This is of particular importance during the reconstruction phase, where resources are used for building infrastructure: unnecessary or overlapping works should be avoided and waste minimised.

I. **Ineffectiveness**

The use of disaster-related aid should be used as effectively as possible. Ineffectiveness results where the aid received is used up without the victims’ needs being met. For example, when rebuilding infrastructure, governments and disaster management agencies must take into account the suitability of the infrastructure to the local conditions, culture and geography.

J. **Financial statement risk**

A financial statement risk is the risk that financial statements have been materially misstated. When auditing financial statements (which include aid receipts), auditors should test the validity of management "assertions" regarding existence, completeness, rights and obligations, valuation and allocation, presentation and disclosure.

K. **Unrecorded aid**

34 In the emergency phase, auditors should use their professional judgment when assessing the possibility of fraud, since many infrastructures may be damaged and people (including the aid managers) may exhibit unusual behaviour. The auditor should check the mechanisms in place to evaluate the genuineness of the claimant. However, there should be periodic improvements to disaster management, and the reinforcement of internal controls is essential if fraud is to be prevented in the event of a future disaster. See ISSAI 5530 [http://www.issai.org/composite-280.htm](http://www.issai.org/composite-280.htm)
Unrecorded aid is that received but not recorded in the recipient’s books. This could be because of collection agencies which are unidentified, multiple accounts, failure by the authorities to make available information on aid management mechanisms and poor coordination among disaster management agencies.

L. **Damaged aid**

During transportation items donated in-kind or bought using financial aid can become damaged or obsolete and no longer meet required standards for distribution, because of inappropriate storage or inadequate human and organisational resources to manage them.

M. **Unequal aid distribution**

When individuals or groups are favoured in aid distribution at the expense of others, there is inequality which may result in disaster-related aid not reaching the population affected most acutely by disaster. For example, a particular region may receive more aid than another as a political favour.

N. **Environmental damage**

Many disasters cause damage to the environment and ecosystems. The process of rehabilitation and reconstruction may cause further damage and this may cause future disasters.

O. **Assets ownership**

Ownership of assets resulting from the rehabilitation and reconstruction phases must be carefully defined. This should include the legal right to occupy the assets and the obligations of owners in respect of their assets, such as the requirement to carry out subsequent maintenance.

P. **Double funding**

Following disasters, there can be multiple flows of financial aid from donors to recipients. Lack of transparency of these aid flows engenders the risk that aid organisations may receive aid funds from multiple sources (donors) for any one given project. There may be a risk of double funding and misuse.

Q. **Information flows**

In an immediate post-disaster situation the dissemination of clear and objective disaster information to the public and stakeholders is critically important to avoid misinterpretation or speculation. The timely receipt of feedback from the public and disaster relief agents on the ground to the government bodies implementing disaster aid is equally important. Two-way communication is essential.
<table>
<thead>
<tr>
<th>Topic(s)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
<th>P</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Damage and needs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Aid selection</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Aid collection</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4 Procurement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Storage</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Distribution</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7 Infrastructure</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Reporting</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9 Accountability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

A Delay  
B Unintended recipients  
C Undistributed aid  
D Fiduciary controls  
E Fraud and corruption  
F Poor economy  
G Inflation  
H Inefficiency  
I Ineffectiveness  
J Financial statement risk  
K Unrecorded aid  
L Damaged aid  
M Unequal aid distribution  
N Environmental damage  
O Assets ownership  
P Double funding  
Q Information flows
Part 3: Good practice and examples of auditing disaster-related aid

Part 3 of ISSAI 5520 is based on experiences of auditing disaster-related aid collected by WG AADA. The Working Group consulted widely with SAIs involved in auditing disaster-related aid and conducted two surveys and a parallel/coordinated audit. The work was led by the SAI of Indonesia and covered ten topics.

Preparing the audit
Cooperation between auditors of disaster-related aid
Information and data gathering
Selection of audit topics
Types of audit
Financial auditing and disaster-related aid
Performance auditing and disaster-related aid
Compliance auditing and disaster-related aid
Reporting audits and disaster-related aid
Audit tools for disaster-related aid

Sections 8 to 17 refer to relevant guidance and include examples, referred to in the text itself and expanded upon in the appendices. The examples relate experiences provided by SAIs auditing disaster-related aid.

8 Preparing the audit

8.1 Following a disaster, SAIs audit flows of disaster-related aid. The scope and objectives of each audit and the way in which it is planned and conducted depend on the mandate of the SAI and the regulatory framework within which it operates as well as on whether the SAI is auditing from the perspective of the donor or the recipient. The survey conducted by INTOSAI WG AADA revealed considerable differences between the approaches of SAIs to auditing disaster-related aid. This was often due to differences in the external audit model (the three most common models being the Auditor General model, the Court of Accounts (or Audit) model and the Board of Collegiate model). Another factor was the type of audit SAIs were either required or authorised to conduct. For example, some SAIs are required to carry out a financial audit which allows them to express an opinion on “whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework”. Other SAIs are required by national law to carry out audits of disaster-related aid, or specific areas of disaster-related expenditure, using audit

35 The parallel audit was led by the SAI of Indonesia. The other members were the SAIs of India, Pakistan and Turkey. See WG AADA final report.
36 ISSAI 1000/46-48
37 ISSAI 1000/96
programmes addressing a number of audit objectives which may be financial, performance, compliance or a mixture of these. Clear objectives assist the auditors to focus the audit work and facilitate follow up of audit observations and recommendations.

8.2 Before embarking on an audit, SAIs should understand the processes for the management of disaster-related aid and the focus of each phase (recovery, relief, rehabilitation and reconstruction). They should assess the nature of the risks in each phase, familiarise themselves with the internal controls applied by each of the organisations responsible for managing disaster-related aid and test whether those internal controls are operating and are sufficient to overcome or reduce the risks. Figure 3 has been prepared by the SAI of Indonesia as an example of priority-setting and design of an audit of disaster-related aid.

Figure 3 Priority-setting and design for an audit of disaster-related aid

- Delay risk
- Unidentified recipients
- Undistributed funds/materials
- Unrecorded aid
- etc.
- Financial statement risk
- Poor economy
- Inefficiency
- Ineffectiveness
- Conflict of interest
- Fraud and corruption
- Environmental damage
- etc.
- Fraud
- Poor economy
- Inefficiency
- Ineffectiveness
- Conflict of interest
- Environmental damage
- Asset ownership
- Regular basis (ensuring ongoing improvements)
- Policy matters (awareness campaign, strengthening existing weak buildings and infrastructures, and developing disaster management plans at household and community level)
9 Cooperation between auditors of disaster-related aid

9.1 The flow of disaster-related aid from donors to recipients and the corresponding flow of information from recipients to donors is complex. Figure 4 shows a donor’s perspective (in this case, the Government of the Netherlands) of aid flows to victims of the tsunami that devastated large coastal areas in South-East Asia in December 2004. The high death-toll stimulated multiple donations of disaster-related aid which were often channelled through NGOs. The SAI of the Netherlands compared the accounts of 50 NGOs and found that they all used different reporting models. The auditors were not able to follow the aid from donors to final recipients.  

Figure 4: The flow of disaster-related aid: Indonesian tsunami case study

![Diagram of aid flows](source: The SAI of the Netherlands)

9.2 Several different auditors may seek to audit aid flows as complex as those shown in figure 4: auditors of governments donating humanitarian aid, international agencies and governments receiving aid. There is often scope for cooperation between auditors which can involve carrying out joint, parallel or coordinated audits. For example, two or more SAIs of donor governments may seek to cooperate on auditing national contributions to a disaster-affected population, or donor and recipient government SAIs may find it to be of mutual advantage to coordinate their audits of aid provided.

http://www.courtoaudit.nl/english/Publications/Audits/Introductions/2008/12/Lessons_on_accountability
by the donor government for a specific disaster in the recipient country. This is especially the case when major disasters take place and many donors are involved in making significant donations. SAIs of donor governments can learn much from SAIs in recipient countries about the national legal and operational environment of auditing disaster-related aid and SAIs from recipient countries can learn about the international context of receiving disaster-related aid. The exchange of information and transfer of knowledge between SAIs in the context of disaster-related aid can be of mutual benefit.\(^{39}\)

9.3 The objectives of audit cooperation can be:

- sharing information and experiences;
- training auditors and clarifying terminology;
- overcoming problems of access rights;
- taking reliance from the work carried out by another auditor;
- enhanced transparency and accountability;
- developing and disseminating good practice.

9.4 The conditions for cooperation should be set out clearly in an audit plan:

- the scope and objectives of the audit;
- which body is responsible for coordination;
- budget and audit tools available;
- reporting arrangements.

For more on cooperative audits, see the INTOSAI “Guide For Cooperative Audit Programs Between Supreme Audit Institutions”.\(^{40}\)

10 Information and data gathering

10.1 The objectives of gathering information and data are as follows:

- to understand the government's response to the disaster;
- to identify potential weaknesses in the government’s response – to be investigated further during the audit;
- to collect documentation on the legal and regularity framework and how entities are complying with that framework, as well as memoranda of understanding, agreements between the recipient government and donors and agreements with the various intermediaries;
- to document disaster-related aid flows and collect other relevant information which can be used to make choices regarding which approach to follow.

\(^{39}\) See WG AADA final report for more the WG AADA parallel/coordinated audit of disaster-related aid

When gathering information and data on disaster-related aid management, auditors should decide what information and data are needed and what role they will play during the assignment to achieve the audit objectives. To gather such data the auditor can:

- conduct physical observations in the disaster zone, making extensive use of photos and videos. Such recorded evidence can then later be compared to physical documents and witness reports to corroborate findings;
- interview the intended beneficiaries of disaster-related aid;
- identify the roles and responsibilities of staff in the organisations responsible for handling disaster-related aid;
- obtain key information about the aid (donors, recipients, collection, distribution, storage, aid conditions, registration, etc.);
- identify the activities performed by the organisations responsible for handling disaster-related aid; and
- identify the relevant internal control systems and procedures.

SAIs recognise the importance of technical audits and on-the-spot physical inspections in disaster-related aid audits. Some SAIs send auditors to the site of a disaster at a very early stage to gather information. Appendices 6 and 7 provide examples of this. Such an approach can be of benefit because auditors gain a first-hand understanding of the situation and can collect evidence including by interviewing the affected population. Their presence should not disrupt relief operations but may allow them to both make timely and constructive recommendations and to act as a deterrent to potential perpetrators of fraud and corruption. The mandates of other SAIs preclude such an approach, for example the SAI of India. Other sources of information which can be gathered include official government sources, the websites of international humanitarian organisations such as real time evaluation data provided by UN OCHA and online crowd sources, such as Google Earth, Maps, OpenStreetMaps and Ushahidi.

The information and data gathered during the emergency phase may concern:

- the rescue and evacuation of disaster victims;
- the response to victims' basic needs;
- aid selection, collection, storage and distribution;
- control procedures/activities during the emergency phase (including authorisations, separation of duties among disaster management agencies, etc.);
- accounting for disaster-related aid (for example how in-kind donations are valued, quantified, and recorded);
- controls over goods received and distributed including reconciliation between the records of the different organisations involved;
- the effectiveness of information, communication and coordination among those responsible for disaster-related aid management, victims, and other parties concerned with the collection and distribution of aid (donors, aid collection agencies, NGOs, etc.);
- damage and loss assessment;
- the validity of data held by disaster management agencies on the disaster victims (including criteria and the agencies' verification of victims);
- the executive agencies' preparation of victim and loss data; and
monitoring carried out by the coordinator of disaster management activities.

10.5 The information and supporting data obtained, including positive and negative aspects of disaster management and the management of disaster-related aid should be documented appropriately. This is important since not all information and data obtained is followed up during the audit. Auditors may also use the data and information as preliminary documents for the purpose of audit planning.

11 Selection of audit topics

11.1 The scope and extent of SAIs’ financial audit is often defined in national legislation and in SAIs’ mandates. Performance and compliance auditing, on the other hand, usually involves a choice of audit topics. SAIs can use strategic plans to direct such audits towards areas where an external, independent audit may add value. The selection of topics for performance and compliance audit should be made by the SAI without outside pressure. However, SAIs can decide to audit topics requested or proposed by government or parliament.\(^{41}\)

11.2 The selection of topics should take account of the need to prioritise resources, capacity, budget and time. This involves planning and scoping an audit to help appropriately focus resources on addressing overall risk and to direct auditors in the field work and reporting stages. Figure 5 shows an example of the process auditors may follow to select topics for performance or compliance audits of disaster-related aid.\(^{42}\) The procedure for selection of audit topics is described in paragraph 11.3.

\(^{41}\) See ISSAI 3000/44

\(^{42}\) See also ISSAI 1315 on a risk based approach to financial audit
Figure 5: Selecting topics for performance or compliance audits of disaster-related aid

Request from parliament, government, or other*

Topics propose

No

Yes

Specific issues

Phase I: Understanding Stakeholders’ Expectation

Phase II: Aligning topics/subtopics with risk and vice versa (audit design matrix)

Phase I: Understanding entity and business process

Phase II: Identify risks

Phase III: Identify actions by disaster management agency to mitigate the risks

Phase IV: Choose audit topics and priorities

Audit program

Design matrix

* (This will vary according to the SAI’s mandate)

Source: The SAI of Indonesia
11.3 Procedure for selection of audit topics

Auditors familiarise themselves with disaster-related aid policies, measures and activities. To begin with they can list all potential areas for audits. This list is likely to be long and choices have to be made based on established selection criteria including risk analysis.

**Phase I: Understand entities and processes**

Auditors need to understand the entities involved and the processes for managing disaster-related aid. This can be done by collecting information on key players, documenting disaster-related aid flows, identifying the internal control systems in operation and examining the role and responsibility of management. Documentation of previous disaster-related aid flows should also be consulted.

**Phase II: Establish selection criteria**

To allow them to explain the process of selecting topics for audit and the selection of topics itself auditors should establish and document in advance clear criteria for the selection of topics. For each area of disaster-related aid, these may include:

- the extent to which the audit will contribute to improving management or aid delivery;
- the knowledge that problems which require resolution exist;
- the added value that the audit can provide;
- the result of the risk analysis.

**Phase III: Risk Analysis**

The result of the risk analysis is a key selection criterion. The analysis of disaster-related aid can be complex and comprehensive data may not be available. In carrying out a risk analysis, auditors may need to consult external sources, such as studies done by NGOs, interviews with relevant officials and representatives, donor websites, media reports and other sources such as academic papers. For specific risks related to fraud and corruption, see ISSAI 5530. Factors which may indicate high risk in areas of disaster-related aid are:

- high financial or budgetary value;
- area already known to be risky or reported by civil society organisations or in the media as such;
- previously unaudited (the first time this type of disaster has occurred) or especially urgent (rapid onset) disaster;
- lack of information on prevention and mitigation activities (inadequate disaster preparedness measures in place).

Table 3 below shows some of the risks faced by key players in disaster-related aid and the characteristics that should be considered in managing these risks. (Refer to table 2 in part 2 of this ISSAI).
Table 3: Risks faced by key players in disaster-related aid

<table>
<thead>
<tr>
<th>Risks</th>
<th>Characteristics to consider</th>
<th>Key players</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay</td>
<td>Nature of disaster management phase</td>
<td>Disaster management agency</td>
</tr>
<tr>
<td>Unintended recipients</td>
<td>- Emergency response</td>
<td>Relevant government institutions</td>
</tr>
<tr>
<td>Undistributed aid (material and financial)</td>
<td>- Rehabilitation and reconstruction phase</td>
<td>NGOs implementing aid</td>
</tr>
<tr>
<td>Fraud and corruption</td>
<td></td>
<td>Affected population</td>
</tr>
<tr>
<td>Poor economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inefficiency</td>
<td>Nature of disaster</td>
<td></td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td>- Routine</td>
<td></td>
</tr>
<tr>
<td>Environmental damage</td>
<td>- Massive</td>
<td></td>
</tr>
<tr>
<td>Financial statement risk</td>
<td>- Complex</td>
<td></td>
</tr>
<tr>
<td>Unrecorded aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damaged aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SAI of Indonesia

Phase IV: Identify and evaluate actions by disaster management to mitigate risks

The entity responsible for managing the disaster-related aid may have already taken action to resolve the risks identified. Auditors can assess whether the action taken by the management agency and other key players is adequate to compensate for the risks identified. This can be done by reviewing legal regulations, government policies and instruments and standard operating procedures, and by interviewing key players, such as relevant staff and senior officials at the managing entity, as well as officers in the field. Auditors may consider carrying out sample checks of whether the systems and procedures are sufficiently effective and reliable.

Table 4 below provides some examples of action taken by disaster managers to address risks identified in disaster-related aid.
Table 4 Examples of action taken by disaster managers to address risks

<table>
<thead>
<tr>
<th>Risks</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay</td>
<td>Improve existing policies and procedures</td>
</tr>
<tr>
<td>Unintended recipients</td>
<td>Modify existing or enact new legislation</td>
</tr>
<tr>
<td>Undistributed aid</td>
<td>Conduct needs assessment</td>
</tr>
<tr>
<td>(material and financial)</td>
<td>Establish Memorandum of Understanding or contract</td>
</tr>
<tr>
<td>Fraud and corruption</td>
<td></td>
</tr>
<tr>
<td>Poor economy</td>
<td></td>
</tr>
<tr>
<td>Inefficiency</td>
<td></td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td></td>
</tr>
<tr>
<td>Environmental damage</td>
<td></td>
</tr>
<tr>
<td>Financial statement risk</td>
<td></td>
</tr>
<tr>
<td>Unrecorded aid</td>
<td></td>
</tr>
<tr>
<td>Damaged aid</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Source: SAI of Indonesia

Phase V: Prioritisation of topics

Possessed of a good knowledge of the entity, using effective selection criteria and following a comprehensive risk analysis, auditors are in a position to select topics to propose for audit. Auditors making the final selection require adequate skills, training and experience and need to exercise professional judgment. The list of potential audit topics selected can be prioritised appropriately with a view to the efficient and effective use of resources and time, potential audit impact, financial materiality, the risk to good management, complexity, significance, visibility, coverage and multi-sector relevance. The selection should be documented and reviewed by the hierarchy.

For guidance on selection of topics for performance audits see ISSAI 3000.43

11.4 Audit topics proposed to the SAI

Depending on the mandate of the SAI and its relationship with parliament, government, or other stakeholders, topics for audit may be proposed to or selected for the SAI. It is important for the auditors to understand the reasons for the proposal and stakeholders’ expectations of the audit. The SAI should reformulate the stakeholders’ proposals as audit topics with audit objectives and determine the associated risks. Stakeholder proposals are

43 ISSAI 3000/43-46 http://www.issai.org/composite-344.htm
sometimes described in terms of areas of risk rather than areas of interest. Appendix 2 shows the risk-based strategy used by the SAI of Indonesia in auditing the management of disaster-related aid.

For the subsequent stages of the audit, auditors are referred to the stages in the design matrix in Appendix 3. The audit design matrix can assist auditors to define audit objectives, researchable questions, audit criteria, audit evidence, sources of audit evidence, methods of obtaining audit evidence and check the reliability of that evidence, the limitations that auditors might face and the audit findings.

12 Types of audit

12.1 SAIs can carry out financial, performance or compliance audits of disaster-related aid. In all cases the audits should fall within the mandate given to the SAI and be carried out in accordance with the national and other relevant legislation and auditing standards which apply. Reference should be made to which standards have been complied with (International Standards on Auditing (ISAs), ISSAIs and/or other national and relevant auditing standards) and whether compliance with such standards is total or partial. ISSAI 1000 provides guidance on this.

12.2 Much of disaster-related aid comes from or is received into the budgets of national governments and is subject to periodic audit in this context (usually annual financial audit). Where there is no statutory requirement to carry out an audit of disaster-related aid or when any type of disaster-related aid is excluded from their mandates, SAIs may consider recommending to government to amend or enact the necessary legislation.

12.3 An audit of disaster-related aid may include aspects of financial, performance and compliance auditing. However, the objectives of these different types of audit are not the same and should be stated clearly and separately. Financial audit focuses on reports and accounts, compliance audit is concerned with the respect of legislation, policy or agreed upon terms and performance audit addresses the economy, efficiency and effectiveness of government undertakings, systems, programmes or operations. Each type of audit should be completed in accordance with applicable standards. The following are the relevant ISSAIs:

- General Auditing Guidelines on Financial Audit 1000-1810
- General Auditing Guidelines on Performance Audit 3000-3100
- General Auditing Guidelines on Compliance Audit 4000-4200

Appendix 5 contains references to audits of disaster-related aid carried out by SAIs in recent years.

---

44 Notably level 3 INTOSAI Standards. See [http://www.issai.org/media(1075,1033)/Purpose_and_authority_of_the_INTOSAI's_professional_standards.pdf](http://www.issai.org/media(1075,1033)/Purpose_and_authority_of_the_INTOSAI's_professional_standards.pdf)

45 ISSAI 1000/28
13 Financial audit and disaster-related aid

13.1 The purpose of an audit of financial statements is to enhance the degree of confidence of intended users in the financial statements. This is achieved by the expression of an opinion by the auditor on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework.\textsuperscript{46} The definition of the scope of the audit depends on regulations, mandate and organisational structure of the SAI.\textsuperscript{47}

13.2 When conducting a financial audit of disaster-related aid, auditors should take account of the specific nature of disaster-related aid. The audit of financial statements could address, among other things:\textsuperscript{48}

- the requirements of the applicable accounting standards in the light of the special circumstances surrounding disasters (emergency procedures, large volumes of public expenditure during or after the emergency);
- the existence and operation of adequate internal control systems during the different post-disaster phases and activities (relief, recovery, rehabilitation and reconstruction);
- the increased risk of fraud and corruption in emergency activities;\textsuperscript{49}
- whether the legislation regarding contracts provide for emergency provisions and whether this is appropriately reported in the financial statements;
- reconciling disaster-related aid budgeted for and accounted for;
- the possible existence of gaps in funding between executive units engaged in similar activities;
- reconciling donors’ and recipients’ records and reports;
- comparing project expenditure recorded by donors with figures for total aid.

Auditors should refer to ISSAIs 1000-2999 “Financial Audit Guidelines”.

13.3 Following disasters, especially major disasters, SAIs may find themselves facing challenging new situations. In some cases SAIs visit the site of the disaster as soon as possible to gather information or start the audit work. This was the case for the SAI of Peru after the 2007 earthquake in Pisco and for the SAI of China following the 2008 Wenchuan earthquake. The audit carried out by the SAI of Peru concentrated on emergency activities. The post-Wenchuan audit concentrated on recovery and

\textsuperscript{46} ISSAI 200/20
\textsuperscript{47} See ISSAIs 100 and 1000/20 and 21
\textsuperscript{48} See ISSAI 1300: Planning an audit of financial statements
\textsuperscript{49} ISSAI 5530
reconstruction and was a real-time audit which lasted three years, i.e. virtually the whole of the reconstruction period. The main objectives of these post-disaster audits were financial but the audits included performance and compliance aspects. See Appendices 6 and 7 for summaries of these audits.

14 Performance audit and disaster-related aid

14.1 Performance audits carried out by SAIs are independent, objective and reliable examinations of whether government’s undertakings, programmes, systems or organisations are performing in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvements. Auditors develop strategies that will help in setting priorities and audit topics and plan in such a way as to ensure that audits are of high quality and are carried out in an economic, efficient, effective and timely manner.

14.2 Performance audits of disaster-related aid may examine whether due attention has been paid to:

- the economy with which the disaster-related aid was used. Auditors can test whether financial and in-kind aid were used to carry out activities in accordance with sound administrative principles and practices and management policies;
- the efficiency with which human, financial and other resources have been used. Auditors can seek to establish whether maximum output has been achieved from the disaster-related aid. Looking at questions of efficiency requires the examination of information systems, performance measures and monitoring arrangements and the procedures followed by audited entities for remedying deficiencies identified; and
- how effectively those responsible for managing and implementing disaster-related aid have performed in relation to the objectives set. To measure effectiveness, auditors have to compare the actual impact of activities with their intended impact.

Auditors should refer to ISSAI(s) 3000-3299 “Performance Audit Guidelines”.

14.3 A performance audit may seek answers to the following questions:

- Trust – Has the aid pledged been provided? Has the aid pledged led to appropriate expenditure?
- Regularity – Has the aid been spent on the intended purposes?
- Efficiency – Has the aid been spent as efficiently as possible?
- Effectiveness – Has the aid been spent as effectively as possible?

50 ISSAI 300/2
51 http://www.intosajournal.org/technicalarticles/technicaloct06b.html
14.4 The following are some of the aspects which performance auditors may consider:

- Goals attainment: did the affected population receive the help it needed?
- Process: were procedures adequately prepared in advance and then respected during the post-disaster period?
- Cost/benefit: were the objectives of the disaster-related aid met at the lowest possible cost?
- Quality: was the quality of the output (food aid, shelters, etc) acceptable?

14.5 When conducting a performance audit, SAIs should bear in mind the need to make recommendations to feed into measures to prepare for the event of future disasters. For example, in the field of infrastructure development, SAIs should ensure that the rebuilding of infrastructure is intended not only to replace damaged facilities, but also to reduce the impact of future disasters and create a resilient community. Another example is where auditors observe inadequate preventive, detective and reactive controls to deter, detect and follow-up on fraudulent and corrupt activities, they can propose that a fraud and corruption prevention strategy should be built into preparations for a future potential disaster.\(^\text{52}\) SAIs may also seek to issue recommendations of general application regarding, for example, improvements to be made in human resources and organisational capacity development.

14.6 Appendix 8 presents two performance audits conducted by the SAI of Japan. Following the Great East Japan Earthquake in 2011, the SAI of Japan reported on questions of economy and efficiency of recovery and reconstruction expenditure and found that emergency housing could have been supplied more economically and that disaster-generated waste was not being disposed of with adequate efficiency.

14.7 Appendix 9 summarises a performance audit carried out by the SAI of the European Union of the European Commission’s humanitarian response to the 2004 tsunami in South East Asia. Recommendations concerned the role the Commission could consider playing in helping affected governments to manage donor coordination more effectively, the need for better clarification of roles between Commission services, the necessity to improve monitoring and the availability of information and the importance of obtaining access to documentation on projects implemented by UN agencies.

14.8 In the aftermath of the South East Asian tsunami, the SAI of India carried out a performance audit of national expenditure and international disaster-related aid across the disaster management cycle at national, state and district levels. The audit found the mechanisms for managing and monitoring aid to be inadequate and that there were no clear criteria for assessing expected financial assistance. The construction of both temporary shelters and permanent housing was found to be ineffective and there were

\(^{52}\) ISSAIs 5510 and 5530
delays in construction. The audit also covered financial and compliance audit objectives and revealed irregularities in aid payments, in the identification of beneficiaries and in the administration of infrastructure projects. See Appendix 10 for a summary of the audit.

14.9 The United States of America (US) is one of the world’s largest donors of disaster-related aid. In 2005 Hurricane Katrina struck the Gulf coast of the US, causing billions of dollars in damage and dislocating thousands of residents. As the storm’s devastation and destruction were viewed around the world, many countries offered both cash and in-kind donations, including military donations to the United States. Since the US government had not received such substantial amounts of international disaster assistance before, ad hoc procedures were developed to accept, receive and distribute the cash and in-kind assistance. The SAI of the US carried out a performance audit to determine the amount of cash that was donated by foreign countries and the extent to which it had been used to assist in the relief efforts. The audit also examined the extent to which those federal agencies with responsibilities for the assistance had policies and procedures in place to help ensure the appropriate accountability for the acceptance and distribution of in-kind donations, including military donations. Based on the findings of the audit, the SAI recommended improvements to the policies, procedures, planning and oversight relating to international donations. See Appendix 11.

15 Compliance audit and disaster-related aid

15.1 The objective of compliance auditing is to enable SAIs to report to the appropriate bodies on audited entities’ compliance with particular sets of criteria. This involves reporting on the degree to which the audited entities are accountable for their actions and exercise good public governance. SAIs carrying out compliance audits should refer to the General Auditing Guidelines on Compliance Audit.

15.2 Compliance audit can be performed as a separate audit task. It can also be related to performance audit, or to the audit of financial statements. Some SAIs may have special compliance audit tasks and responsibilities established by their mandate or otherwise. Such tasks may include the judicial function of SAIs, activities related to suspected fraud and corruption, investigation of suspected illegal acts or other misconduct for the purpose of decisions on the sanctioning of individuals or reporting to law enforcement authorities, or the assessment of the truth and completeness of information submitted by ministers to a parliament.

15.3 The INTOSAI Fundamental Auditing Principles highlight two key concepts of compliance auditing:

ISSAI 400/20
ISSAIs 4000-4200
Regularity – the concept that activities, transactions and information pertaining to an auditee are in accordance with the authorising legislation, regulations issued under governing legislation and other relevant laws, regulations and agreements, including budgetary laws, and that they are properly sanctioned.

Propriety – the general principles governing sound public sector financial management and the conduct of public sector officials.

15.4 When carrying out compliance audits of disaster-related aid auditors may seek to verify compliance with the requirements of international agreements covering recovery, relief, rehabilitation and reconstruction measures and activities. For example, governments are required by United General Assembly Resolutions 46/182 of 1991 and 58/114 of 2004 to adhere to the humanitarian principles of humanity, neutrality, impartiality and operational independence. SAI can report on failure by government to comply with these principles in the use of disaster-related aid.

15.5 Auditors should be aware of emergency procedures which may be in operation during the emergency phase following disaster. It may not be possible to comply with all laws and regulations in emergency situations and auditors should take into account the need to circumvent some rules in exceptional circumstances to prioritise the saving of lives and the alleviation of human suffering. However, auditors should expect that, where it is reasonable, the deviations from rules should be documented and explained. Auditors should also verify and make recommendations regarding the degree to which appropriate disaster preparedness measures existed and whether they took into account the need for pre-defined emergency procedures.

15.6 Appendix 12 presents two compliance audits carried out by the SAI of Indonesia in 2010 and 2009 respectively of emergency response, rehabilitation and reconstruction disaster-related aid activities. The audits included performance as well as compliance objectives. The auditors of the emergency response to an earthquake in 2010 found that disaster management regulations in the province concerned were not adequate, that the legal requirement to set up a local disaster management agency was not respected and that the construction of emergency infrastructure did not comply with legal requirements. The auditors of recovery and reconstruction expenditure (national expenditure together with international disaster-related aid) reported the failure to comply with national budget regulations and that local government had not complied with requirements on reporting disaster-related aid.

16 Reporting audits of disaster-related aid

16.1 When preparing audit reports, SAIs should consider the specific context and needs of the country concerned, as well as legal mandates and any other information relevant to the stakeholders. Separate audit reports might be prepared for different parts of the post-disaster phase (emergency response, rehabilitation or reconstruction activities). These reports may have a similar overall structure, with their content depending on the phase concerned. In all cases, reports should be addressed to the appropriate authority for follow up on the recommendations made.

16.2 Reports on financial audits of disaster-related aid should respect national requirements. SAIs should refer to the INTOSAI guidelines.\(^57\) If the financial statements have been prepared in accordance with a special purpose framework, auditors should consider including an emphasis of matter paragraph in the report on the financial audit of disaster-related aid.\(^58\)

16.3 Following performance or compliance audits, auditors should provide written reports to communicate the results of the audit to all levels of government and other stakeholders. The fact that reports are written make the results less susceptible to misunderstanding, make the results available for public inspections and facilitate follow-up to determine whether corrective action has been taken.

16.4 Performance audit reports should be reliable and informative. Recommendations should be logical and clear, and linked to the audit objectives and the findings. The auditors should report the audit objectives, scope, methodology and sources used, as well as audit findings, conclusions and recommendations. The audit reports should be complete, accurate, objective, convincing and as clear and concise as possible. See ISSAI 3000 for guidance.\(^59\)

16.5 Compliance audit reports should include the objectives and scope of the audit, the time period covered, identify or describe the subject matter and the criteria, the responsibilities of the various parties (legal basis), the auditing standards applied in performing the work, a summary of the work performed and a conclusion. See ISSAI 4100 for guidance.\(^60\)

16.6 INTOSAI has spearheaded an initiative called The Integrated Financial Accountability Framework (the IFAF) to improve the quality and availability of financial information on humanitarian aid.\(^61\) The proposal is for all stakeholders in

\(^57\) ISSAI 1700 “Forming an Opinion and Reporting on Financial Statement.”

\(^58\) ISSAI 1800: Special Considerations – Audits of Special Purpose Financial Statements

\(^59\) http://www.issai.org/media/797.1033/ISSAI_4100_E_Endorsement_version_June.pdf

\(^60\) http://www.issai.org/media/797.1033/ISSAI_4100_E_Endorsement_version_June.pdf

\(^61\) http://www.issai.org/composite-194.htm
humanitarian aid to prepare IFAF tables, for these tables to be audited by external auditors and for them to be made publically available by publishing them as open data. The objective of the IFAF is to standardise and simplify humanitarian aid reporting, improve transparency and accountability and make ex-post, final, audited financial information on the whole of humanitarian aid available to all interested parties. Once the IFAF is operational, SAIs can use the improved information to support their work on auditing financial statements and to assist them in their performance and compliance audits. For more information see INTOSAI GOV 9250 on the IFAF.  

17 Audit tools for disaster-related aid

17.1 The complexity of auditing disaster related-aid makes the use of audit tools a necessity for SAI auditors. However, before using the tools, auditors should obtain assurance regarding the quality and reliability of the information on which they are based. Some of these tools are described below.

17.2 Governments use Geographic Information Systems (GIS) as a source of information. These can be used to integrate, store, analyse, manage and present data that are linked to locations. GIS technology can be used to assess where hazardous natural phenomena are likely to occur. In a disaster-related aid audit, GIS can be used to identify the area(s) affected by the disaster to be audited. GIS is useful both in planning and in conducting the audit. For further discussion of GIS and how it can be used for auditing disaster-related aid, see ISSAI 5540.

17.3 Online databases can be useful for SAI auditors where many stakeholders are involved in disaster-management. Some examples of online databases used in auditing tsunami related aid in Indonesia are RAN-DTF, ETS, FTS, and the United Nations’ Relief website. Due to the important role these databases play in disaster management, auditors should also assess the quality of these databases and the information they contain. SAIs are referred to the final report of the INTOSAI Task Force of the Accountability for and Audit of Disaster-related Aid for criteria for assessing the quality of online databases for disaster management and specifically for disaster-related aid.

The Task Force considered that databases for disaster-related aid should contain:

- complete, reliable, timely and comparable data;

62 ibid

63 http://www.issai.org/composite-280.htm

64 Task Force on the Accountability for and Audit of Disaster-related Aid (2008), Lessons on accountability, transparency and audit of Tsunami-related aid. See website: http://eca.europa.eu/portal/page/portal/intosai-aada/home.
information on the reliability and timeliness of the data: Has the information been verified or audited? When was the information collected? Data over the whole period of relief, rehabilitation and reconstruction.

17.4 INTOSAI GOV 9250 on the IFAF (see paragraph 16.6) includes the proposal that IFAF tables should be made available as open data. The audited information published in IFAF tables can be used as a tool for auditors seeking to construct global audit trails for individual disasters or specific aid flows. IFAF tables can also be used by auditors seeking to establish coverage by other auditors of the humanitarian aid in which they are interested and as such can become tools to further collaboration and cooperation between auditors.65

65 http://www.issai.org/composite-194.htm
## Appendix 1

### Characteristics of disasters

Prepared by the SAI of Indonesia. See bibliography at Appendix 15.

<table>
<thead>
<tr>
<th>Types of disaster</th>
<th>Characteristics</th>
<th>General counter-measures</th>
<th>Special problems areas</th>
</tr>
</thead>
</table>
| Earthquake        | • Usually no warning  
|                   | • Usually sudden onset  
|                   | • Earthquake-prone areas are generally well identified and well known  
|                   | • Major effects arise mainly from land movement, fracture or slippage; specifically they include damage (usually very severe) to structures and systems, plus considerable casualties due to lack of warning | • Development of possible warning indicators  
|                   | | • Land use regulations  
|                   | | • Building regulations  
|                   | | • Relocation of communities  
|                   | | • Public awareness and education programmes | • Severe and extensive damage creating the need for urgent measures, especially search and rescue and medical assistance  
|                   | | | • Difficulty of access and movement  
|                   | | | • Widespread loss of or damage to infrastructure, essential services and life support systems  
|                   | | | • Recovery requirements may be very extensive and costly  
|                   | | | • Rarity of occurrence in some areas may cause problems for economies of counter measures and public awareness |
| Volcanic eruption | • Major eruptions can sometimes be predicted  
|                   | • Volcanic blast can destroy structures and environmental surrounds, and also cause fires, possibly including forest fire  
|                   | • Land-surface cracking, resulting from volcanic explosion, may affect buildings and other structures  
|                   | • Lava flows can bury buildings and crops, cause fires and render land unusable  
|                   | • Ash, in its airborne form, can cause respiratory problems. It may also affect aircraft by ingestion into engines.  
|                   | • Ground deposits of ash may | • Land use regulations  
|                   | | • Lava control systems  
|                   | | • Development of monitoring and warning system  
|                   | | • Evacuation plans and arrangements  
|                   | | • Relocation of population  
|                   | | • Public awareness and education programmes | • Access during eruption  
|                   | | | • Timely and accurate evacuation decisions  
|                   | | | • Public resistance to evacuation  
<p>|                   | | | • Control of incoming sightseers when evacuation programmes are being implemented |</p>
<table>
<thead>
<tr>
<th>Types of disaster</th>
<th>Characteristics</th>
<th>General counter-measures</th>
<th>Special problems areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsunami</td>
<td>The velocity of the wave depends on the depth of water at the point where the seismic disturbance occurs. Warning time depends on distance from points of wave origin. Speed of onset varies. Impact on shoreline can be preceded by marked recession of normal water level prior to arrival of wave. The tsunami wave can be very destructive. Impact can cause flooding; salt-water contamination of crops, soil and water supplies; destruction of or damage to buildings, structures, and shoreline vegetation.</td>
<td>Early warning. Evacuation of threatened communities from sea level/low level areas to high ground, if sufficient warning available. Land use regulations (but these are likely to be difficult to implement if the tsunami risk is perceived as low). Public awareness and education programmes.</td>
<td>Timely dissemination of warning, in view of the possible short period between receipt of warning and the arrival of the tsunami wave. Effective evacuation time scale. Search and rescue. Recovery problem may be extensive and costly due to severe destruction and damage.</td>
</tr>
<tr>
<td>Tropical cyclone (typhoon, hurricane)</td>
<td>Usually long warning, derived from systematic international meteorological observation (including remote sensing). Speed of onset gradual. Tends to conform to seasonal pattern. Major effects arise mainly from destructive force winds, storm surge (producing inundation) and flooding from intense rainfall. Landslides may follow flooding and heavy rainfall. Destruction and/or severe damage may be caused to buildings and other structures, roads, essential services, crops, and the environment generally. Major loss of life and livestock may occur.</td>
<td>Effective warning arrangements. Precautionary measures during warning period. Moving of people to safe shelters. Generally readiness and clean-up measures prior to expected cyclone season. Building regulations. Public education and awareness.</td>
<td>Assessment of effects and needs may be difficult, especially due to bad weather following main disaster impact and to problems of access and movement caused by high damage levels. Widespread destruction or loss of counter-disaster resources. Difficulty of access and movement in carrying out urgent relief operations, especially emergency feeding, shelter, and medical assistance programmes. Search and rescue. Widespread destruction/disruption of essential services. Evacuation. Rehabilitation of</td>
</tr>
<tr>
<td>Types of disaster</td>
<td>Characteristics</td>
<td>General counter-measures</td>
<td>Special problems areas</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Flood</strong></td>
<td>Long, short, or no warning depending on the type of flood</td>
<td>Flood control, Land use regulations, Building regulations, Forecasting, monitoring, and warning systems, Relocation of population, Evacuation plans and arrangements, Emergency equipment, facilities and materials, such as flood boats, sandbags, supplies of sand (plus designated volunteers for implementation of emergency measures), Public awareness and education programmes</td>
<td>Difficulties of access and movements, Rescue, Medical and health difficulties (for example arising from sanitation problems), Evacuation, Loss of relief supplies, Large-scale relief may be required until next crop harvest</td>
</tr>
<tr>
<td></td>
<td>Speed of onset may be gradual or sudden</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There may be seasonal patterns to flooding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Major effects arise mainly from inundation and erosion; specifically, they may include isolation of communities or areas, and involve the need for large-scale evacuation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Landslide</strong></td>
<td>Waning period may vary</td>
<td>Land use and building regulations, Monitoring systems, where applicable, Evacuation and/or relocation of communities, Public awareness programmes</td>
<td>Difficulties of access and movement in affected areas, Search and rescue, Risk of follow-up landslides may hamper response operations, Relocation (as distinct from temporary evacuation) may be resisted by indigenous communities, Rehabilitation and recovery may be complex and costly, In severe cases, it may not be possible and/or cost-effective to rehabilitate the area for organized human settlement</td>
</tr>
<tr>
<td></td>
<td>Speed of onset is mostly rapid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damage to structures and systems can be severe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rivers may be blocked, causing flood</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crops may be affected</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When landslides are combined with very heavy rain and flooding, the movement of debris may cause high levels of damage and destruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bushfire (or Wildfire)</strong></td>
<td>Most bushfire-prone areas are well known and well defined</td>
<td>Accurate risk assessment, Effective monitoring and warning systems, Fire prevention</td>
<td>Maintenance of adequate community awareness and preparedness, Arson can be difficult</td>
</tr>
<tr>
<td></td>
<td>Bushfire threat tends to be seasonal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speed of onset may vary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Types of disaster</td>
<td>Characteristics</td>
<td>General counter-measures</td>
<td>Special problems areas</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Drought</td>
<td>Major areas liable to drought are usually well known</td>
<td>Effective counter-measures tend to be mostly long term</td>
<td>Response requirements may be extensive and prolonged, thus involving major commitment and expenditure of resources</td>
</tr>
<tr>
<td></td>
<td>Periods of drought can be prolonged</td>
<td>The long-term resolution of drought problems usually rests with national governments and involves major policy decisions</td>
<td>Prolonged drought may undermine self-reliance of affected communities, thus making it difficult to withdraw disaster management assistance</td>
</tr>
<tr>
<td></td>
<td>Areas affected may be very large</td>
<td>Since this decisions involve human settlement, they are often sensitive and difficult ones</td>
<td>Logistics requirements may exceed in-country capability, particularly if large inputs of outside (international) commodities are involved</td>
</tr>
<tr>
<td></td>
<td>Long warning</td>
<td>International co-operation and assistance usually play an important part in coping with major drought problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effects on agriculture, livestock, rural industry production and human habitation may be severe</td>
<td>Land management and spatial plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term effects can be in the form of severe economics loss, erosion which affects future habitation and production, and sometimes abandonment of large tracts of land</td>
<td>Response to drought-caused emergencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man-made activities may aggravate the possibility and extent of the drought problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The inability and/or unwillingness of the population to move from</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Types of disaster</td>
<td>Characteristics</td>
<td>General counter-measures</td>
<td>Special problems areas</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Drought-prone areas</td>
<td>Drought-prone areas may exacerbate the problem</td>
<td>Usually include provision of food and water supply, medical and health assistance, emergency accommodation</td>
<td>Loss of medical and health resources during disaster impact</td>
</tr>
<tr>
<td>Epidemic</td>
<td>Usually include provision of food and water supply, medical and health assistance, emergency accommodation</td>
<td>Information programmes, especially to assist aspects such as land management</td>
<td>In-country shortage of special equipment</td>
</tr>
<tr>
<td>Major accident, CBRNE (Chemical, Biological, Radiological, Nuclear and Explosive) event, or IED (improved explosive device) incident</td>
<td>Usually include provision of food and water supply, medical and health assistance, emergency accommodation</td>
<td>Reinforcement of medical resources and supplies in anticipation of epidemic outbreaks</td>
<td>Integration of outside (international) medical and health assistance with local systems</td>
</tr>
<tr>
<td></td>
<td>Usually include provision of food and water supply, medical and health assistance, emergency accommodation</td>
<td>Public awareness and education, both before and after disaster impact</td>
<td>Containment and control of common diseases which can have a mass effect, especially if relevant medical and health resources are severely limited</td>
</tr>
<tr>
<td></td>
<td>Usually include provision of food and water supply, medical and health assistance, emergency accommodation</td>
<td>An effective health sub-plan within the overall area counter-disaster plan</td>
<td></td>
</tr>
<tr>
<td>Types of disaster</td>
<td>Characteristics</td>
<td>General counter-measures</td>
<td>Special problems areas</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| Civil unrest      | • Usually the responsibility of police, paramilitary, and armed forces  
|                   | • Violent and disruptive activities occur  
|                   | • Patterns of civil unrest are difficult to predict. Therefore, effective warning may also be difficult  
|                   | • In many civil unrest circumstances, especially terrorism, the instigators have the initiative, thus complicating the task of law enforcement authorities | • Firm application of law and order regulations and requirements  
|                   |                   | • Imposition of special emergency measures and regulations  
|                   |                   | • Positive information programmes aimed at maintaining majority public support for government action against disruptive elements/factions | • Overloading of resources organization due to demands of civil unrest incidents, in addition to normal commitments  
|                   |                   |                   | • Difficulty of integrating “peacetime” resource organizations with “military-type” operations which are necessary to deal with violent civil unrest |
Appendix 2

Risk-based audit strategy for auditing disaster-related aid management – a case study by the Indonesian SAI

1. Before conducting an audit on disaster management and disaster-related aid management, SAI auditors examine and obtain an understanding of the entity. This example from the SAI of Indonesia shows auditors selecting topics for the audit of disaster management by a Disaster Management Agency in the rehabilitation and reconstruction phase. They have selected topics for audit and using the matrix in section 7 of ISSAI 5520, they have identified potential risks for each of the topics. The auditors have not considered all of the suggested risks in the matrix to be of relevance for all of the topics.

2. Once the risks have been highlighted, the auditors examine the Government Risk Management (GRM) procedures and the appropriateness and the strength of internal controls to assess the extent to which each apparent risk may have been addressed by the Disaster Management Agency. This involves an evaluation of the sufficiency and effectiveness of laws, regulations, guidelines, manual and any other tools created by government or the agency itself to address the potential risks. The auditors also consider feasibility of carrying out the audit, for example it may at present be too dangerous for auditors to reach the disaster affected areas, the likely impact of the audit in terms of improving the implementation of the programmes or the management of the agency and public opinion on the topics. The results of the assessment are then prioritised and ranked. Auditors develop the audit plan based on the priority chosen by referring to the audit design matrix in Appendix 3.

3. The process is summarised in the following diagram.

---

Risk-based audit strategy for auditing disaster-related aid management

Source: The SAI of Indonesia
Appendix 3
Audit Design Matrix
This matrix has been designed by the SAI of Indonesia using INTOSAI guides. It is proposed as a tool to assist auditors to design an audit programme. It consists of a number of steps.

STEPS IN DESIGNING AN AUDIT PROGRAMME

1. CHOOSE PRIMARY AUDIT TOPIC

2. IDENTIFY RELATED RISK

3. FORMULATE POTENTIAL AUDIT OBJECTIVE AND RESEARCHABLE QUESTIONS

4. DECIDE AUDIT CRITERIA AND INFORMATION REQUIRED

5. PROVIDE INFORMATION SOURCE DESIGN STRATEGY

6. IDENTIFY METHODS FOR GATHERING EVIDENCE

7. DESCRIBE DATA ANALYSIS/DATA RELIABILITY STEPS

8. IDENTIFY LIMITATIONS OF AUDIT AND ANALYSIS

9. LIST EXPECTED CONCLUSIONS

---

1. **Choose primary audit topic**

   This is the most important step in the audit process. The SAI needs to identify key issues in disaster-related aid management which are of the greatest importance for the recipients of the report. If possible (where mandated), this should be done in consultation with the client to ensure that both parties agree and clearly understand the main purpose of the audit. A selection of key audit topics (disaster-related aid activities) can be found in section 7.2 of ISSAI 5520.

2. **Identify related risk**

   After deciding on a topic, the SAI needs to start identifying risks which could influence the direction and aim of the audit and the work on each subtopic. The identified risks may ultimately feature in the audit findings. A list of potential risks for each activity is set out in section 7.2 of ISSAI 5520.

3. **Formulate potential audit objective and researchable questions**

   The identification of risks enables the SAI to develop a clearer picture of the audit’s course and possible findings, and thus to formulate the principal audit objective. Once a potential audit objective has been formulated, the auditors should develop researchable questions or lines of enquiry that are likely to guide the audit towards achieving that objective. The questions should be clear and specific, fair and objective, and state measurable objectives. They should also be sufficiently comprehensive to enable the auditors to meet the audit objective in full.

4. **Decide audit criteria and information required**

   The auditors should then examine how the questions can be answered. This is crucial to determining the audit criteria. Each question will require corresponding and measurable criteria to determine the degree of compliance of the entity being audited. The criteria may be developed from international conventions, agreements, national regulations, policies, best practices, and benchmarks. In financial and compliance audits, the SAI may use criteria that are broadly defined in the national accounting and legal framework. However, criteria for performance audits cannot necessarily be taken from accounting and legal documents, and will vary from audit to audit and case to case. Nevertheless, in all types of audit the criteria adopted must be clear, relevant, reasonable, and generally accepted.

   Besides establishing criteria, the auditors should identify what evidence is needed to support findings, conclusions, and potential recommendations. Audit evidence can be categorised as physical, documentary, testimonial or analytical. The SAI can obtain physical evidence by, for example, observing the work of a disaster management agency or conducting on-site visits to check for internal controls. Documentary evidence can be obtained in the form of laws and regulations, contracts, accounting records, etc. Testimonial evidence can be obtained through surveys and interviews with disaster management agencies and disaster victims, focus groups of disaster experts, etc. Audit evidence should be sufficient, competent and relevant.\(^3\) See ISSAI 3000, Appendix 2 for guidance on performance audit criteria.

---

\(^3\) ISSAI 3000/62
5. **Provide information source design strategy**

This step concerns the sourcing of information. The necessary information may be found in previous audit reports, disaster reports prepared for internal and external monitors, interviews with disaster management agencies, disaster victims and experts, disaster management laws and regulations, crowd sources, etc. Auditors should assess the quality of the information in these sources before using it.

6. **Identify methods for gathering evidence**

Having identified their sources, the auditors should come up with plans to obtain the necessary information. To gather evidence in the context of an audit of disaster-related aid, the SAI may have recourse to procedures that are commonly used in all types of audit, including:

a. Making inquiries of disaster management agency staff. The audit team should ask staff to explain their disaster management and aid management duties.

b. Examining key documents and records for each management cycle.

c. Observing control activities that do not leave a written audit trail. The audit team should perform a walkthrough of the main activities in the aid management cycle.

7. **Describe data analysis/data reliability steps**

Having obtained the necessary information, the auditors should plan how to use it. The procedure for analysing the evidence collected by the SAI will depend on the audit objectives.

8. **Identify limitations of audit and analysis**

After defining a data analysis/data reliability procedure, the auditors should focus their attention on the limitations of audit and analysis. Relevant questions are:

a. What action cannot be envisaged?

b. What are the caveats?

c. Has the information and evidence obtained been verified?

d. Can significant limitations affecting disaster-related information be overcome?

9. **List expected conclusions**

This step concerns what the auditors expect to find. The auditors should:

a. Identify potential findings

b. Predict the suitable audit conclusion based on the potential audit findings
THE AUDIT DESIGN MATRIX

Each of the preceding steps is presented in an audit design matrix below. Although these steps are presented in sequential order, the steps are all interrelated to a greater or lesser degree.

<table>
<thead>
<tr>
<th>Audit Topic:</th>
<th>Audit risk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Objective/s:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Researchable questions</th>
<th>Criteria &amp; information required</th>
<th>Informatio n sources &amp; design strategy</th>
<th>Evidence gathering methods</th>
<th>Data analysis methods / Data reliability</th>
<th>Limitations of audit and analysis</th>
<th>Expected conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do you want to know?</strong></td>
<td><strong>What information do you need to answer the question?</strong></td>
<td><strong>Where is the information obtained?</strong></td>
<td><strong>How do you plan to obtain the information?</strong></td>
<td><strong>What do you want to do with the information?</strong></td>
<td><strong>What is not possible?</strong></td>
<td><strong>What do you expect to find?</strong></td>
</tr>
<tr>
<td>Questions should be:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classify the questions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify the evidence needed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria: Disaster-related aid management principle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officials, experts to be interviewed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laws and regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous audits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examine documents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaster report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Descriptive statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data reliability assessments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualitative analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost/benefit analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are the caveats?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there limitations to access?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any stipulated accounting standard for disaster?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are auditors subject to resource constraints?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List of possible findings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Findings related to the sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect of proposed programme changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of implementing changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Below is an example of an audit design matrix for a particular objective in the area of aid distribution.

<table>
<thead>
<tr>
<th>Researchable questions</th>
<th>Criteria &amp; information required</th>
<th>Information sources &amp; design strategy</th>
<th>Evidence gathering methods</th>
<th>Data analysis methods / Data reliability</th>
<th>Limitations of audit and analysis</th>
<th>Expected conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has disaster management agency distributed the aid in time?</td>
<td>Criteria: Disaster management act</td>
<td>Sources: Documentary and physical evidence obtained from reliable sources (such as stipulated laws and regulation) and on site visit</td>
<td>Interview earthquake victims to obtain their description related to distribution of aid</td>
<td>Verify the information validity by comparing legal document to recent condition resulted from interview and walkthrough</td>
<td>Any known problems or limitations on the evidence will be described</td>
<td>We will identify any gaps between the current legal framework stipulating schedule and provision of aid distribution We will show any delay in aid distribution (if any)</td>
</tr>
</tbody>
</table>
Appendix 4:
Example of disaster auditing guidelines for private sector auditors
Prepared by the SAI of Chile

1. The following disaster auditing guidelines were prepared by the SAI of Chile in collaboration with representatives from donor organisations, Non-Governmental Organisations, private sector auditing firms and the Government General Internal Auditing Council of Chile. In the course of this work the SAI of Chile also consulted accounting standard setters, accounting and auditing bodies and colleges and representatives from a range of government services associated with disaster-related aid and audit. The SAI of Chile based the guidelines on the auditing procedures used by the Chilean Office of the Comptroller General. The guidelines were reviewed by and agreed to by the representatives of the donor organisations, Non-Governmental Organisations, private sector auditing firms, the internal Government General Internal Auditing Council of Chile and the SAI of Chile. The guidelines have been tested by private sector auditors of a humanitarian NGO in Chile. See WG AADA final report for more details.

2. The guidelines take auditors through the steps of the audit:

- Control environment
- Information analysis
- Selection of beneficiaries
- Reception and delivery of resources
- Accounting for aid
- Internal controls and meeting targets

The steps are summarised in the following flow chart.
Control Environment
- This corresponds to the initial stage, which involves a general familiarization with the receiving agency in terms of the emergencies and disasters issue, observing its organic structure, the regulations currently in force, its procedures, records, donation agreements, coordination with other entities, etc. This stage is carried out by the auditor’s conducting an interview or by some other means.

Information Analysis
- This refers to the stage of obtaining and reviewing the information gleaned from the consultation in the previous control environment stage, in order to validate the information and achieve a preliminary view of how the Institution functions in the area of emergencies.

Selection and Acceptance
- This corresponds to the stage of selecting and accepting the beneficiaries on the basis of the procedures defined by the entity and the intentions specified by the donor Institution.

Control and Follow-up
- This stage involves verifying that the receiving agency has internal controls in place that will enable it to meet the targets in terms of the use of resources.

Rendering of Accounts
- The stage of the audit when the rendering of accounts is requested, reviewed and validated, to ensure that the resources have been used for the purposes intended.

Reception and Delivery of Resources
- This includes the process of receiving the resources from the receiving agency and subsequently delivering them to the beneficiaries, including the control that must be exercised by the entity that receives and channels the aid, with regard to the instances involved in the process.
CONTROL ENVIRONMENT: This corresponds to the initial stage, which involves a general familiarization with the receiving agency in terms of the emergencies and disasters issue, observing its organic structure, the regulations currently in force, its procedures, records, donation agreements, coordination with other entities, etc. This stage is carried out by the auditor’s conducting an interview or by some other means.

<table>
<thead>
<tr>
<th>CONTROL ENVIRONMENT STAGE</th>
<th>YES</th>
<th>NO</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is there any legislation governing the receiving agency?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Are there policies, instructions or internal procedures on the handling of resources received and delivered?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Are there specific policies, instructions or internal procedures on the handling of resources received and delivered in disaster situations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do the internal procedures include a segregation of functions in the Finance and Treasury Unit? (payment authorization and authorized signatories) Are these modified in cases of emergency?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Are there defined procedures for the distribution of resources or goods to beneficiaries? Are these modified in cases of emergency?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Is there an organizational structure in place to face an emergency, which has the necessary powers?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Is there a system of registering beneficiaries that is relevant to the situation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Is there a record of the resources delivered to beneficiaries?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Is there any donation contract, arrangement or agreement?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Does the contract, arrangement or agreement expressly specify the intention of the donation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Has the donor imposed any restrictions on the handling of the donated resources?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Is there any coordination with other public or private bodies that have to do with emergencies? (Type of coordination and objectives are to be specified).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Is there adequate protection for the donated goods?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Are there procedures in place to prove the delivery of resources or goods to beneficiaries?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Is there a separate record for donated resources?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>If advisable, are there controls to make it possible to comply with health regulations or their equivalent in the storing of the goods?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**INFORMATION ANALYSIS:** This refers to the stage of obtaining and reviewing the information gleaned from the consultation in the previous control environment stage, in order to validate the information and achieve a preliminary view of how the Institution functions in the area of emergencies.

<table>
<thead>
<tr>
<th>No.</th>
<th>Test</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To validate the consistency of the policies, instructions or procedures on donations received.</td>
<td>Check whether such rules are clear, up-to-date and relevant to the intentions of the donation.</td>
</tr>
<tr>
<td>2</td>
<td>Analyse contracts</td>
<td>Check whether the contracts, arrangements or agreements stipulate clearly the intentions of the donation.</td>
</tr>
<tr>
<td>3</td>
<td>Verify the competence of the Emergency Response Officer</td>
<td>Find out whether the Emergency Response Officer is familiar with the aforementioned documents and whether he/she has been trained to carry out the tasks entrusted to him/her (including the procedures for distributing the resources).</td>
</tr>
</tbody>
</table>
| 4   | Check the basic contents of the universe of beneficiaries database | If the database is to be analysed correctly, this must contain the following information as a minimum:  
  a) Beneficiary’s forenames and surnames;  
  b) Address and region where he/she received the benefit;  
  c) Financial and physical resources delivered to him/her;  
  d) Date when benefits were delivered;  
  e) The beneficiary’s single identification number.  
  f) Donor of the resources; and, g) Intention of the donation. |
| 5   | Corroborate the existence of a system for recording and administering the delivery of benefits | Verify that beneficiaries’ data, and the administration of the resources are kept in a record that meets the following conditions at least:  
  • It does NOT allow benefit to be delivered more than once to the same beneficiary.  
  • It does NOT allow the beneficiary’s single identification number to be entered. |
| 6   | Verify coordination with other entities | Check the existence of details to prove coordination with other entities concerned in dealing with emergencies. (Protocols, arrangements or agreements) |
| 7   | Investigate the administration of the resources | Verify whether there is an adequate system for administering the goods and resources donated. (For goods, consider: reception, storage, protection and delivery) |
| 8   | Verify evidence of the delivery of resources to beneficiaries | Check that the corresponding record has complied with the formal procedure that proves delivery, whoever may have carried it out. |
| 9   | Examine the donations register | Find out whether the register provides clear, precise information about the resources and/or goods received in donations, to allow them to be matched with the resources delivered. |
| 10  | Check compliance with health regulations | Analyse and validate if necessary the existence of adequate safeguards in the warehouses containing physical resources, to comply with any health regulations or equivalent stipulated for that purpose. |
SELECTION AND ACCEPTANCE: This corresponds to the stage of selecting and accepting the beneficiaries on the basis of the procedures defined by the entity and the intentions specified by the donor Institution.

<table>
<thead>
<tr>
<th>N°</th>
<th>Test</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To decide on the selection of the sample</td>
<td>To decide on a representative simple of the accepted beneficiaries, on the basis of the criteria approved by each institution.</td>
</tr>
<tr>
<td>2</td>
<td>Check compliance with procedures</td>
<td>On the basis of the sample chosen, carry out a range test for certain operations in order to evaluate compliance with the selection and acceptance procedures defined by the organization.</td>
</tr>
<tr>
<td>3</td>
<td>Analyse the beneficiary’s entry in the registration system</td>
<td>Verify that a control is kept for each beneficiary of the donation, to contain at least the following data: a) Forenames and surnames of beneficiary; b) Address and region where he/she received the benefit; c) Financial and physical resources that were delivered to him/her; d) Date when benefits were delivered; e) Beneficiary’s single identification number; f) Donor of the resources; and, g) Intention of the donation.</td>
</tr>
<tr>
<td>4</td>
<td>Corroborate that there is no duplication of benefit</td>
<td>Verify on the register of resources delivered that there is no duplication in the delivery of benefit to the same person or institution. This can be analysed using tools such as ACL, Excel, or some other.</td>
</tr>
<tr>
<td>5</td>
<td>Check the consistency of the intentions stipulated by the donor and the beneficiaries that have been accepted.</td>
<td>Match the intentions defined by the donor with the characteristics of the beneficiaries that have been accepted, to check that these coincide.</td>
</tr>
</tbody>
</table>
RECEPTION AND DELIVERY OF RESOURCES: This includes the process of receiving the resources by the receiving agency and subsequently delivering them to the beneficiaries, including the control that must be exercised by the entity that receives and channels the aid, with regard to the instances involved in the process.

<table>
<thead>
<tr>
<th>N°</th>
<th>Test</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Verify that the funds are entered</td>
<td>Verify that the resources received are controlled by means of an accounting record, depending on the nature of the donation, and that the funds are entered in an exclusive current bank account, or, in the case of donations in goods, that there is adequate physical protection for them. Likewise check that there are such controls in place as are necessary to safeguard such resources.</td>
</tr>
<tr>
<td>2</td>
<td>Verify that the donation is certified</td>
<td>Check that the receiving agency issues the donor organization with a receipt.</td>
</tr>
<tr>
<td>3</td>
<td>Review the dates when resources are delivered</td>
<td>Check that the resources are granted to each of the beneficiaries at the correct time, on the basis of criteria fixed by each institution.</td>
</tr>
<tr>
<td>4</td>
<td>Review the control of the resources</td>
<td>Check that the delivery of the resources is recorded in a system that allows them to be effectively controlled.</td>
</tr>
<tr>
<td>5</td>
<td>Verify the formal procedure for delivering resources</td>
<td>Check that the reception of the resources is duly signed by the beneficiary, except in special situations where written evidence must be provided in the form of certification of the benefit’s delivery issued by the Receiving Agency.</td>
</tr>
</tbody>
</table>
**RENDERING OF ACCOUNTS:** The stage of the audit when the rendering of accounts is requested, reviewed and validated, to ensure that the resources have been used for the purposes intended.

<table>
<thead>
<tr>
<th>No.</th>
<th>Test</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rendering report</td>
<td>Check that there exists on the part of the receiving agency a rendering report on the use and destination of the resources received.</td>
</tr>
</tbody>
</table>
| 2   | Details of rendering          | Check that there is a rendering-of-accounts format that includes income, expenditure and the unused balance of the resources. It must also contain at least:  
1) Identification of the back-up documents.  
2) List of the contributions paid by the donor institution and the deductions made under the heading of delivery to beneficiaries.  
3) The unused balance which must coincide with that appearing in the accounting records in that same period.  
4) The signatures and approvals of responsible officials. |
| 3   | Confirmations of amounts given by the donor | Confirm with the institutions that gave the resources, in order to validate the amounts entered at the receiving agency.                                                                                       |
| 4   | Carry out a review of the rendering file | Check:  
1) That the date of the renderings coincides with the period stipulated in the agreement.  
2) That the supporting documentation is original (physical or electronic support documents).  
3) That the receipts coincide with the nature and intention of the fund.  
4) That all back-up documents of the rendering of accounts have a control to avoid their being reused.  
5) That the rendering of accounts is authorised or initialled by the official responsible, as established in the agreement. |
| 5   | Review of expenditure receipts | With regard to these, check:  
1) That the sheets are pre-numbered and correlative.  
2) That the name of the creditor or receiver corresponds to the one mentioned in the back-up documents.  
4) That the date when the cheque was issued or the electronic transfer made coincides with the back-up documentation. Also ensure that each cheque delivered to the supplier appears as charged in the following bank statement.  
5) That the currently applicable tax rules with regard to donations have been complied with. |
| 6   | Physical validation           | Carry out inspections on site, or in some other relevant way, in order to verify:  
1) The identity of the beneficiary.  
2) That the resources delivered to the target group correspond to those promised. (including specialist support, if necessary).                                                                 |
| 7   | Review of goods storage       | If necessary, check that there is a control of the custody and accumulation of goods, to ensure that they are correctly protected.                                                                            |
| 8   | Analyse the existence of surplus resources | Find out whether the entity had surplus resources and if these were reported; used later; returned to the donor Institution or redistributed (as agreed with the donor).                                         |
9. Validate other commitments stipulated in the agreement

Check that any other commitments stipulated in the donation agreement that have not been dealt with, are fulfilled.

10. Verify purchasing procedures

If necessary, check that there are procedures to cover the purchase of goods and/or services.

CONTROL AND FOLLOW-UP: This stage involves verifying that the receiving agency has internal controls in place that will enable it to meet the targets in terms of the use of resources.

<table>
<thead>
<tr>
<th>CONTROL AND FOLLOW-UP STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
</tr>
<tr>
<td>Analyse whether there are follow-up control procedures in place with regard to the transfers made.</td>
</tr>
</tbody>
</table>

GLOSSARY FOR USE WITH THE DISASTER AUDITING GUIDELINES FOR PRIVATE SECTOR AUDITORS DEALING WITH DISASTERS, WHETHER NATURAL OR CAUSED BY MAN

<table>
<thead>
<tr>
<th>N°</th>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Beneficiary</td>
<td>A person or group of people who are granted resources of any kind to alleviate the consequences of the disaster that has affected him/her/them.</td>
</tr>
<tr>
<td>2</td>
<td>Goods</td>
<td>These correspond to the physical resources available for distribution to the beneficiaries.</td>
</tr>
<tr>
<td>3</td>
<td>Warehouse</td>
<td>Place where the physical resources are accumulated, pending delivery to the beneficiaries.</td>
</tr>
<tr>
<td>4</td>
<td>Benefit Delivery Certificate</td>
<td>A document constituting proof that the resources have been delivered to each beneficiary, It must be signed by him/her and, if this is not possible, by the organization delivering such resources.</td>
</tr>
<tr>
<td>5</td>
<td>Expenditure Receipt</td>
<td>A document used in the organization’s accounting to record information related with payments made.</td>
</tr>
<tr>
<td>6</td>
<td>Confirmation</td>
<td>Proof by which the donor is asked to confirm the information concerning the resources delivered to the receiving agency within a given period.</td>
</tr>
<tr>
<td>7</td>
<td>Donation contract, arrangement or agreement</td>
<td>Document by which the donor organization delivers resources to a receiving agency, so that the latter may channel the contributions donated to each target beneficiary or group, in accordance with the terms stipulated.</td>
</tr>
<tr>
<td>8</td>
<td>Accounting register</td>
<td>Register that enables an economic element or action taken by a company to be identified and classified.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Disaster</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>A serious alteration in the living conditions of individuals or a community, or damage to property, caused by a natural phenomenon or by human intervention, whether intentional or unintentional, which is impossible to control using the means and resources provided or reinforced locally, and requires the assistance and coordination of public and private bodies, both national and international, with human, operational and material means to initiate and implement a response to gain control of the situation.</td>
<td></td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>Tax rules</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Rules that state the tax obligations related with the operations being examined.</td>
<td></td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>Supporting or back-up documentation</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>A sequenced series of paper or electronic support documents, that serves as back-up for the operations carried out by the organization.</td>
<td></td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>Donation</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Resources of any kind given in a non-refundable manner by a donor in order to help those affected by an emergency or disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>Donor</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>A local or international body which provides non-refundable resources to a receiving agency so that help is delivered through that agency to those affected by any type of emergency or disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>Receiving Agency</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>The body that receives resources from the donor, whose mission is to channel aid to those affected by any type of emergency or disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>15</strong></td>
<td>Duplication in the granting of benefits</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>This refers to a risk that may occur if there are internal control weaknesses in the receiving agency: namely that a benefit is given more than once to the same beneficiary.</td>
<td></td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>Emergency</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>A serious alteration in the conditions of risk for people’s lives or damage to property, caused by a natural phenomenon or human intervention, whether intentional or unintentional, that affects them but can be controlled using the means and resources available in the locality, space or community affected, if reinforced by means and resources from outside it.</td>
<td></td>
</tr>
<tr>
<td><strong>17</strong></td>
<td>Emergency Response Officer</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Person within the receiving agency with responsibility for the work of direction, coordination and control in the face of situations of emergency or disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>18</strong></td>
<td>Specialist</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Person with technical knowledge and experience in a specific field of action.</td>
<td></td>
</tr>
<tr>
<td><strong>19</strong></td>
<td>Control and Follow-up Stage</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>This corresponds to verification that the receiving agency has internal controls in place to meet the targets for the use of resources.</td>
<td></td>
</tr>
<tr>
<td><strong>20</strong></td>
<td>Surplus resources or unused balances</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Balance of resources remaining after the corresponding delivery of these has been made to the target group of beneficiaries.</td>
<td></td>
</tr>
<tr>
<td><strong>21</strong></td>
<td>Rendering of Accounts File</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Details of the receiving agency, originating from its information systems, consisting of income, expenditure and transference receipts, - accompanied by back-up documentation - which reflect the transactions carried out in the course of its work during a given period.</td>
<td></td>
</tr>
<tr>
<td><strong>22</strong></td>
<td>Single beneficiary identification number</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>This is a single numerical series by which every inhabitant of a given country is identified, e.g. Passport number, national ID number, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>23</strong></td>
<td>Rendering report</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Instrument by which the receiving agency informs the donor by document about the administration of the resources received.</td>
<td></td>
</tr>
<tr>
<td><strong>24</strong></td>
<td>Entering the funds</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Corresponds to the reception process for donated funds.</td>
<td></td>
</tr>
<tr>
<td><strong>25</strong></td>
<td>Representative sample of beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>This is the number of beneficiaries on whom the inquiry will concentrate, selected from the universe of beneficiary records or files which the receiving agency has available.</td>
<td></td>
</tr>
<tr>
<td><strong>26</strong></td>
<td>Donation intention</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Corresponds to the purpose stipulated by the donor for the donated resources.</td>
<td></td>
</tr>
<tr>
<td><strong>27</strong></td>
<td>Purchasing procedures</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Procedures used by the receiving agency for making purchases.</td>
<td></td>
</tr>
<tr>
<td><strong>28</strong></td>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>This includes contributions of all kinds, which can be monetary or financial, physical or material, services, or others, given to provide aid in a situation of emergency or disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>29</strong></td>
<td>Delivered resources</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>Corresponds to the resources delivered by the receiving agency to the beneficiaries.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>30</strong></td>
<td>Received resources</td>
<td>Refers to the resources delivered by the donor to the receiving agency.</td>
</tr>
<tr>
<td><strong>31</strong></td>
<td>Beneficiary register</td>
<td>A system in which the universe of beneficiaries is entered and stored and which has the information necessary for appropriate identification of every individual.</td>
</tr>
<tr>
<td><strong>32</strong></td>
<td>Physical protection or custody of goods</td>
<td>Storage of physical resources in conditions appropriate to their nature, to comply with sanitary or health standards or their equivalent if applicable.</td>
</tr>
<tr>
<td><strong>33</strong></td>
<td>Selection of the sample</td>
<td>Procedure whereby a representative group of entries is extracted from the universe of beneficiaries, using statistical or other pertinent methods, to be the object of review.</td>
</tr>
<tr>
<td><strong>34</strong></td>
<td>Universe of beneficiaries</td>
<td>This corresponds to all the people affected by an emergency or disaster who qualify as eligible to receive resources to mitigate the situation that affects them.</td>
</tr>
<tr>
<td><strong>35</strong></td>
<td>Physical validation</td>
<td>This is the act of corroborating the actual delivery of the resources by checking the identity of the beneficiary and the goods that he/she has received.</td>
</tr>
</tbody>
</table>
## Appendix 5

### Examples of audits of disaster-related aid

The following table lists examples of disaster-related aid audits by SAIs of emergency recovery and relief, rehabilitation and reconstruction activities.

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Australia</td>
<td>Arrangements to Manage and Account for Aid Funds Provided Under the Australia-Indonesia Partnership for Reconstruction and Development</td>
</tr>
<tr>
<td>2004</td>
<td>Czech Republic</td>
<td>The state support implemented by the form of anti-flood programmes for the revitalization of the regions affected by the 2002 floods[^4]</td>
</tr>
<tr>
<td>2007</td>
<td>Indonesia</td>
<td>Nias and Nias Selatan District (Kabupaten) Road at Rehabilitation and Reconstruction Agency (BRR) in Nias Islands[^6]</td>
</tr>
<tr>
<td>2007</td>
<td>Japan</td>
<td>Execution status of Official Development Assistance (ODA)^[^7]</td>
</tr>
<tr>
<td>2006</td>
<td>Korea</td>
<td>Establishment and Operation of National Disaster Management Support System (NDMSS)^[^8]</td>
</tr>
<tr>
<td>2009</td>
<td>Kyrgyz</td>
<td>Audit of handling of public funds and special means and analysis of functional activity of the Ministry of Emergency Situation of the Kyrgyz Republic and its structural subdivisions.</td>
</tr>
<tr>
<td>2000</td>
<td>Lesotho</td>
<td>The Distribution of Food Relief Aid</td>
</tr>
<tr>
<td>2006</td>
<td>Norway</td>
<td>Audit of the Norwegian support from Ministry of foreign affairs in accordance with the tsunami disaster</td>
</tr>
<tr>
<td>2009</td>
<td>Poland</td>
<td>Assistance to Victims of Tornado of the 15th August 2008 and the</td>
</tr>
</tbody>
</table>


[^5]: [http://www.eca.europa.eu/audit_reports/special_reports/docs/2006/rs03_06en.pdf](http://www.eca.europa.eu/audit_reports/special_reports/docs/2006/rs03_06en.pdf)

[^6]: Contact asosai@bpk.go.id for more details


<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>USA</td>
<td>Liquidation of Its Consequences in Opole and Silesia Regions</td>
</tr>
<tr>
<td>2009</td>
<td>Indonesia</td>
<td>Assess disaster preparedness and disaster management by government and disaster management agencies following the West Java earthquake.</td>
</tr>
<tr>
<td>2009/10</td>
<td>Hungary</td>
<td>Evaluate the regulatory and institutional system for managing disasters</td>
</tr>
<tr>
<td>2011</td>
<td>France</td>
<td>Funds of the tsunami victims’ associations</td>
</tr>
<tr>
<td>2012</td>
<td>France</td>
<td>Lessons of the 2010 floods on the Atlantic Coast (Xynthia) and in the Var</td>
</tr>
<tr>
<td>2013</td>
<td>France</td>
<td>French aid to Haiti following the 12 January 2010 earthquake</td>
</tr>
<tr>
<td>2012</td>
<td>The Netherlands</td>
<td>Accounting for Haiti aid funds 2011</td>
</tr>
<tr>
<td>2008-2011</td>
<td>China</td>
<td>Financial audit of recovery and reconstruction following the Wenchuan earthquake in China - real time audit</td>
</tr>
<tr>
<td>2012</td>
<td>Japan</td>
<td>Performance audit of Provision of emergency temporary houses following the Great East Japan Earthquake</td>
</tr>
<tr>
<td>2012</td>
<td>Japan</td>
<td>Disposal of disaster waste generated by the Great East Japan Earthquake</td>
</tr>
<tr>
<td>2006</td>
<td>India</td>
<td>Performance audit of relief and rehabilitation after the 2004 tsunami</td>
</tr>
<tr>
<td>2011</td>
<td>Indonesia</td>
<td>Audit report on disaster-related aid management and accountability in the rehabilitation and reconstruction phase</td>
</tr>
</tbody>
</table>

10 Contact asosai@bpk.go.id for more details
19 For more information contact asosai@bpk.go.id
<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>New Zealand</td>
<td>Roles, responsibilities, and funding of public entities after the Canterbury earthquakes[^20]</td>
</tr>
<tr>
<td>2008</td>
<td>European Commission</td>
<td>European Commission rehabilitation aid following the tsunami and hurricane Mitch[^21]</td>
</tr>
<tr>
<td>2005</td>
<td>Sri Lanka</td>
<td>Interim report on the Rehabilitation of the losses and Damages caused to Sri Lanka by the Tsunami Disaster[^22]</td>
</tr>
</tbody>
</table>

[^22]: [http://eca.europa.eu/portal/pls/portal/docs/1/1881964.PDF](http://eca.europa.eu/portal/pls/portal/docs/1/1881964.PDF)
Appendix 6

Financial audit of the emergency response following the earthquake in Pisco, Peru

1. On August 15th, 2007, there was an earthquake in southern Peru affecting seven provinces, causing 596 deaths, injuring 1,289 people, leaving 431,313 homeless and destroying 91,240 homes.

2. The Comptroller General of the Republic appointed an ad hoc committee (the Crisis Committee) to direct and monitor a team of auditors sent to the disaster-affected zone. The assignment of the team was to:
   - audit disaster related aid;
   - identify risks which might adversely affect the entities involved in managing disaster;
   - provide timely warning to the entities involved in managing disaster.

The team was instructed to not hamper emergency activities. One of the purposes of the presence of the team at the site of the disaster was to act as a deterrent to the possible occurrence of fraud and corruption.

3. The team was instructed to observe:
   - the collection and storage of goods;
   - the distribution of goods to the victims; and
   - the verification of the damage to physical infrastructure.

4. To do this the team carried out the following:
   - identified the agencies responsible for managing the disaster and their roles and responsibilities;
   - observed the collection and storage of receipt of goods which had been donated;
   - checked the source of donations, funds transfers, and storage and distribution mechanisms;
   - noted risks associated with activities carried out, and the way in which information was prepared;
   - made a site visit to the stores to document possible risks to security, control and the preservation of the donated goods received; and
   - examined the distribution of goods from warehouses to the victims to document possible risks related to the transportation of aid to its destination.

5. The team also followed up complaints and denunciations from the affected population.

6. The findings were presented in a Consolidated Report and submitted to the Crisis Committee. The Crisis Committee then submitted the Consolidated Report to the President, the National Institute of Civil Defence, the Ministry of Education and Regional Local Government to implement the recommendations.

23 www.contraloria.gob.pe/cgr/publicaciones/informes_cgr
7. The summary of the Consolidated Report is presented below.

Part I, Introduction covered the objective, scope and history of the disaster, the legal and governmental framework, information on cash and in-kind donations, including bank account details where transfers of donations were made from overseas.

Part II, Findings. This part covered the findings of the audit.

a. Not all of the public bodies forming the Civil Defence system in the country took immediate action to include other governmental authorities acting independently and without coordination.

b. The Committee of Civil Defence did not provide basic information on damage assessment and analyses of needs, as a result of which, aid was not delivered as quickly as it should have been.

c. The administration of the Province of Ica did not have enough human resources to monitor, coordinate and advise the executive bodies, which caused confusion in distributing goods.

d. There was a delay of up to three days in transporting 3,000 tons of donations from the port in the city of Pisco due to the lack logistical support.

e. Food was damaged because it was badly stored and exposed to the weather.

f. There was no government representative monitoring the distribution of aid to the victims.

Part III, Conclusions. This contained a professional opinion based on the objectives and results of the audit. The audit concluded that the regulatory framework was not adapted to the requirements of the disaster. This was because the roles of the principal agencies and what to do to take care of the victims were not clearly defined.

Part IV, Recommendation. This part recommended the implementation of specific measures to help manage the disaster. The recommendations to the Presidency of the Council of Ministers were:

a. to promote a revision of the existing legal framework related to the National Civil Defence System;

b. to strengthen and facilitate the participation of the entities making up this system (particularly the National Institute for Civil Defence); and

c. to establish clearly roles and responsibilities for the different aspects of emergencies resulting from natural disasters or catastrophes.
Appendix 7

Financial audit of recovery and reconstruction following the Wenchuan earthquake in China

Prepared by the SAI of China

1. On 12 May 2008, a 7.9 magnitude earthquake hit Wenchuan in Sichuan Province, a mountainous region in Western China. The disaster affected more than 45 million people and caused more than USD 127 billion in economic damage. Over 90,000 people were left dead or missing and some 370,000 people were injured. The Chinese Government decided to raise USD 159 billion for post-earthquake rehabilitation and reconstruction projects.

2. The SAI of China, the National Audit Office of the People’s Republic of China (CNAO) carried out a real-time audit of the Wenchuan Post-Earthquake Recovery and Reconstruction Projects (PERR). The work began in July 2008, two months after the disaster and continued until September 2011 when most of the reconstruction work had been completed and involved more than 11,648 auditors.

3. A lead team was set up at the CNAO with responsibility for planning, reporting, coordination, guidance and special investigations of major issues and cases. The audit work was divided between CNAO offices in the disaster-stricken areas and provincial audit institutions and offices.

4. The CNAO’s objectives for the real-time audit were to:
   - promote the successful execution of the PERR and to make sure there were no significant faults in the post-earthquake reconstruction,
   - discover and report on institutional barriers and weak links in funds or project management,
   - identify violations and urge timely corrections and
   - help improve policies and institutions by making constructive recommendations for improvements in systems when problems are detected.

5. The audit did not only examine the implementation of the budget and the final accounting results, it also covered:
   - implementation of the PERR and its effects;
   - how funds and materials for the PERR were collected, distributed, managed and used;
   - implementation of PERR policies and measures (e.g. on tax incentives, targeted aid, employment assistance, resettlement);
   - construction management, especially project quality management;
   - land expropriation, environmental protection and prevention of geological disaster.

---

24 The National Audit Office of the People’s Republic of China (CNAO) see http://www.cnao.gov.cn/main/.articleshow_ArtID_1253.htm
6. According to the CNAO, the real-time audit facilitated the implementation of the Wenchuan post-earthquake recovery and reconstruction projects and provided assurance for major problems prevention. Some of the audit’s concrete outputs and achievements included:

- 4,377 audit reports issued and 4,159 pieces of audit information submitted;
- 19,640 audit opinions and recommendations provided resulting in 2,700 rules and regulations created or improved;
- 4,000 projects’ construction management improved;
- USD 2 billion saved through greater efficiency and acceleration of project implementation;
- dozens of cases referred to disciplinary inspection authorities.

7. The experience gained from carrying out this real-time audit of PERR allowed the CNAO to identify some key points to be considered in future cases:

- the need to select priorities and to be sure of the cost-benefit ratio before embarking on the audit, given the large resources requirement of a real-time audit;
- the importance of the correct timing of the audit – in this case as soon as possible after the earthquake;
- the need for strong management and organisation, because of the greater complexity of a real-time audit due to a wider scope of work and involvement of many auditors and auditees.
Appendix 8

Performance audits of recovery and reconstruction after the Great East Japan Earthquake

Prepared by the SAI of Japan

1. Background

Following the Great East Japan Earthquake in March 2011, the Board of Audit of Japan carried out audits of recovery and reconstruction expenditure and reported the results in the annual Audit Report relating to the 2011 financial year. The following performance audits were carried out on-site and looked at the provision of temporary emergency housing to earthquake victims and the removal of disaster-generated waste.

2. Provision of emergency temporary houses following the Great East Japan Earthquake

The Japanese government paid subsidies amounting to USD 4.76 billion up to the end of March 2012 to seven disaster-affected prefectures for the provision of 116,170 emergency temporary houses for the victims of the earthquake and for other related purposes.

The objective of the audit was to ascertain whether or not emergency temporary houses are properly provided and there are any matters to be improved.

The auditors found that 52,858 of the houses had been constructed by the local authorities at a cost of USD 69,778 per dwelling. Another 57,697 houses were rented from the private sector for a two-year cost of USD 20,333 per dwelling. It was revealed that the rented houses were available more quickly than those constructed and more economically in terms of cost.

In the case of the rented houses, the local authorities first rent the houses from the owners and then provide them to the victims. This principle of Japanese government is called “benefit in-kind”, which relates to the provision of non-cash goods or services to people at the point of delivery. However, this measure proved to have caused delay in the provision of rented houses. As such, the Board concluded that, in the case of major disasters such as the Great East Japan Earthquake, in order to respond quickly and precisely to the needs of victims, the government should take measures flexibly according to circumstances. The Board recommended that to improve this situation, it is necessary to consider for future cases the possibility of partly deviating from the benefit in-kind principle by letting victims contract with house owners themselves. The local authorities would then pay the rent to the house-owners. Despite the position of the government not to deviate from the benefit in-kind principle, the Board reported and published the above situation in its audit report in the interest of providing information to the public.

3. Disposal of disaster waste generated by the Great East Japan Earthquake

In the aftermath of the Great East Japan Earthquake, an estimated total of 31.21 million tons of disaster-generated waste and tsunami deposit had to be disposed of in local municipalities in 13 prefectures. USD 8.5 billion was budgeted for FY 2011 by the Japanese government to subsidise this disposal which was to be completed by March 2014.

The objective of the audit was to report the situation in which the different prefectures were progressing with disposal.

According to the result of field audits conducted by the Board, in the three disaster-affected prefectures (Iwate, Miyagi and Fukushima) where the 95.3% of the total waste existed, the percentage of disposed waste compared to the total was 17.7% on average. However, this does not necessarily mean there was delay in the progress of the project, but this is because the major part of the work done in the financial year 2011 was dedicated to the preliminary works such as transporting waste from the disaster-affected areas to temporary-placing sites. In view of the necessity of providing information to the public toward the completion of disposal by the target date at the end of March 2014, the Board reported and published its audit results on the current progress in its audit report, mentioning its concern regarding the uncertainty recognised during audits about securing final disposal sites and using the waste as building materials for reconstruction, etc.

Appendix 9

Performance audit of the European Commission response to the South East Asian tsunami.27

Prepared by the SAI of the European Union

1. On 26 December 2004 an earthquake off the west coast of Northern Sumatra triggered a massive tsunami causing widespread destruction in many countries of the Indian Ocean, killing over 200 000 people.

2. The European Commission has a specific Directorate General, DG ECHO,28 which has the task of responding to humanitarian crises. DG ECHO does not implement relief activities directly, but through partners which consist of NGOs and international organisations, including United Nations and the Red Cross. Following the tsunami, DG ECHO granted funding of 123 million euro of humanitarian aid.

Audit Observations

3. The Court carried out a performance audit of the Commission's humanitarian aid response to the tsunami. This included the emergency response and some short-term rehabilitation work consistent with DG ECHO's mandate, but did not include longer term reconstruction. The main questions addressed were:
   (a) was the Commission's response to the tsunami sufficiently rapid and appropriate?
   (b) were DG ECHO's actions effectively coordinated with those of other Commission services, international organisations and other countries?
   (c) were DG ECHO's monitoring and control procedures designed to ensure that projects implemented by partners were relevant, timely and efficiently implemented?
   (d) did projects implemented by DG ECHO's partners achieve their expected results and were short-term rehabilitation actions adequately sustainable?

Audit findings

4. Commission procedures enabled a rapid response to the tsunami, granting 3 million euro the same day as the disaster, followed by a further 20 million euro within five days. An additional amount of 80 million euro was granted in February 2005, followed by 20 million euro in December 2005, making a total of 123 million euro. The high level of funding proved appropriate particularly due to the longer than expected transition from the relief phase to the reconstruction phase.

5. DG ECHO had already been working in Sri Lanka prior to the tsunami on projects with the conflict affected population. Following the tsunami, DG ECHO chose to work with existing partners in Sri Lanka who knew the situation well. In this way it found relevant projects to fund despite the huge influx of

27 Published in the Official Journal of the European Union C 170 of 21 June 2006

28 European Community’s Humanitarian Office See http://ec.europa.eu/echo/about/presentation_en.htm
funding and NGOs which arrived immediately following the disaster. In Aceh DG ECHO did not have a presence in the field before the tsunami. Due to problems of access and lack of reliable information some early project proposals were based on a standard response to emergency situations. From February 2005 onwards, project proposals were based on more reliable needs assessments.

6. DG ECHO supported the coordination role of the United Nations and provided funding to address the lack of reliable and accurate information on needs. The arrival of a large number of humanitarian organisations, often with large amounts of private funding, added to the difficulties of coordination resulting in variations in the level and quality of aid provided. There was good coordination with other Commission services, which helped to ensure a smooth link between short-term relief efforts and longer term reconstruction. In both Indonesia and Sri Lanka, however, coordination remained problematic.

7. To monitor and check projects, DG ECHO used field experts and desk officers to carry out on-the-spot checks, reports by its partners, checks prior to final payment and later external audits. Procedures generally enabled projects to be modified to meet evolving needs. However, there was scope to develop comparative cost information, to provide more details on organisational arrangements and to quantify the achievement of project outputs.

8. In some cases project output was lower than planned due to inflation and to difficulties in obtaining goods and recruiting qualified staff. The projects managed by DG ECHO partners contributed to covering the basic needs of the population in terms of shelter, food, water and sanitation, health, psychosocial support, child and family care and telecommunications. The Commission also financed projects to support disaster preparedness.

9. In terms of reaching beneficiaries, the success of Commission projects was sometimes less than initially planned, mainly due to inaccurate needs assessments. For example, the water and sanitation component of a UN agency project in Aceh reached 100 000 people, representing only 5% of the 2 million beneficiaries originally planned.

**Recommendations**

10. Based on its observations and conclusions, the Court made the following recommendations:

   (a) the Commission should consider the role it could play in helping affected governments to manage donor coordination more effectively;
   
   (b) the roles of DG ECHO and DG Environment (Civil Protection Mechanism) should be clarified to ensure a coherent approach;
   
   (c) a longer timeframe for emergency operations should be considered in order to provide sufficient time for implementation;
   
   (d) DG ECHO should strengthen its monitoring system in order to include written feedback to partners following monitoring visits, the development of comparative cost information, an explanation of the implementing arrangements and information on what has been done where;
   
   (e) the difficulties of access to documentation of projects implemented by UN agencies should be taken into account in the context of the Financial and Administrative Framework Agreement.
Appendix 10

Performance audit of relief and rehabilitation after the 2004 tsunami
Prepared by the SAI of India

The objectives of the performance audit were to verify whether:

- the lessons learnt from earlier disasters had been used for the formulation of effective policies for disaster management;
- the institutional mechanisms set up by the Union and the State governments for disaster management including pre-disaster risk assessment, mitigation, prevention and preparedness, monitoring of feedback on implementation of orders/instructions issued by the Ministry from time to time were adequate and functioning effectively;
- the special assistance through National Calamity Contingency Fund (NCCF), Calamity Relief Fund (CRF), Prime Minister’s National Relief Fund (PMNRF) and external assistance were adequate and reached the affected families promptly;
- the system of identification of beneficiaries, needs assessment, flows of immediate assistance to the beneficiaries and planning of rehabilitation activities was robust and effective, and
- the post disaster activities relating to immediate assistance, which provided arrangements for procurement and delivery of relief and rehabilitation, restoration of infrastructural services and economic and social recovery of productive sectors such as fishing, tourism and so on were planned and executed efficiently and economically.

The audit involved examination of records at the Ministry of Home Affairs (MHA), Ministry of Finance (MoF), Planning Commission, Ministry of Environment and Forests (MoEF), Indian Meteorological Department (IMD) and Department of Ocean Development (DOD) at the Union level. At the state and district levels, records were checked in the corresponding disaster management authorities and different units of the departments of Animal Husbandry, Agriculture, Education, Fisheries and Public Works. Reconstruction was not been covered in this audit.

The criteria used for assessing the efforts of relief and rehabilitation were:

- the extent of compliance with the system of assessment of the requirements of funds and their phasing,
- the promptness of the release of funds by MHA/State Governments in view of the magnitude of the disaster,

---

29 Report No. 20 of 2006
• the performance of disaster response and post disaster activities,
• the system devised for the identification of beneficiaries,
• the status of monitoring the outcome and impact of the assistance provided at the Union and State levels,
• the status of training of the people associated with the relief work,
• the completeness and accuracy of accounting for relief material and stores, and
• the quality of stores management, machinery and equipment procured and the extent of their utilisation.

The audit revealed there to be:

• inadequate institutional mechanisms for disaster management and the monitoring of the implementation of orders and instructions,
• no clear criteria for general application adopted to enable the States affected by disaster to create a realistic assessment of expected financial assistance,
• financial irregularities due to non-utilisation, irregular disbursement, etc.,
• improper identification of beneficiaries, which resulted in irregularities in three states,
• ineffective construction of temporary shelters since they were not occupied by the victims,
• ineffective construction of permanent housing, since the houses were not completed nor handed over, and
• delays in construction and administrative irregularities in the restoration of basic infrastructure.

Based on these findings, the SAI of India concluded that the institutional mechanism for disaster management was inadequate and resulted in a lack of coordination of measures for preparedness and vulnerability reduction.

The SAI of India recommended that the National Disaster Management Authority (NDMA) should review policies regarding relief and reconstruction activities and follow up measures to remedy the weaknesses reported.
Appendix 11
Performance audit of disaster-related aid following hurricane Katrina
Prepared by the SAI of the United States of America

1. Background

Hurricane Katrina struck in August 2005, devastating the Gulf coast of the United States (US), causing billions of dollars in damage, and dislocating thousands of residents. Government at all levels—local, state, and federal—struggled to respond to the magnitude of the event. As the storm’s devastation and destruction were viewed around the world, many foreign countries offered both cash and in-kind donations including foreign military donations to the United States. For the first time in its history the US government welcomed international offers of assistance to this degree. The National Response Plan established that the Department of State (DOS) is the coordinator of all offers of international assistance. The Federal Emergency Management Agency (FEMA) within the Department of Homeland Security (DHS) was responsible for accepting the assistance and coordinating its distribution.

2. Audit objectives

This audit was intended to determine:

- the amount of cash that was donated by foreign countries and the extent to which it had been used to assist in the relief efforts;

- the extent to which those federal agencies with responsibilities regarding the international assistance offered to the United States had policies and procedures in place to ensure the appropriate accountability for the acceptance and distribution of in-kind donations, including foreign military donations.

3. Methodology

To answer the objectives, GAO reviewed US legislation and other guidance, including the National Response Plan, and met with key officials from the Departments of State, Homeland Security, Defense, Treasury, and Agriculture, as well as the US Agency for International Development and the Food and Drug Administration. In addition, GAO collected and reviewed relevant data, including lists of items offered and received, and letters of acceptance from the agencies.
4. **Findings**

The audit revealed that:

- in the absence of policies, procedures, and plans, the Department of State developed an ad hoc process to manage $126 million in foreign cash donations to the U.S. government for Hurricane Katrina relief efforts;

- the Federal Emergency Management Agency (FEMA) and other agencies did not have policies and procedures in place to ensure the proper acceptance and distribution of in-kind assistance donated by foreign countries and militaries;

- although FEMA and other agencies did establish ad hoc policies and procedures, there was insufficient coordination of efforts.

5. **Recommendations**

Based on the above findings, GAO made recommendations designed to improve the policies, procedures, planning, and oversight of international cash and in-kind donations to the US government in response to disasters.

For the complete audit report, visit: [http://www.gao.gov/new.items/d06460.pdf](http://www.gao.gov/new.items/d06460.pdf)
Appendix 12

Compliance audits of emergency, rehabilitation and reconstruction disaster-related aid

Prepared by the SAI of Indonesia

1. AUDIT REPORT ON DISASTER-RELATED AID MANAGEMENT AND ACCOUNTABILITY IN THE REHABILITATION AND RECONSTRUCTION PHASE

Pursuant to Law Number 15 of 2004 and Law Number 15 of 2006, the Audit Board of the Republic of Indonesia (BPK RI) has conducted a compliance audit on disaster-related aid management and accountability. This audit is intended to assess:

- whether or not the disaster-related aid management and accountability have complied the established law
- whether or not the disaster-related aid has reached its intended parties and met its purposes in timely manner to help disaster victims

The audit scope covers planning, management and distribution, monitoring and evaluation, and reporting and accountability of disaster-related aid in rehabilitation and reconstruction phase carried out by National Disaster Management Agency and some local governments receiving aid from National DMA including Provincial Government of J, SB, JB, JT, and KB in budget year 2009.

The compliance audit was carried out based on 2007 State Finance Audit Standards (SPKN) and 2008 Audit Management Manual (PMP) as guidelines.

The audit result by sampling in the five regions revealed that:

1) Disaster-related aid management in budget year 2009 has not been sufficient and the aid distributed to the local governments has not met its intended purpose and has not been used to reflect disaster management priorities.

2) Disaster-related aid management has not fully complied national budget mechanism.

3) Disaster-related aid, in the form of direct assistance for the community, in Provincial Government of JB is not distributed orderly.

4) Local governments receiving rehabilitation and reconstruction aid have not submitted accountability report of the use of the aid/fund in timely manner.

Based on those points, BPK RI concluded that disaster-related aid management and accountability in rehabilitation and reconstruction phase budget year 2009 covering planning, management and distribution, monitoring and evaluation, and reporting and accountability, have not fully complied stipulated law and regulation.

Due to the above conclusion, BPK RI recommends National Disaster Management Agency to review policies regarding rehabilitation and reconstruction activities and follow up measures on the weaknesses stated in the audit report.
2. AUDIT REPORT ON DISASTER-RELATED AID MANAGEMENT AND ACCOUNTABILITY IN EMERGENCY RESPONSE PHASE

Pursuant to Law Number 15 of 2004 and Law Number 15 of 2006, the Audit Board of the Republic of Indonesia (BPK RI) has conducted audit on the management of the emergency response phase after earthquakes in Provincial Government of SB. This audit is intended to assess:

- whether or not disaster management and funding process during emergency response phase have complied stipulated regulation
- whether or not disaster management by Central Government and related parties was appropriate in the aftermath of earthquake
- whether or not the organization, task, function, coordination, receipt, and distribution of aid has been sufficient
- whether or not aid recording and reporting during emergency response have been sufficient and reflect updated condition

The audit scope covers Central Government’s roles and efforts in managing disaster in the aftermath of earthquake in Provincial Government of SB, the management of aid/fund received, private sectors and NGOs/INGOs roles during emergency response phase and early recovery.

The compliance audit was carried out based on 2007 State Finance Audit Standards (SPKN) and 2008 Audit Management Manual (PMP) as guidelines.

The audit result by sampling in the Provincial Government of SB, City Government of Pad and Par, District Government of PP and A revealed that:

1) The existence of supporting regulation in disaster management has not been sufficient.
2) National Disaster Management Agency has not built sufficient coordination with related parties during emergency response phase.
3) Aid/fund collection, receipt, and distribution conducted by private collector units are not under control.
4) Provincial Government of SB, District Government of A and PP, and City Government of Par have not established local disaster management agency as ordered by law.
5) Need assessment process and aid/fund distribution are not conducted in timely manner and inaccurate.
6) Emergency infrastructure building for stalls in the City Government of Pad has not complied stipulated law.

Based on those points, BPK RI concluded that disaster-related aid management and accountability in emergency response phase in the aftermath of earthquake affected some regions in the Provincial Government of SB have not complied stipulated law and regulation.

Due to the above conclusion, BPK RI recommends National Disaster Management Agency to review policies regarding emergency response activities and build coordination with local governments to follow up measures on the weaknesses stated in the audit report.
Appendix 13

Acronyms and abbreviations

ADB – Asian Development Bank
CRED - Centre for Research and the Epidemiology of Disasters
EM-DAT - International Emergency Disasters Database
ICRC – International Committee of the Red Cross
IFRC – International Federation of Red Cross and Red Crescent Societies
IOM – International Organization for Migration
INGO – International Non-Governmental Organisation
NGO – Non Governmental Organization
OECD – Organisation for Economic Cooperation and Development
SAI – Supreme Audit Institution
UN – United Nations
UN DAC - United Nations Disaster Assessment and Coordination
UN ISDR – United Nations International Strategy for Disaster Reduction
UN OCHA – United Nations Office for the Coordination of Humanitarian Affairs
US FEMA - United States Federal Emergency Management Agency
WHO – World Health Organisation
WMO – World Meteorological Organisation
Appendix 14

Glossary
(This glossary does not repeat terms defined in the ISSAI 1003, Glossary of terms to the INTOSAI Financial Audit Guidelines).

Aid: Voluntary transfer of resources from one country to another.

Anti-fraud and corruption strategy: Outlines the commitment to minimising the risk of loss to the organisation resulting from fraud and corruption.

Audit procedures: Techniques used by the auditor in gathering audit evidence to substantiate the conclusions of the audit. Examples of audit procedures in financial audit are observing assets to verify existence and amount, collecting independent confirmations from external parties and evaluating internal control. Audit procedures are indicated in the audit programme.

Audit process: An audit process is a review of an entity’s operating mechanisms in line with the applicable laws, regulations and standards. It follows a sequential order of steps by the auditor in the examination of the records. The audit process may vary depending upon the nature of the engagement, its objectives, and type of audit assurance desired. The process includes understanding the environment, conducting auditing procedures and tests, appraising the audit results, and communicating the results to interested parties.

Bilateral aid: Aid provided directly by a donor to an aid recipient country.

Building code: A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.

Collusion: A secret agreement between two or more individuals for a deceitful or fraudulent purpose. This is one of the most difficult types of fraud to expose.

Contingency planning: A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Co-ordinated audit: A co-ordinated audit is either a joint audit with separate audit reports to the SAI’s own hierarchy or legislature or a parallel audit with a single audit report in addition to the separate national reports.

Corruption: The abuse of entrusted power for private gain. Corruption usually comprises illegal activities, which mainly come to light only through audits, investigations, scandals or prosecutions.

Deterrent: Fraud and corruption deterrence is the proactive identification and removal of the causal and enabling factors of fraud and corruption. Visible activity by auditors can act as a deterrent to potential perpetrators of fraud and corruption.

Development aid: Official financing administered with the promotion of the economic development and welfare of developing countries as the main objective.

Disaster: A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.
**Disaster-related aid:** Aid provided to help people, who are victims of a natural disaster or conflict, meet their basic needs and rights. The aid can be to fund disaster-preparedness measures or activities arising as a consequence of disasters.

**Disaster management:** The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies, and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards, and to bring back life (rehabilitation and reconstruction)

**Disaster management cycle:** Shows the sequence of events related to the organisation and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies in order to lessen the impact of disasters. It comprises a pre-disaster phase and a post-disaster phase, including activities of mitigation, preparedness, emergency response/relief, rehabilitation, and reconstruction.

**Disaster risk:** The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

**Disaster risk management:** The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

**Disaster risk reduction:** The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

**Donor:** Party which donates money, goods, or services voluntarily.

**Early warning system:** The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

**Emergency:** A serious situation or occurrence that happens unexpectedly and demands immediate action.

**Emergency phase:** The phase immediately following the occurrence of a disaster. It covers emergency response and relief activities and the first rehabilitation activities. It can last from a few days to several months, depending on the nature of the disaster and on the circumstances and type of the disaster.

**Emergency relief:** Financial assistance, goods or services made available to individuals and communities that have experienced losses due to disasters.

**Emergency response:** The efforts made to mitigate the impact of a disaster on the population and the environment.

**Ex-post control:** The audit carried out by SAIs or other statutory external auditors of the accounting records, the underlying transactions and/or issues of economy, efficiency and effectiveness of the use of aid.

**Fraud investigation:** Process followed to determine whether fraud has taken place and to gather evidence if fraud has occurred.

**Geographical Information Systems (GIS):** A computerised system that facilitates data entry, storage, analysis and presentation especially for spatial (geo-referenced) data.
Global Positioning System: Global Navigation Satellite System (GNSS) developed by the United States Department of Defence

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property loss, loss of livelihoods and services, social and economic disruption or environmental damage.

Humanitarian aid: Humanitarian aid’ is aid and action designed to save lives, alleviate suffering and maintain and protect human dignity during and in the aftermath of emergencies. The characteristics that mark it out from other forms of foreign assistance and development aid are that it is intended to be governed by the principles of humanity, neutrality, impartiality and independence and it is intended to be short-term in nature.

Individual disaster response: The primary actions taken immediately by those on the ground following the disaster to secure the safety of individuals, including rescue, the administration of first aid and the provision of emergency supplies.

Joint audit: A coordinated audit in which key decisions are shared. The audit is conducted by one audit team composed of auditors from two or more autonomous auditing bodies who usually prepare a single joint audit report for presentation to the respective hierarchies or legislatures.

Man-made disaster: A disaster that is caused by man-made hazards, such as negligence, or failures in the system.

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters.

Multilateral aid: Aid channelled via an international organisation active in development (e.g. World Bank, UNDP) to an aid recipient country.

National Integrity System: The sum of all our institutions, laws, and efforts in stopping corruption.

Natural disaster: A disaster that is caused by natural hazards, for example earthquakes, tsunamis, volcanic eruptions, flooding, crop failure, etc.

Parallel audit: A coordinated audit for which the decision is taken to carry out similar audits with shared methodology and audit approach. The audit is conducted more or less simultaneously by two or more autonomous auditing bodies, but with a separate audit team from each body, usually reporting only to its own hierarchy or legislature and only on matters within its own mandate.

Preparedness: The knowledge and capacities developed by governments, professional response and recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Prevention: The outright avoidance of adverse impacts of hazards and related disasters.

Public awareness: The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Reconstruction phase: The phase during which populations work towards full resumption of services plus preventive measures.
**Recovery**: The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

**Red flags**: Indicators or warning signs of fraud and corruption.

**Rehabilitation phase**: The restoration of basic services and functions which begins shortly after disaster strikes and continues until the reconstruction phase is underway.

**Resilience**: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

**Response**: The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

**Technological hazard**: A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

**Vulnerability**: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

**Sources**: This glossary was compiled from the following main sources:

- OECD-DAC Glossary of key term and concepts: [http://www.oecd.org/document/32/0,3746,en_2649_33721_42632800_1_1_1_1,00.html](http://www.oecd.org/document/32/0,3746,en_2649_33721_42632800_1_1_1_1,00.html)
Appendix 15
References and Bibliography

Aid risk in fragile and transitional context. OECD. 2010
Audit report No. 50 2005-06 in www.anao.gov.au
Audit Strategy on the Rehabilitation and Reconstruction of Aceh and Nias Year 2006-2010. The Audit Board of the Republic of Indonesia. 2006
Auditing Forest: Guidance for Supreme Audit Institutions. INTOSAI WGEA. 2010
fts.unocha.org/exception-docs/About FTS/Definition.pdf
http://www.housingreconstruction.org/housing/Part 4.1
http://www.intosaijournal.org/technicalarticles/technicaloct06b.html
http://ocha.unog.ch/drptoolkit/RiskAnalysis.html
The Management of West Java Earthquake by Indonesian NDMA. The Audit Board of the Republic of Indonesia
International Review of the Red Cross. No. 325 by Rohan J Hardcastle, Adrian T.L. Chua
INTOSAI GOV 9100 : Guidelines for Internal Control Standards for the Public Sector
INTOSAI GOV 9110. Guidance for Reporting on the Effectiveness of Internal Controls: SAI Experiences in Implementing and Evaluating Internal Controls
ISSAI 1800. Guideline on Financial Audit – Special Considerations – Audit in Financial Statements and Specific Objectives and Elements, Accounts or Specific Items of Financial Statements
ISSAI 3000. Standards and Guidelines for Performance Auditing Based on INTOSAI’s Auditing Standards and Practical Experiences
ISSAI 4000. General Introduction to Compliance Audit
Milsten, Andrew M. Managing Volunteers and Donation in Disaster Medicine, p. 238. 2006

The Yokohama Strategy and Plan of Action for a Safer World. 1994


www.gdrc.org/uem/disasters/1-dm_cycle.html

www.globalhumanitarianassistance.org/data-guides/concepts-definitions