

Disaster Management

1. Definitions & Standards

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ISO 17799 & ISO 27001

are Certification Standards on Security Management

Disaster recovery and business continuity management occupies the whole section number 11 of ISO17799.

The standard demands for a formal approach and for the creation of a quality plan.

Compliance with ISO17799 means **establishing a sound disaster recovery arrangement.**

Compliance assures that the **plan is sound and that the disaster recovery practices are adequate.**

Disaster Response in Germany

- regulations concerning relief actions

In the German system of disaster response law, two terms for the functional area of disaster relief are used:

„Katastrophenschutz“ and „Zivilschutz“.

Underlying are two different legal concepts, even if both elements of disaster response are combined and supplementary to each other.

Disaster preparedness (Katastrophenschutz)

- **Disaster preparedness in Germany encompasses all measures and preparations for the case of a disaster in order to keep the number of victims and the extent of damages as small as possible.**
- **This includes the planning of all measures to be taken in the case of a disaster.**
- **Furthermore disaster preparedness comprises the training of emergency auxiliaries, information and education of a potentially affected part of the population.**

Disaster preparedness (Katastrophenschutz)

It includes:

**the simulation of disaster scenarios,
the development of action plans,
the establishment of early-warning systems,
the planning of evacuation and
the accommodation of the persons affected,
logistics, channels of communication, and
the maintenance of stocks.**

Civil Protection (Zivilschutz)

- **In case of a disaster caused by an armed conflict, the disaster preparedness is regulated by the Civil Protection Act (Zivilschutzgesetz, ZSG).**
- **Civil protection includes self-protection, warning of the population, residence regulations, building of shelters, health protection measures, protection of cultural heritage and disaster preparedness in the case of defense.**

The National Fire Protection Association of USA (NFPA) 1600 'Disaster Management, Emergency Management, and Business Continuity', (not for Certification). It requires to:

■ **4.1 Document your Program**

which means to:

Define your enabling authority.

Define your executive policy.

Define your program's vision.

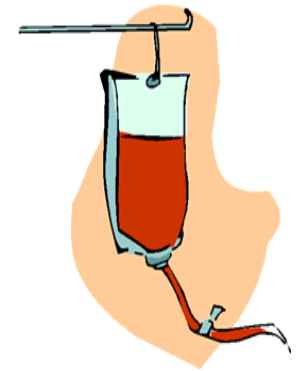
Define your program's mission.

Define your goals and objectives.

Define your plans and procedures.

Define your regulatory environment.

Define your financial constraints.



4.2 Appoint a Program Coordinator

4.3 Establish an Advisory Committee

- **4.4 Establish and Evaluate Program Objectives**
- **5.1 Develop a Program to Manage Disasters and Emergencies**
- **5.2 Respect the Laws and Authorities that Govern Disasters and Emergencies**
- **5.3 Perform Hazard Identification, Risk Assessment, and Impact Analysis**
- **5.4 Establish a Hazard Mitigation Strategy**
- **5.5 Develop a Resource Management Capability**

5.6 Establish Mutual Aid Agreements

5.7 Prepare Program Plans

- **5.8 Develop an Incident Coordination and Control Organization**
- **5.9 Establish a Communication Network**
- **5.10 Establish Operational Procedures**
- **5.11 Establish a Logistical Capability**
- **5.12 Provide Education and Training**
- **5.13 Improve your Program**
- **5.14 Establish Crisis Communication Links**
- **5.15 Develop Financial Procedures**

3.3.1 *Business Continuity Program*

- To identify the impact that potential losses can have on the continuation of service delivery
- To maintain effective service recovery plans, procedures, and strategies
- To ensure that service delivery is continued even though serious losses have occurred

- Provide suitable training
- Test recovery plans and procedures
- Provide ongoing maintenance

3.3.2 *Damage Assessment*

- **A *damage assessment* is an analytical process that is used to evaluate the effect a disaster has had on resources. To evaluate the harm done to human resources**
- **To evaluate the harm done to physical resources**
- **To evaluate the harm done to economic resources**
- **To evaluate the harm done to natural resources**

3.3.3

Disaster or Emergency Management Program

- **Any *program* that attempts to handle an event of disaster or emergency may be referred to as a *disaster management program* or an *emergency management program*.**
- **A program that complies with the NFPA 1600 Standard and sets up a management structure to achieve the compliance is referred to as a *compliant disaster management program* or *emergency management program*.**

3.3.4 *Entity*

- An *entity* is a group of people responsible for any one of the following functions:
- Disaster management
- Emergency management
- Business continuity management
- An entity includes:
- Government organizations
 - Government agencies
 - Government jurisdictions
- Corporate organizations
 - Private companies
 - Public companies
- Nonprofit organizations



3.3.5 *Impact Analysis*

An *impact analysis* is a methodology that examines what would happen if a company, organization, or an area meets a disaster and loses its resources.

An impact analysis:

- Identifies the effect of a resource loss
- Measures the effect of a resource loss
- Describes the effect of a resource loss

Such an analysis makes:

- hazard mitigation decisions
- disaster recovery decisions
- continuity planning decisions



3.3.6 *Incident Management System*



- An *incident management system* is a structure that has been set up to handle emergencies and hazardous events. An *incident management system* copes with incidents. Resources:
 - facilities
 - equipment
 - personnel
 - procedures
 - communications

3.3.7 *Mitigation*

Mitigation is a process to:

- prevent hazardous incidents
- eliminate hazardous incidents
- reduce their probability
- reduce their severity
- prevent the losses
- minimize the losses



3.3.8 *Mutual Aid Agreement*

- A *mutual aid agreement* is a mutual understanding between jurisdictions, organizations, and governments to help each other during a disaster or emergency.
- These are negotiated before disaster occur.



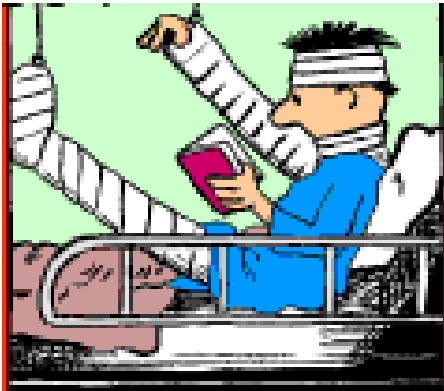
3.3.9 *Preparedness*

- ***Preparedness*** means being ready to handle disasters with systems, procedures, and activities adequate to:
- **Mitigate disasters and emergencies**
- **Respond to disasters and emergencies**
- **Recover from disasters and emergencies**



3.3.10 *Recovery*

- **Recovery** means to restore services, facilities, programs, and infrastructure after a disaster or emergency back to a level that is acceptable.



3.3.11 *Response*

- A *response* is an action that is taken to deal with a disaster or emergency. *Response* should address the disaster or emergency itself, as well as the problems that are caused by the disaster or emergency.



3.3.12 *Situation Analysis*

A situation analysis:

- Evaluates the severity of an incident or event
- Evaluates the severity of the problems that are caused by the incident or event



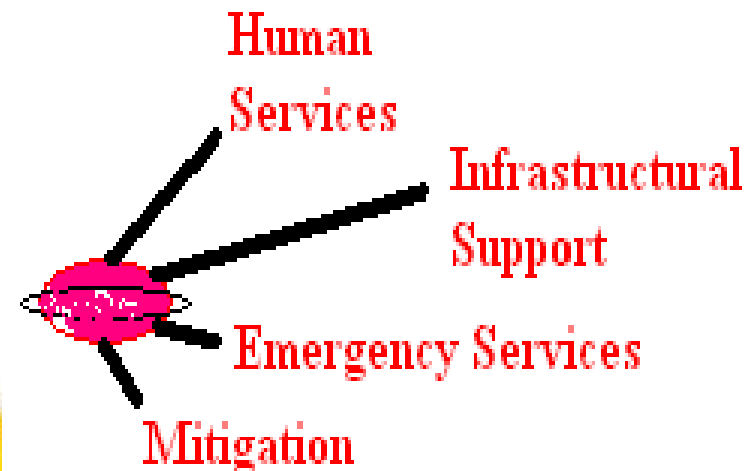
1. What are the functions of the four branches of the Operations Section?

1. Human Services Branch

- Provides for short- and long-term disaster housing.
- Coordinates non-medical mass care services.
- Initiates delivery of Individual Assistance programs.
- Assures provision of victim-related recovery efforts such as counseling.

2. Infrastructure Support Branch

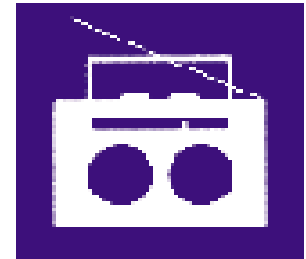
- Debris clearance and disposal.
- Initiates assistance programs.



1. What are the functions of the four branches of the Operations Section? Contd

3. Emergency Services Branch

- Detects and suppresses fires on Federal, State, Tribal, and local lands.
- Urban search and rescue.
- Hazardous materials response.



4. Mitigation Branch

- Supports efforts to eliminate or reduce degree of long-term risk to human life and property.

2.Name three types of disaster assistance managed by the Operations Section.

- **Individual Assistance,**
- **Public Assistance, and**
- **Hazard Mitigation.**



3. What is a mission assignment?

- **A work order issued by Federal Emergency Management Agency (FEMA) to a Federal agency for the completion of a task to meet an urgent, immediate need of the State.**

4. List the four requirements for Public Assistance eligibility.

- 1. Cost,**
- 2. Work,**
- 3. Applicant, and**
- 4. Facility.**

5. What is the difference between long term and short term programs?

- Long term program is a comprehensive mitigation plan to be implemented in years to come.
- Short term program includes immediate saving of life and repairs of damaged facilities and infrastructure.

6. Give examples of assistance programs offered through Individual Assistance.

Individuals and Households Program

- Replacement Assistance**
- Repair Assistance**
- Business Physical Loss Disaster Loans**
- Economic Injury Disaster Loans**
- Agricultural Assistance**
- Consumer Services**
- Disaster Unemployment Assistance**
- Disaster Legal Services**

The Incident Command System is divided into four main sections:

**Operations,
Planning,
Logistics, and
Finance/Administration.**



When the Authority declares a major disaster, a wide range of assistance becomes available to individual disaster victims. Individual Assistance (IA) programs meet a variety of individual needs, depending on the disaster.

The Operations Section consists of four branches:

- **Human Services Branch**
- **Infrastructure Support Branch**
- **Emergency Services Branch**
- **Community Recovery and Hazard Mitigation Branch**



Delivery Sequence

- **Emergency assistance provided by voluntary agencies**
 - **Insurance**
 - **Disaster Housing assistance**
 - **State loans**
 - **Other Needs Assistance (ONA)**
 - **Additional assistance**
 - **The special fund**



Emergency Assistance

- **Emergency needs include:
shelter,
food,
clothing, and
first aid.**

Local agencies such as the fire department, emergency medical services, Red Cross, and other voluntary agencies provide emergency assistance during immediate response.

Insurance

- Applicants pursue assistance through their private insurance carriers.
- If the insurance settlement: is delayed, insurance is insufficient, or claims are denied, then applicants may receive Government assistance

Repayment of Federal funds must be guaranteed if insurance covers the losses.



Individuals and Households Program— Disaster Housing

- **Temporary Housing** —Money to purchase a temporary housing unit.
- **Repair** —Money for homeowners to repair disaster damage. Government may provide up to a limited amount.
- **Replacement** —Money to replace a disaster-damaged home.
- **Permanent Housing Construction** —Direct assistance or money for the construction of a home.

Small Business Loans

- **Low-interest disaster loans need to be made available to homeowners, renters, business owners, and non-profit organizations.**
- **This program is administered and funded by the relief authority.**
- **A Federal Declaration is issued to provide the authority for such loans.**
- **Income tables are drawn as an initial screen for eligibility. The tables are based on income and household composition and are updated annually.**

Other Needs Assistance

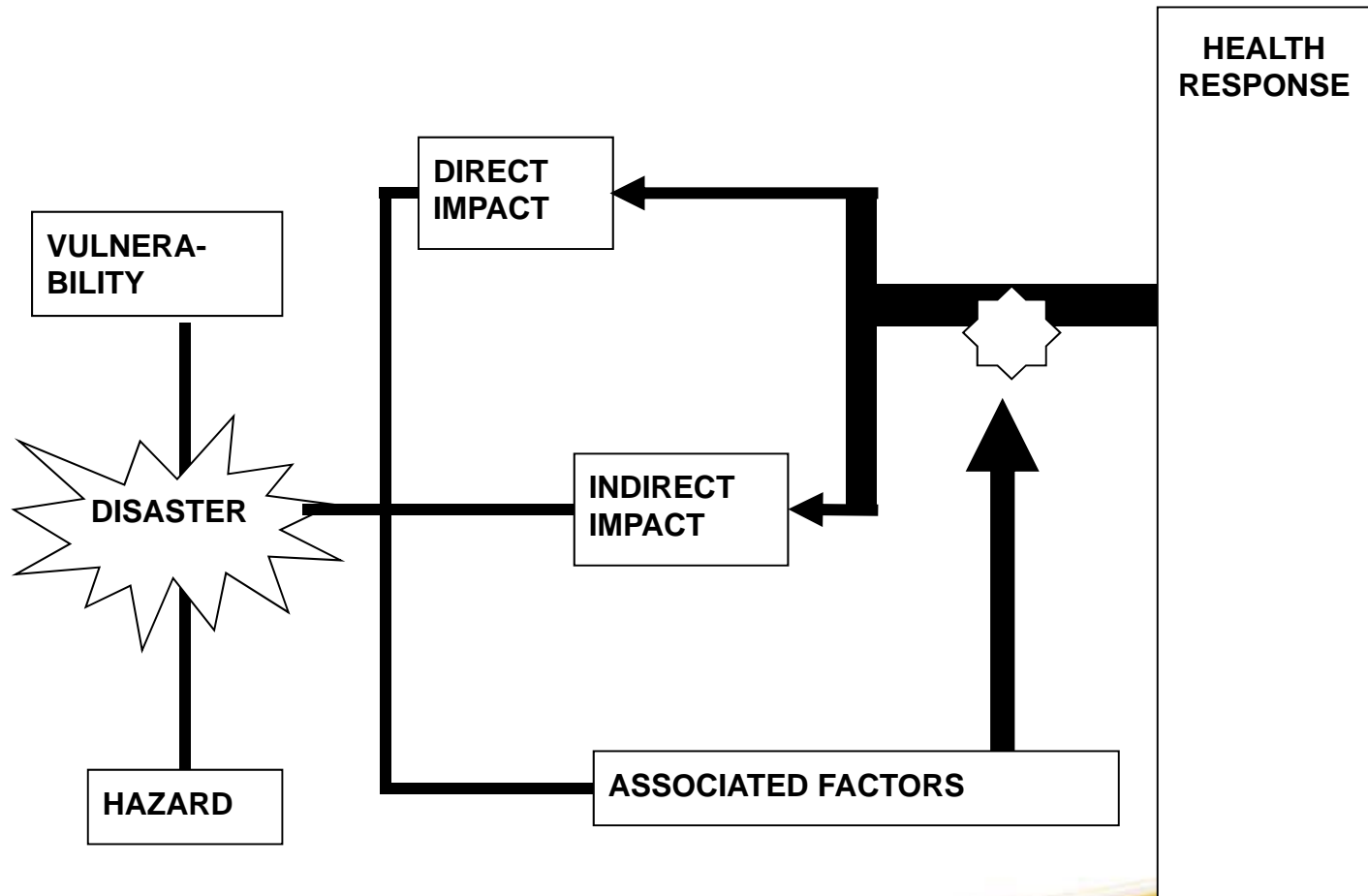
- **Personal Property** —Money to repair or replace personal property that is damaged or destroyed as a result of the disaster.
- **Transportation** —This money is intended to pay for the repair and/or replacement of an individual's primary means of transportation.
- **Medical and Dental Expenses** —This money is intended for medical and/or dental treatment costs.
- **Funeral and Burial Costs** —This money is intended for the payment of funeral services and burial.
- **Other Items** —This money is to cover fuel, moving and storage expenses, towing, utilities setup.

Helpline/Customer Service

- The Helpline is a toll-free number that individuals can call when they need additional help or have questions.
- The Helpline operator handles calls from applicants who need additional assistance or have questions about the assistance received.
- Helpline staff provide application status information, request re-inspection when appropriate, provide information about additional rental assistance, and make referrals to other programs or services.



General Flow Chart Disasters and Health



Earthquake and Disaster Response, Flow Chart

