

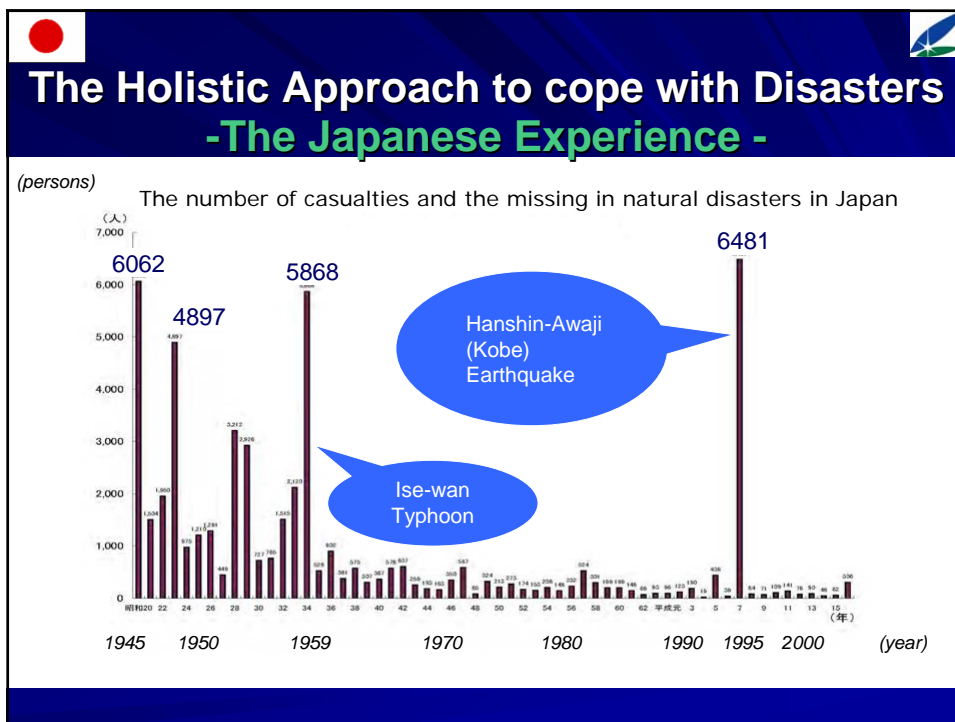



Promoting Public-Private Partnership for Disaster Risk Reduction in Japan Towards a Nation-wide Movement

June 2007

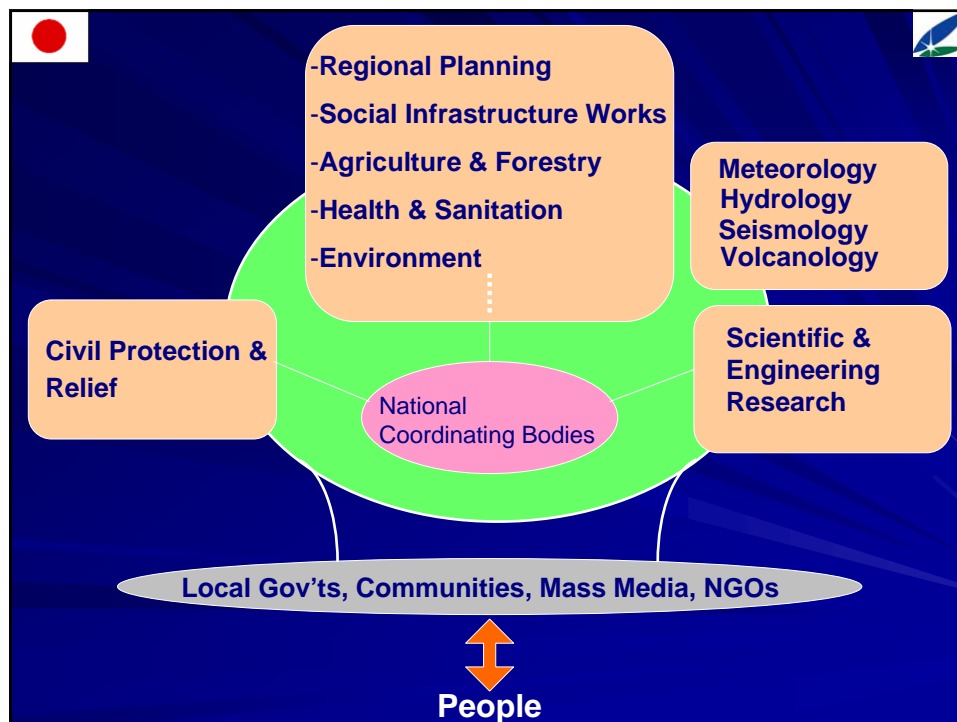
by Satoru Nishikawa

Cabinet Office, Government of Japan



Two Epoch-Making Turning Points for Disaster Reduction in Modern Japan

- 1959 Ise – Wan Typhoon
 - ⇒ Institutional Mechanism for Disaster Reduction
 - 1961 Disaster Countermeasures Basic Act
- 1995 Hanshin – Awaji(Kobe) Earthquake
 - ⇒ Quicker Information Gathering Mechanism
 - ⇒ Need for Ensuring Building Safety
 - ⇒ Recognition of importance of “self help” & “mutual help”





Noto Hanto Earthquake 25 March 2007



Magnitude: 6.9

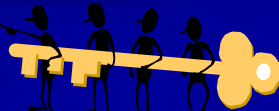
House damaged: 14,303

Only 1 person killed

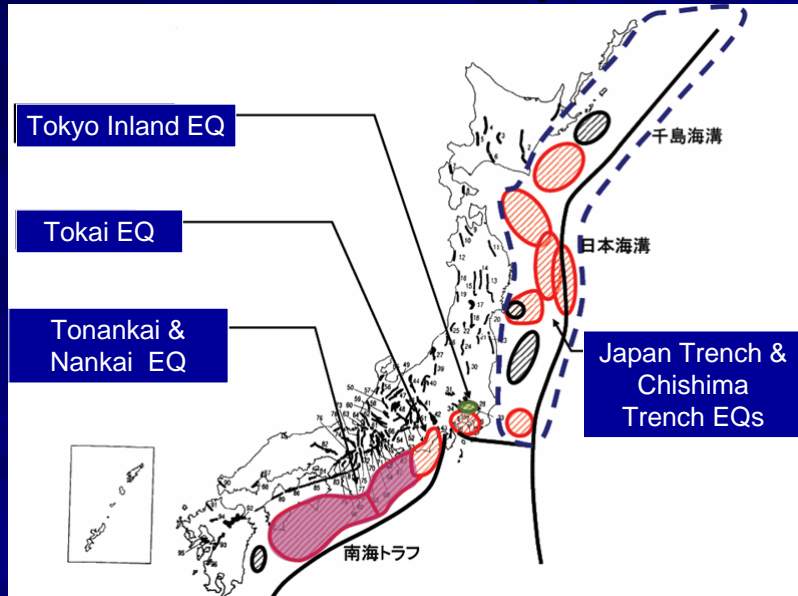
 

The Challenges Ahead in Japan

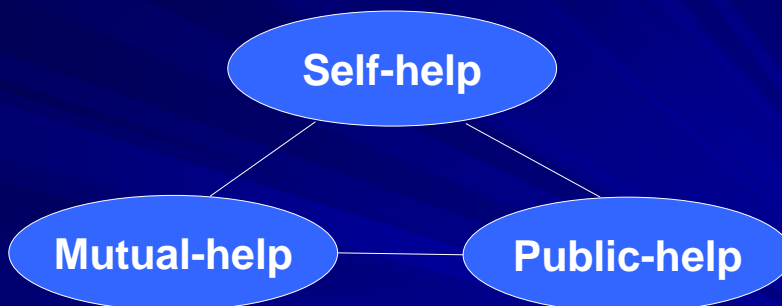
- **How can we decrease casualties by possible Earthquakes !**
 - Retrofit / Rebuild old existing houses & buildings
 - Affix furniture and adhere protective films on old windows
 - Encourage companies to make their own contingency plans etc.
- **How can we decrease casualties by possible Tsunamis !**
 - Distribute Tsunami Hazard Maps
 - Disseminate Tsunami Warning effectively
 - Ensure that people run immediately to safe place etc.
- **How can we further decrease casualties by Typhoons & Floods !**
 - Effective advance evacuation warnings for elderly & disabled
 - Distribute Flood Hazard Maps etc.



Possible large-scale earthquakes and tsunamis in Japan



A Nation-Wide Movement for Disaster Reduction Actions





Initiate a Nation-Wide Movement for Disaster Reduction Actions to protect own lives and properties aimed at building the resilience of our nation and communities to disasters



How ?

- Involving various local groups in disaster reduction
 - Community Groups
 - Junior Chamber of Commerce Chapters
 - Parent & Teachers Associations
 - Local Shop Unions
- Providing Various Opportunities for Disaster Prevention Education
 - in Elementary & Secondary Schools
 - at Social Education Facilities & Public Libraries
- **Involving the Corporate (Business) Sector**



Disaster Reduction Activities of Corporate Sector

Why are they necessary ?

- ① Where are people working during the daytime?
 - Kobe Earthquake in 1995 ... Before dawn in Monday
 - Niigata Earthquake in 2004 ... Saturday Evening
 - Fukuoka Earthquake in 2005 ... Sunday Morning
 - What if they had occurred during the working hour?
 - Who should secure safe places employees and customers?
- ② Corporate Citizenship: as a member of community
- ③ Business Continuity is essential for corporations.
 - Lack of smooth provision of goods/services causes economic loss.
 - Without quick business restart, they are forced to leave market.

Disaster resistant Telecommunications Facilities

By NTT (NIPPON TELEGRAPH AND TELEPHONE) Group



Protection from Storm and Flood Disasters

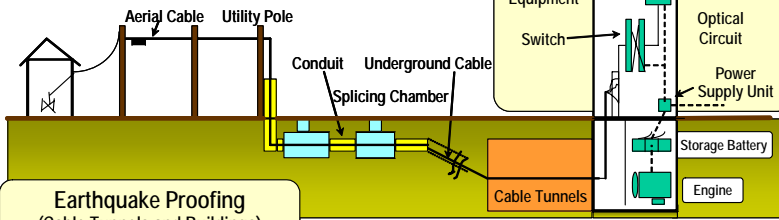
- Selective installation at elevated locations (200-year rainfall probability)
- Flood defense, tide embankment, and anti-heavy snow measures
- Wind pressure-resisting design
- Measures to cope with prolonged power outage

Fire Protection

- Use of flame-resisting or nonflammable materials
- Implementation of fire retarding divisions
- Oil inflow prevention barrages, etc.

Earthquake Proofing

- (Facilities installed inside Buildings)
- These facilities suffer slight damage at seismic intensity 7 but main functions of facilities are quickly restored.



Earthquake Proofing (Cable Tunnels and Buildings)

- These facilities may be damaged at seismic intensity 7 but they will be avoided from catastrophic damage.

Installation of Flood Defense Plates (Site Defense)

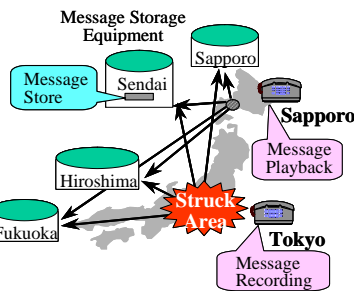


Disaster Emergency Message Dial "171" Service

By NTT (NIPPON TELEGRAPH AND TELEPHONE) Group



[System configuration]



- Total of 8 million messages storable at nationwide
- Avoidance of call concentration to struck areas

[How to Use Disaster Emergency Denson Dial Service]

1 7 1

Voice Guidance
This is Disaster Emergency Message Dial Service. Press 1 to record your message. Press 2 to playback. Press 3 to record your message using your personal identification number. Press 4 to playback using your personal identification number.

- 1 ... For Recording 3 for recording with personal identification number
- 2 ... For Playback 4 for playback with personal identification number

Voice Guidance
If you are a person in struck areas, dial your home telephone number or your intended person's telephone number in struck areas, starting with the area code. If you are a person outside struck areas, dial your intended person's telephone number in struck areas.

Area Code
(x x x) x x x - x x x x x

Voice Guidance
(For Recording): Your message will be received. After hearing a beep, talk your message within 30 seconds.
(For Playback): The latest message will be played back first.

Start of Recording or Playback

Emergency Earthquake Quick Reporting System

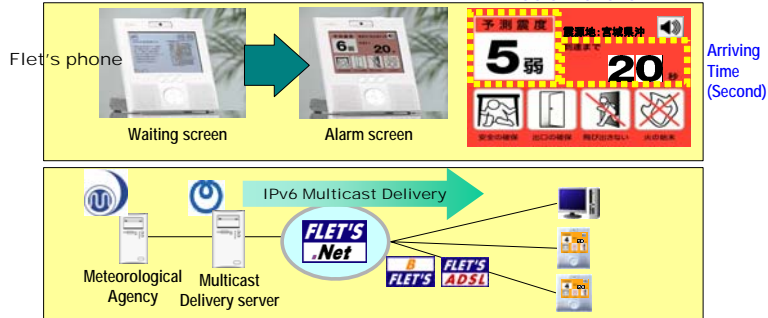
By NTT (NIPPON TELEGRAPH AND TELEPHONE) Group



When receiving "emergency earthquake quick report" from Japan Meteorological Agency, this system estimates "arrival time of main quake at each area" and "seismic level" before main quake arrives.

Image

When receiving emergency earthquake quick report, the system calculates "expected seismic intensity" and "the main quake arrival time" using the location data being set in advance changes to alarm screen. And these are quickly informed to users by voice & warning sound.

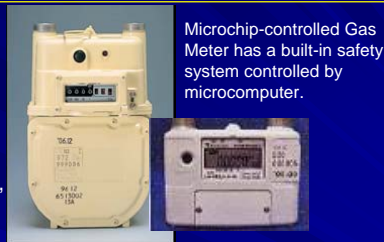


Earthquake Countermeasures

By Tokyo Gas Co., Ltd.



- Earthquake Countermeasures in the Three Stages
 - "Prevention"
 - Polyethylene gas pipes
 - "Emergency Response"
 - Microchip-controlled Meter
 - Monitoring System "SUPREME"
 - "Restoration"
 - Resumption of Services



Resumption of Services



New SI Sensor



Super-dense Real-time Monitoring of Earthquake System, "SUPREME"



Polyethylene Gas Pipe




Disaster Awareness Programs

By Tokyo Gas Co., Ltd.

Children's Awareness Workshop



Bucket Relay



Evacuation Drills



Fire Extinguisher Drills



Microchip-controlled Meter




Backup of Head Office functions

By TEPCO (TOKYO ELECTRIC POWER COMPANY)

- Organize a backup of Head Office in the following table inside the brunch office building which is 40km away from the head office.
- Design backup to be almost the same as head office so that it can be used as a substitute smoothly.
- Leaders and disaster personnel of Head Office can quickly move to the backup facility by helicopter.



Appearance of building which has backup of Head Office



Backup facility of Central Load Dispatching Center


■ Three functions prepared to be substituted

Organization	Functions
1. Emergency Center	Central Command System for Information gathering & distributing, and Restoration
2. Central Dispatch Office	Demand and Supply Control
3. Central Communication Office	Communication Network Operation for power supply


Copyright© Tokyo Electric Power Co., Inc. 2006 All Right Reserved.

Conduct an Effective Emergency Drill By TEPCO (TOKYO ELECTRIC POWER COMPANY)


- Conduct various types of drill on a normal time basis in order to perform prompt and effective recovery activities.
- In Command Post Exercise, Emergency Center activities to be conducted by the head office and branch office in the event of a disaster is simulated, disaster information is collected and analyzed, an effective recovery plan is set out and optimum allocation conducted to all over the company.
- In Disaster Damage Prediction and Judgment Training which is table top exercise, targeted for core personnel in disaster activities, predictive capability and judgment for disaster are developed.
- In Field Training Exercise, an activity in order to recover services in the front line facility is conducted.
- We constantly try to improve the level of capability of disaster prevention by extracting issues through the training and reflecting the countermeasure in the manual.



Command Post Exercise




Disaster Damage Prediction and Judgment Training



Field Training Exercise

All the member of the staff carries the emergency card By TEPCO (TOKYO ELECTRIC POWER COMPANY)

- All the member of the staff create an emergency card of which turnout criteria of the employee, behavioral baseline and contact procedure of the safety are indicated, in order to take prompt and adequate action when disaster strikes.
- Familiarize all 40 thousand employees with carrying the card on a daily basis.



E-Card

For families

How to contact and confirm the safety

The nearest office from one's home (Reminder for family)

For the employees

Principal for the employees in a various situation when disaster strikes

How to contact/confirm the safety

Turnout criteria of the employees

(hold and carry on a daily basis)

(Card face)

(Card reverse side)

東京電力「緊急連絡システム」電話番号

東京電力の未帰りの連絡先 03-4231-3333

東京電力の緊急連絡先 0480-80-3333

緊急連絡先

東京電力の緊急連絡先

東京電力の緊急連絡先

エマカード

緊急連絡先

緊急連絡先



Tokyo Central Station Commuters Corps originates

By Mitsubishi Estate Co., Ltd. of Tokyo Central Station Commuters Corps  MITSUBISHI ESTATE

- Marunouchi District in front of the Imperial Palace in Tokyo is the world's leading business center.
- By Mitsubishi, Marunouchi District was evolved into a Modern Office District equal to City and NY 120 years ago.
- Experienced The Great Kanto Earthquake in 1923.
- Buildings had little damage.
- Emergency activity was carried, such as distribution of boiled rice of storage, delivery of food, bread, water



■ Tokyo Central Station Commuters Corps originates there.



Promoting as District Continuity Management “DCM”

By Mitsubishi Estate Co., Ltd. of Tokyo Central Station Commuters Corps  MITSUBISHI ESTATE

- “Town-Update” Developments around Tokyo Central Station
- in the event of Severe Earthquake
- The Collapse of Buildings or Disastrous Fires can be few
- instead, Occurrence of Stranded Commuters Business Performance Change
- An Operational Unit ; Tokyo Central Station Commuters Corps
- New tasks; Terrorism, National Defense Emergencies



District Continuity Management “DCM” for all Stakeholders . . .



“DCM” Normal Times/Emergency Times



Normal Times

- Research and Study of Business District Risk
- Reputation to Global Review
Tokyo has the World's Highest Risk for Disasters
- Symposium, Lecture Presentations
- Disaster Prevention Drill
- Storage of Materials, Foods, Water, Toilets



Quake drill capital idea for foreigners

By Stephen Taylor

As the nation commemorated the Great Hanshin Earthquake of 1995, which is viewed as the most serious disaster to strike Japan since World War II, Chiyoda Ward of all disaster-stricken wards in Tokyo is offering a unique idea for the capital's foreign visitors. The Foreigners and Ex-workers Emergency Symposium will be conducted during the earthquake disaster commemoration. In addition, a special menu will be prepared for the symposium, as well as an earthquake simulation drill for the city.



A participant practices using an automated external defibrillator as a disaster against the Foreigners and Ex-workers Emergency Symposium held in Chiyoda Ward, Tokyo, Oct. 19, 2004.

Emergency Times

- Communication with Chiyoda Ward's Head Office
- Distribution of Food and Water, Set up Sectional Toilets
- Management of Volunteers
- Collection of Governmental Information



Trilateral Agreement on Community Disaster Prevention - Daikin Industries, Ltd & 5 Community Associations & Soka City Municipality - By Daikin Industries, Ltd



Purpose

- To accomplish emergency aid for community people whom suffering disaster. Inevitably people demands help from the nearest institutions when earthquake occurs. Company plants have ability to provide its own resources to the community people as the nearest institution upon the earthquake disaster.
- To support the emergency aid activities of local government in terms of social contribution. Local governments need a certain time (at least 3 days) to start emergency aid activities. In this short period the local mutual efforts are strongly requested especially between municipalities and companies.
- To recover company services. In the urgent circumstances of wide disaster, company should reactivate the facilities as soon as possible. For this process, the cooperation with local government and community is an essential matter.



Provision of playground space



Provision of forklift trucks to remove debris



Trilateral Agreement on Community Disaster Prevention

- Daikin Industries, Ltd & 5 Community Associations & Soka City Municipality -
By Daikin Industries, Ltd

Contents of Agreement

- To take effective and feasible measures against the wide disaster, contents of agreement should be decided by discussion between company, municipality and local community associations.
- The concrete support of company should be limited to its usual service contents and facilities.
- In order to trilateral agreement Daikin Industries, Ltd offers the following supports first 3 days :
 - Provision of playground space (app. 10000 m²).
 - Provision of forklift trucks to removal of debris.
 - Provision of heliport space.
 - Provision of storehouse for supplies.
 - Provision of barbeque space for supplying food.
 - Provision of solar energy devices for battery charging of mobile phones, computers, etc.
 - Provision of water tank and shower facilities.



Provision of barbeque space for supplying food



Provision of solar energy devices for battery charging of mobile phones, computers



Exploration for Disaster Prevention (1)

By The General Insurance Association of Japan (GIAJ)

- Trigger for development of the program
The Great Hanshin-Awaji EQ in 1995
⇒ Local disaster preparedness is important
 - (1) Disaster prevention education for children of the next generation, and
 - (2) Hands-on education program
- Outline of the program
Through enjoyable town exploration, children will
 - (1) Find disaster prevention facilities
 - (2) Draw a map plotting their findings, and
 - (3) Make a presentation on the map
- Effects of the program
 - (1) Enjoy learning disaster prevention and become aware of risks in life, and
 - (2) Attachment & interest in the community increase through interaction with local people



Exploration for Disaster Prevention (2)

By The General Insurance Association of Japan (GIAJ)

SONPO

- Activities of the program supported by the GIAJ
 - (1) Exploration for Disaster Prevention Map Contest
 - A total of 1,052 maps from 224 groups were entered in the 3rd Contest in January 2007
 - Many of them feature disasters that can affect local communities
eg: EQ, Tsunamis, Typhoons, Floods, etc.
 - (2) Seminar for Exploration for Disaster Prevention leaders
 - The leaders support the program all over the country
 - (3) Presentation in the UN World Conference on Disaster Reduction (Kobe) (January 2005)
 - (4) Production and provision of a CD-ROM introducing the Exploration for Disaster Prevention program (Tsunami) in English



Our Activities for Disaster Prevention and Continuation of Operations in Disaster

By Lawson, Inc.

マチのほっとステーション
LAWSON

We will work to enable harmonious exchange with local residents.

Basic principles for disaster prevention:

- Ensure the safety of employees and customers.
- Maintain economic activities even after disasters, keeping our stores open if at all possible.
- Contribute to regional communities.

Detailed activities:

- We have experienced great earthquakes (Great Hanshin-Awaji Earthquake).
- We conduct disaster drills twice a year in January and September.
- We have prepared the disaster relief manuals.
- We have emergency items ready at all times.
- We have established an emergency liaison system.
- We have signed disaster relief agreements with local governments.
 - We will send relief supplies to stricken areas.
 - We will support people having difficulties getting home in a disaster by keeping our stores open if at all possible.



Contributing to and Cooperation with Society By Lawson, Inc.



- We should take responsibility as an enterprise.
- We should sign disaster relief agreements with local governments, and should cooperate with them when a disaster occurs.

Overview of agreements:

- Agreement on sending relief supplies in a disaster
Lawson will do its best to supply daily necessities to shelters, etc., if at all possible.
- Agreement on supporting people having difficulties in returning home due to disaster

If traffic is paralyzed by a disaster or an earthquake, we should keep our stores open if at all possible to support those having difficulty returning home.

- (1) We should let people use our lavatories.
- (2) We should let people use tap water.
- (3) We should provide traffic information using radios, maps, etc.



October, 2004 Niigata earthquake



A disaster support station

Support Activities for Disaster Victims and Community By Japanese Consumer Co-op



■ JCCU is a national federation of consumer co-ops in Japan to serve 619 consumer co-op societies and 24 million individual members. Total business of Japanese Consumers' Co-ops is JPY3.4trillion.

■ Co-op Kobe was seriously damaged by Great Hanshin Earthquake in Jan 1995. 11 employees were killed and its HQ and 11 stores were collapsed.

■ Regardless of its damage, Co-op Kobe continued its business at 97 stores on the day of disaster, at 112 stores on the next day and resumed delivery service ASAP to contribute to its members and community.

■ Co-op Kobe have had a cooperative agreement for disaster with Kobe City and responded a request to provide commodities to people to prevent panic.

■ Other co-ops followed Co-op Kobe to make agreements to supply goods in a time of disaster with local governments (42 prefectures and 275 municipalities)



Co-op Kobe HQ collapsed



Providing Foods in front of the Destroyed Store




Support Activities for Disaster Victims and Community

By Japanese Consumer Co-op





- JCCU made a wide-range cooperation plan for implementation of agreement with local governments and made agreements to secure 300 commodities in a time of disaster with its 80 suppliers.
- JCCU conducts "Map Exercise (disaster simulation)" every year with its member co-ops assuming Tokai Earthquake or epicentral earthquake in Tokyo Metropolitan area.
- The exercise became a reality when the big earthquake was occurred in Niigata in Oct 2004.
Support from co-ops across the country; providing aid supply, feeding service, delivery by co-op trucks, moving volunteer, etc. 400 Co-op trucks, 1600 volunteers and JPY500 million donation from Co-op members.
- Internationally, JCCU collected JPY350 million from Co-op members to donate to Tsunami victims by Sumatra earthquake in 2004. Japanese Health Co-ops sent medical doctors and apparatus to Sri Lanka.



Map Exercise conducted every year




Co-op supported elderly people to move to temporary houses





Glass Power Campaign - Protect people with Laminated Glass

By Asahi Glass Company



- Promoting protective application (earthquake & typhoon resistance) of laminated glass
 - Set up website to communicate the importance of laminated glass for disaster prevention
 - Approx. 6000 people registered and access the website regularly
- Donation of laminated glass for schools to protect evacuated people in disasters
 - One click donation program on the website - total click : 430K
 - 9 school gyms' windows have been replaced by laminated glass since Oct. 2005.



Make the Future Happier by GLASS

Glass Power Campaign - Protect people with Laminated Glass

By Asahi Glass Company



- Education program for children
 - Special lesson about glass conducted in schools
- Demonstration of laminated glass
 - Over 20 demonstrations were done all over Japan since Oct. 2005
- Researches
 - Investigation of damaged glass were done in the area of big earthquake occurred. Reports are on the website
 - Regular opinion survey on disaster prevention among website members. Report are on the website
- Support glass distributors to develop local network for disaster prevention activities.
 - Provide resources and communication tools



Disaster Reduction Activities: Example of parts manufacturer

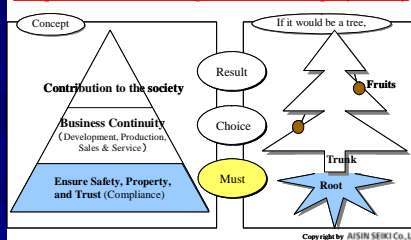
By AISIN SEIKI Co., Ltd.



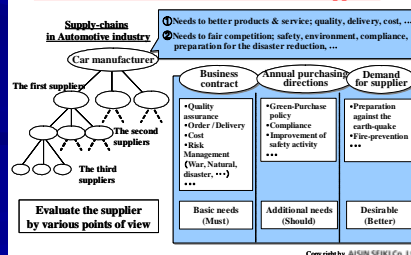
■ We must assure the business continuity for all kind of stakeholder's expectations as well as for us.

■ We supply better products and service (quality, delivery, cost, etc.) as one of supply-chains in automotive industry.

The position of Risk Management of our company activity



Customer's needs to us and our needs to suppliers



The subjects at Parts Manufactures

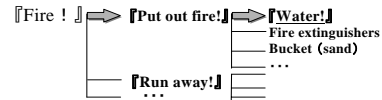
By AISIN SEIKI Co., Ltd.

AISIN

Actual practice as manufacturer

- “CHI” (Knowledge), “GYOU” (Action), “JITSU” (Result) in Emergency operation
- Most important thing is “prompt & accurate action” for minimizing damage.
- But, it’s really difficult to prepare perfectly.
- The key-word is “KAIZEN” (Continuous improvement)

[Example of the better practice; 3 seconds, 3 minutes, 3 hours, ...]



【Example】: an manual of the action in an emergency

- Former : When you see the fire, Call someone near by
- ↓ : When you see the fire, Yell Fire!
- Present (nowadays) : When you see the fire, Yell at the top of your lungs Fire!
- (future) : When you see the fire, Yell Fire! with your arm action



Copyright by AISIN SEIKI Co., Ltd.

To provide reassurance to customers

By DISCO Corporation



- Responsibility of product supply
- How DISCO BCM started
 - Demand from a customer
 - Standardized Supplier Quality Assessment
 - Second supplier
- DISCO BCM policy
 - A reliable company that customers can constantly count on
 - Create a working environment for the employees to work with a sense of security



Precision Processing Tools (Blades and Wheels)

To provide reassurance to customers

By DISCO Corporation



- Top priority placed on information disclosure
 - Business Continuity Guideline

- Business continuity target

“To constantly supply products and services needed by the customers to maintain their current production capacity”

- Focus of implementation
 - Against a large scale earthquake
 - Emphasis on supply of precision processing tools BCM as a part of management system
 - Corporate system that fosters disaster-resistant employees

Business Continuity Guideline

説明項目	回答数/総設問数	レベル別回答数			
		0	1	2	3
I. 方針・計画	●必須項目	-	-	-	-
	○基礎項目	12/12	-	-	3
	☆推奨項目	2/2	1	-	1
II. 具体的施策	●必須項目	5/5	-	1	2
	○基礎項目	15/15	2	3	4
	☆推奨項目	12/12	3	2	4
III. 教育訓練	●必須項目	2/2	-	-	2
	○基礎項目	2/2	-	-	1
	☆推奨項目	2/2	-	-	2
IV. 点検・見直し	●必須項目	-	-	-	-
	○基礎項目	4/4	-	-	4
	☆推奨項目	1/1	-	-	1
V. 防災に関する商品サービスの向上	●必須項目	-	-	-	-
	○基礎項目	-	-	-	-
	☆推奨項目	3/4	2	-	1
合計	●必須項目	7/7	-	1	4
	○基礎項目	33/33	2	3	8
	☆推奨項目	20/21	6	2	4
総合計		8	6	18	28

Business Continuity Plan Guidelines for Construction Companies

By Japan Federation of Construction Contractors



- A construction industry organization has announced its own business continuity guidelines suited to the features of the industry. It is providing support and guidance for the business continuity activities of its member companies.

- Disaster countermeasures are one of the pillars of the corporate social responsibility activities of construction companies. They should build systems that allow them to undertake recovery support rapidly when even a large-scale disaster occurs.

Overview of activities

1. Creation and announcement of Construction Business Continuity Plan Guidelines
2. Implementation of explanatory meetings for member companies
3. Lectures at the Tokyo Chamber of Commerce and Industry and at the Japan Society of Civil Engineers, etc.



BCP Guidelines for Construction Companies



explanatory meetings for member companies

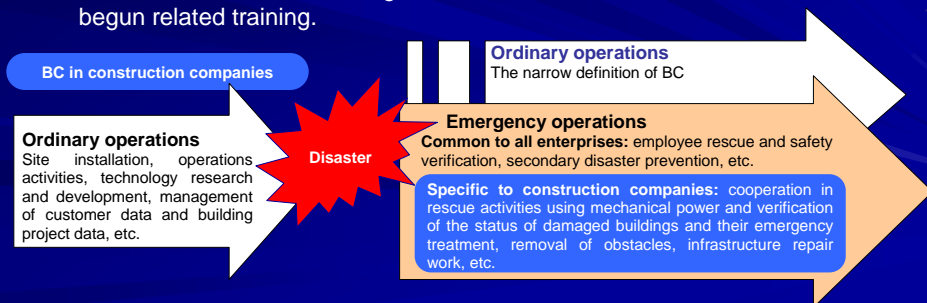
Business Continuity Plan Guidelines for Construction Companies

By Japan Federation of Construction Contractors



- Features of construction BCP guidelines
 - Premised on the occurrence of Japan's greatest potential risk, a large-scale earthquake (in the capital region)
 - Business continuity in construction companies comprises both continuing ordinary operations and responsive emergency operations.
- Companies status

Led by large construction companies, the number of them that have established BCP is increasing, and those that have established them have begun related training.

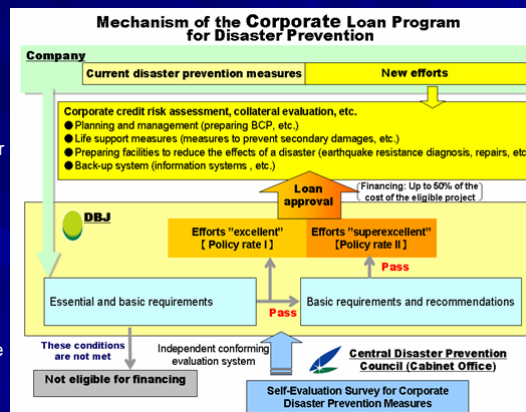


The Loan Program for Promoting Disaster Management (1)

By Development Bank of Japan



- Because there is a close relationship between business continuity measures and overall corporate management, business continuity cannot be properly addressed based solely on individual projects.
- Under the Loan Program for Promoting Disaster Management, disaster management measures for the entire company are evaluated.
- Based on the Self-Evaluation Indicators of the Corporate Disaster Management issued by the Central Disaster Prevention Council, the Bank's own rating system covers 64 points in 12 areas.
- Although the interest rate is set according to the evaluation of the company's current disaster management measures, the evaluation takes any promises of future efforts into consideration.
- Publicizing the application of the program has benefits beyond a better interest rate, such as improved public and investor relations, as well as accelerating future efforts through enlightenment of its employees.





The Loan Program for Promoting Disaster Management (2) By Development Bank of Japan



Financing Case The Yasuda Warehouse Co., Ltd.

- In April 2006, DBJ provided financing to the Yasuda Warehouse Co., Ltd., as the first project under this program.
- Yasuda has a long-standing disaster management system.
- Forming the basis for the system is a disaster management committee with members from across the company.
- The committee provides such measures, such as large-scale earthquake response plan to deal with the possibility of a major earthquake directly hitting the Tokyo metropolitan area.
- Using a hosting service the company has established back-up facilities and data for its information systems, which are key to inventory management in the warehousing business.
- The projects financed by DBJ loans include the renovation of an aging warehouse owned by Yasuda in Yokohama, and the creation of back-up information systems.

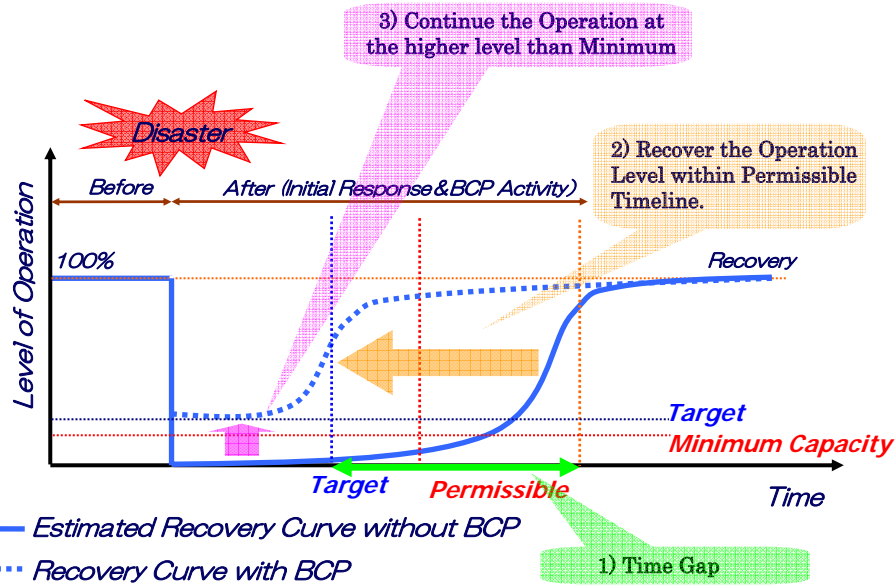


Central Disaster Management Council Official Report on Guidelines for Corporate Disaster Reduction

1) Business Continuity Guidelines 1st ed.

- 2) Checklist for Business Continuity Guideline
- 3) Sample models of Business Continuity Plan
- 4) List of the issues for self-evaluation regarding "Corporate Disaster Reduction Activities"
- 5) Reports for public relations about Corporate Disaster Reduction Activities

Business Continuity Planning



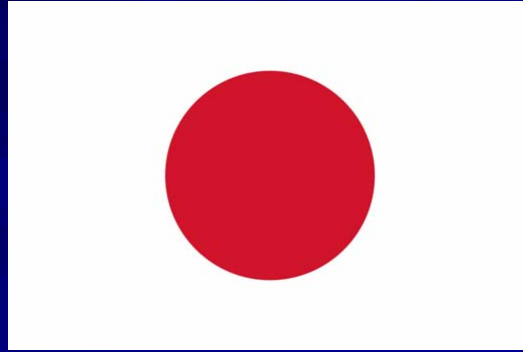
Proverb by Japanese Physics Scientist
Dr. Torahiko TERADA (1878-1935)

「天災は忘れた頃にやってくる」



“Natural Disasters will hit us by the
Time people have forgotten about it”

How to foster & inherit the Culture of Prevention



Thank You