

Workbook



Name	
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“How We Can Overcome a Disaster”

**“Project for Development of a Comprehensive
Disaster Resilience System and Collaboration
Platform in Myanmar”**

YTU-JICA project



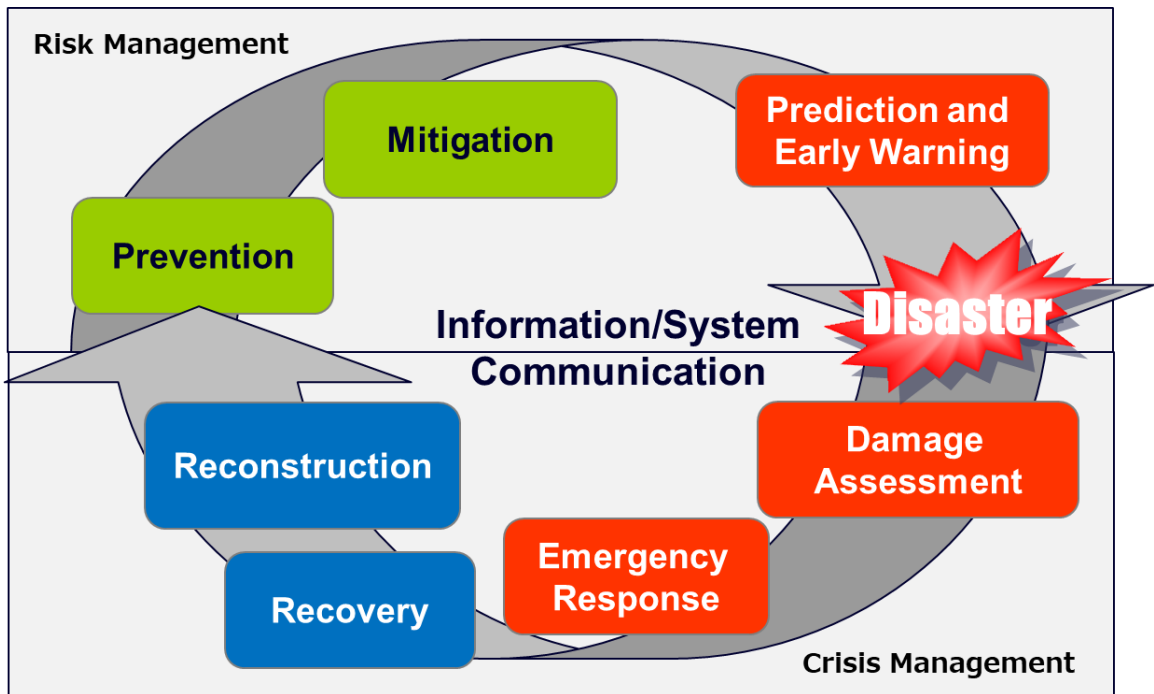
Project WEB site

<http://www.disasterinfo.jp/bs/mmr/>

Muneyoshi NUMADA

**Associate Professor
The University of Tokyo**

7 Disaster Countermeasure Phases



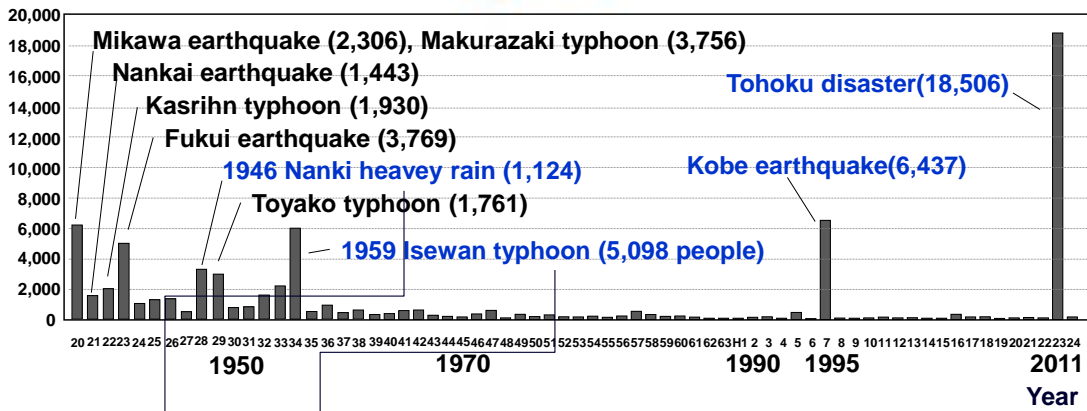
Phase	Examples
Prevention	Primarily improving the structural performance and preventing damages by adding amendments to land-use policy.
Mitigation	Seismic reinforcement of buildings and various structures, reinforcement to resilient structure, liquefaction countermeasures, earthquake-proofing residential homes, prevention of collapse of road bridge
Prediction	To predict and forecast disasters in advance and issue warnings
Damage Assessment	To assess with high accuracy the location as well as the degree of damage as soon as possible.
Emergency Response	Based on the damage evaluation results, the carrying out of rescue operations and recovery of region's basic functions.
Recovery	The general definition of recovery is the restoration to the state before the disaster.
Restoration	Since the former state of the region is not disaster-resilient, there is a need to rebuild the region with stronger disaster resilience. This is called reconstruction.



Past Experience

<https://kvaes.wordpress.com/2013/05/31/data-knowledge-information-wisdom/>

Death tolls



1947 Disaster Relief Act

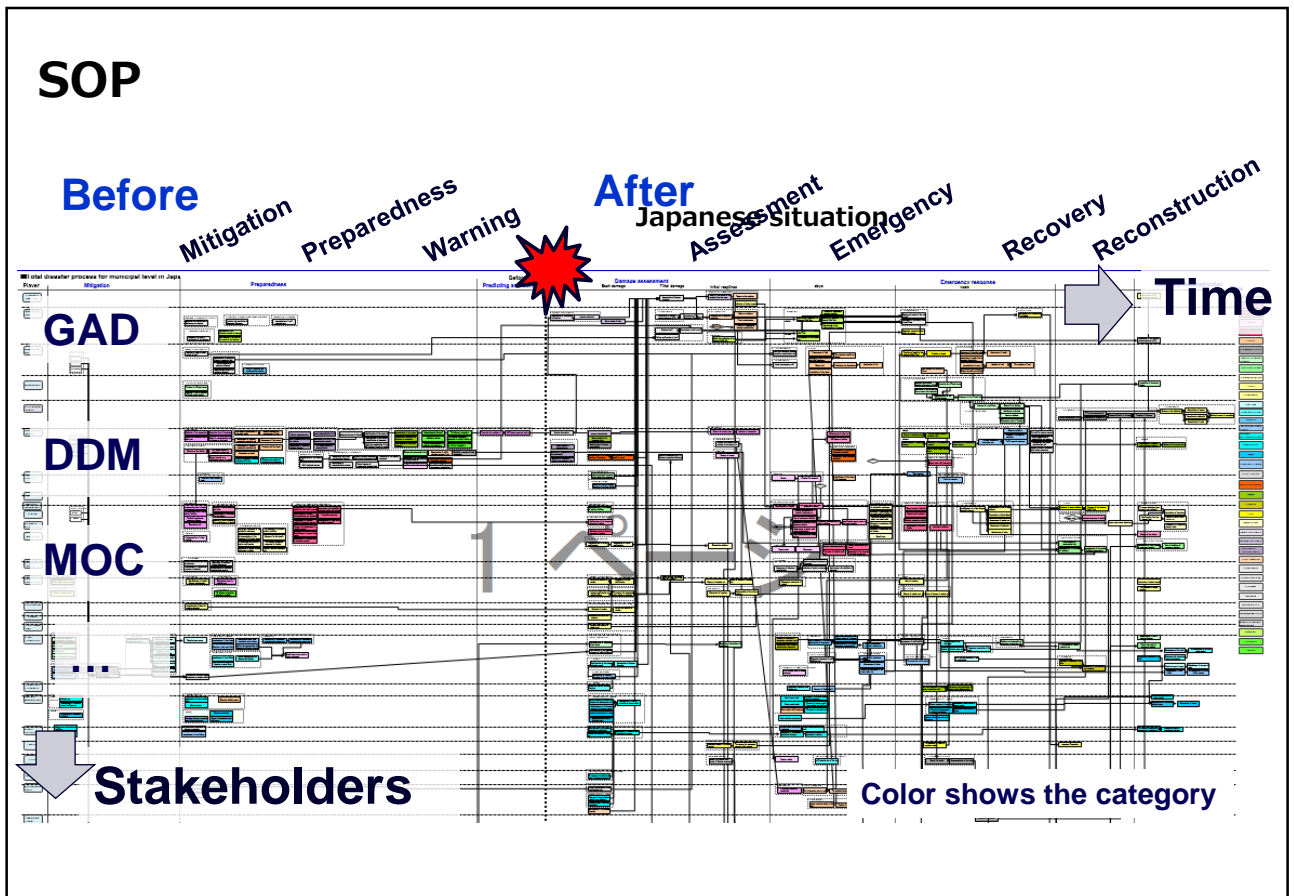
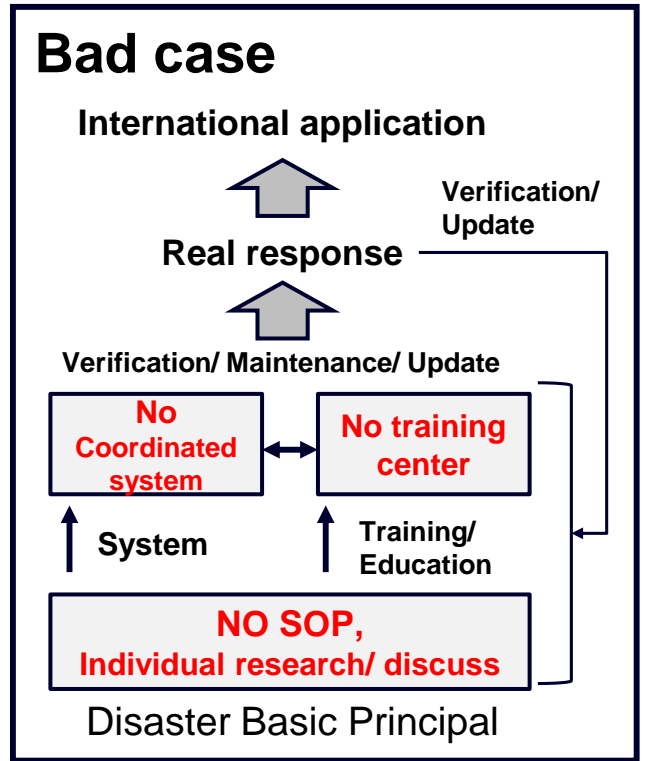
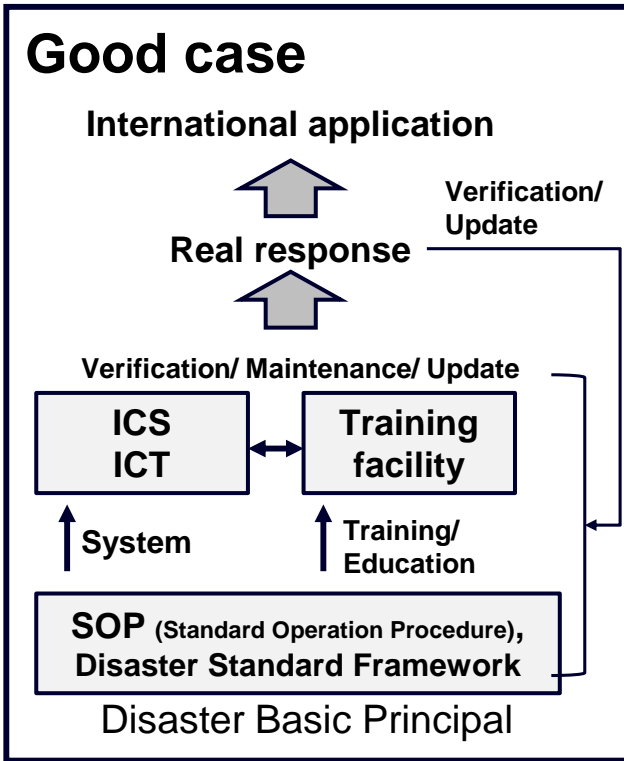
1961 Disaster Countermeasure Basic Act

1963 Basic disaster prevention plan (BDPP)



Before

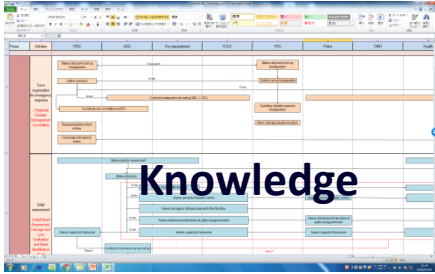
After



Developed system: Workflow chart system

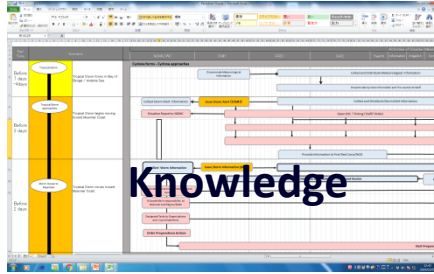
How we can share the knowledge of disaster management with young staffs ?

Earthquake



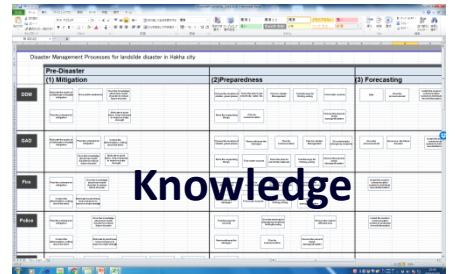
Knowledge

Floods

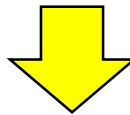
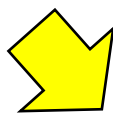


Knowledge

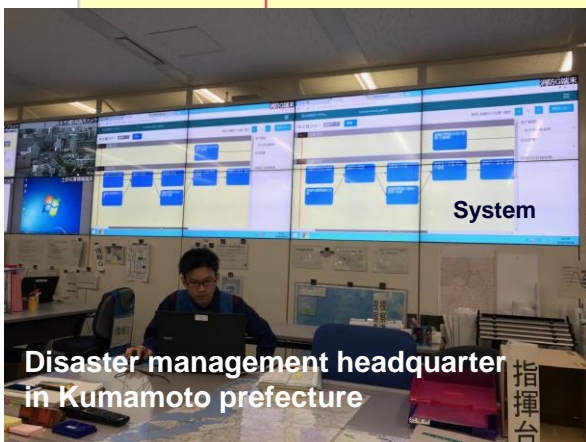
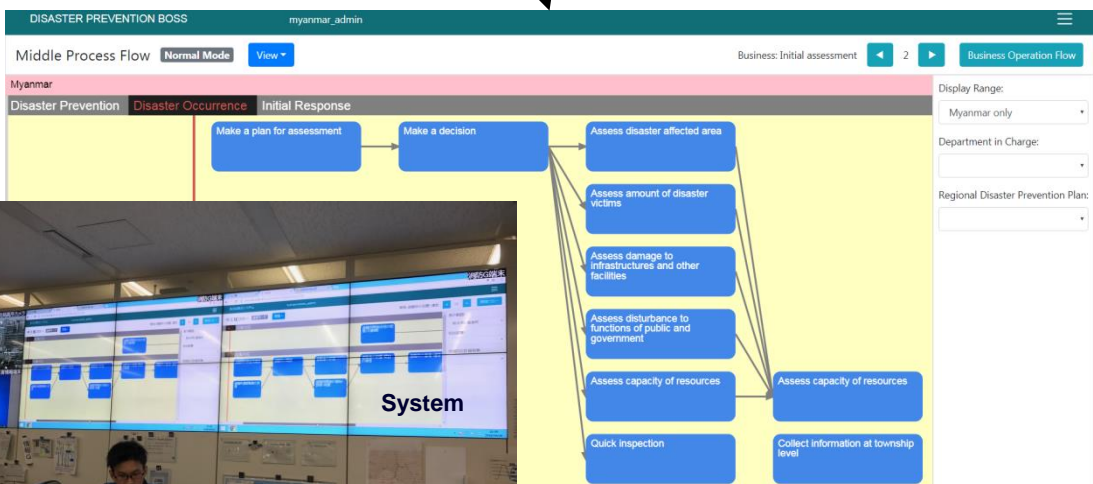
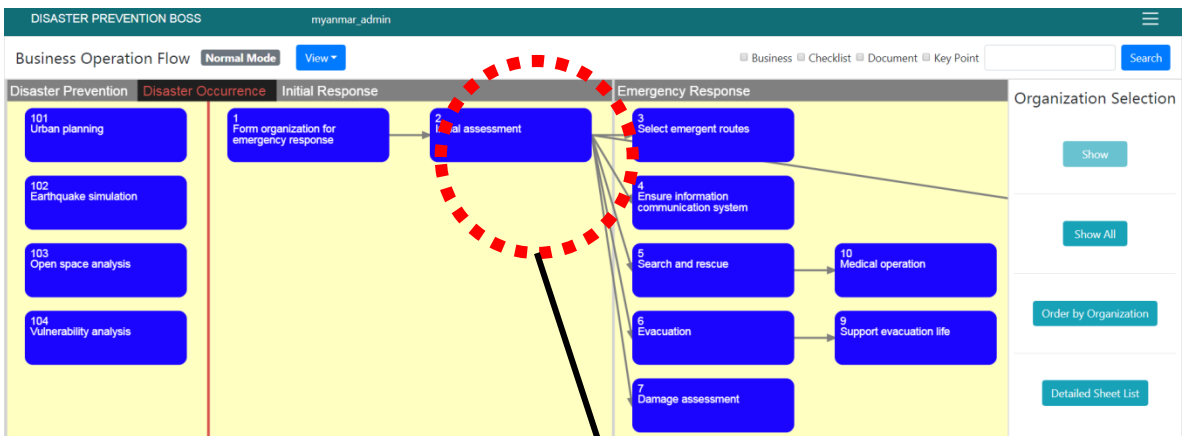
Landslide



Knowledge



Knowledge sharing by the system

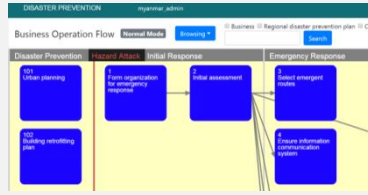


Disaster management headquarter in Kumamoto prefecture

<http://eng.iis-boss.com/work-flowchart>

Developed system: overview

Layer 1: Overview



Layer 2: Detail flow



Layer 3: Detail info.



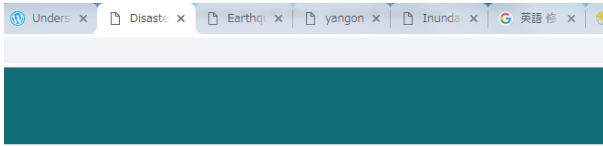
Layer 4: Necessary data/ system/ information/ document

A collage of various data visualization and system interface screenshots. The items include: 'Evaluation system' (a map with a legend), 'Earthquake simulation' (a map showing seismic activity), 'Information sharing' (a map with a legend), 'Past inundation map' (a map showing flooded areas), 'Bridge Quick inspection system' (a map showing bridge locations), and 'Peak Ground Acceleration, PGA' (a map showing seismic intensity). The screenshots are connected by dashed arrows pointing from the Layer 3 interface to each of these items.

How to use the system

<http://eng.iis-boss.com/>

1. Login



Login

User Name

ID: Myanmar_admin
Pass: kumamon

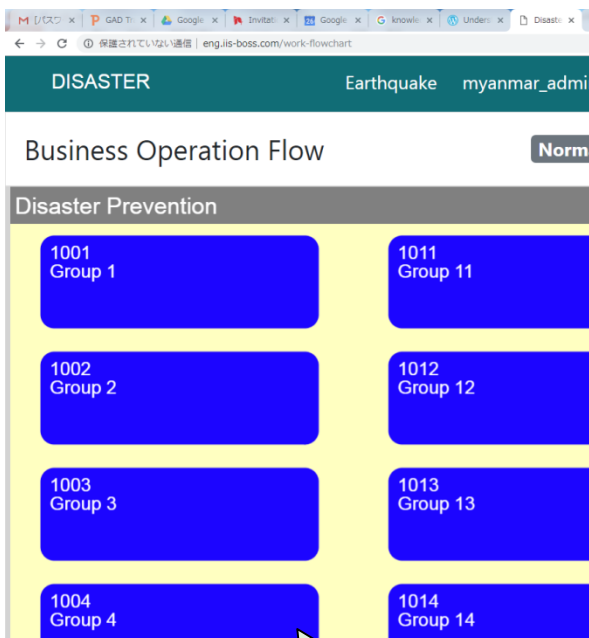
Disaster

Earthquake

Earthquake
Flood
Landslide

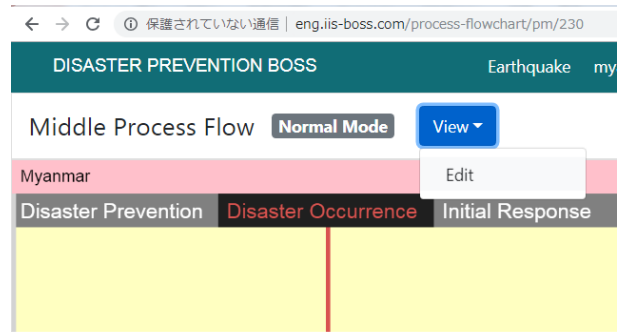
LOGIN

2. Select your Group ID

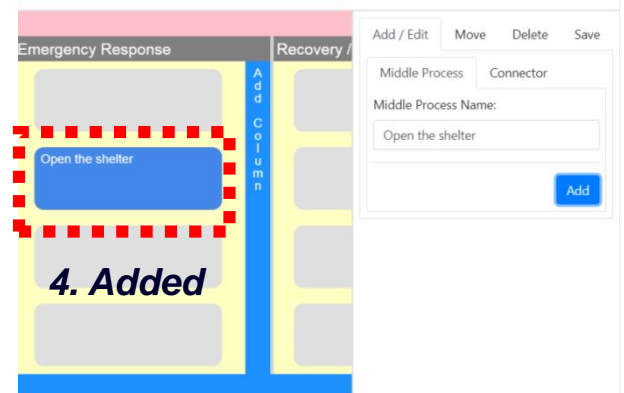
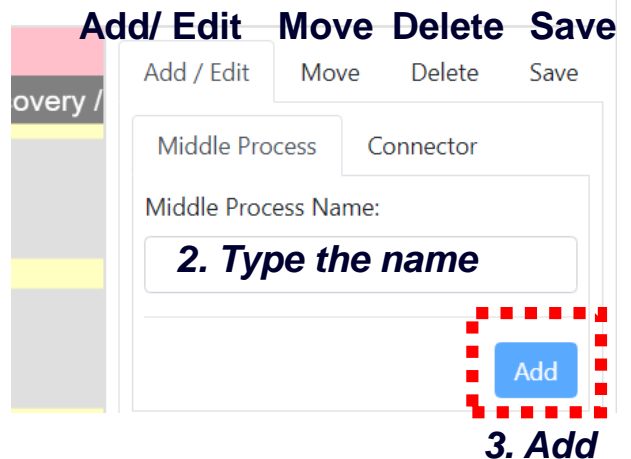
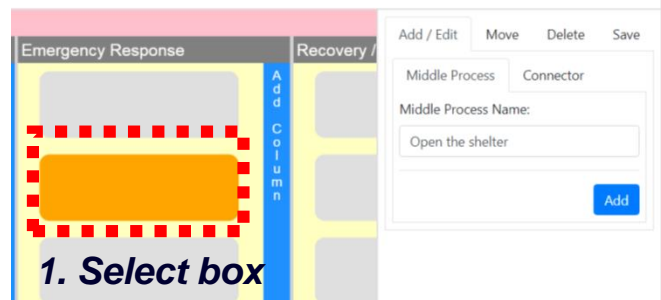


Select your Group number

3. Change from "View" to "Edit" mode



4. Make your flow chart



How to use the system

5. Connector

1. Connector

Add / Edit Move Delete Save

Middle Process Connector

Select the starting textbox and the end textbox.
The textbox on the left side is the starting point. The textbox on the right side is the ending point.

Same textbox in the same column as the starting point can not be selected.

2. Select box

Open the shelter Receive people

Add Column

3. Select box

4. Line

Add / Edit Move Delete Save

Middle Process Connector

Select the starting textbox and the end textbox.
The textbox on the left side is the starting point. The textbox on the right side is the ending point.

Same textbox in the same column as the starting point can not be selected.

6. Move

1. Move

Add / Edit Move Delete Save

Click Drag and Drop

Select the textbox that you want to move and the destination to move.

Textboxes can not move between "Disaster Prevention" and the other phases.

If you move the starting textbox to the behind of the ending textbox, the connector will be deleted. The oppsite is also same.

2. Select box

3. Select box

Open the shelter Receive people

Add Column

4. Moved

Open the shelter Receive people

Add Column

Don't forget "SAVE"

7. Save

Add / Edit Move Delete Save

Save the data.

Save

SAVE

Situation visualize and Damage situation mapping

Disaster Management Support System

Our activity Our system Our team Informations Contact Only member



- Concept
- Business Operation Support System
- Situation visualize**
- Earthquake simulation
- Damage situation mapping**
- Quick inspection of buildings
- Future development simulation
- Floods area in Yangon collaborate with Myanmar Japan

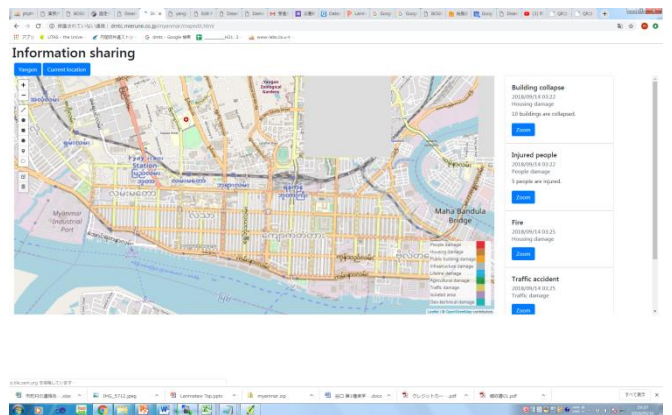
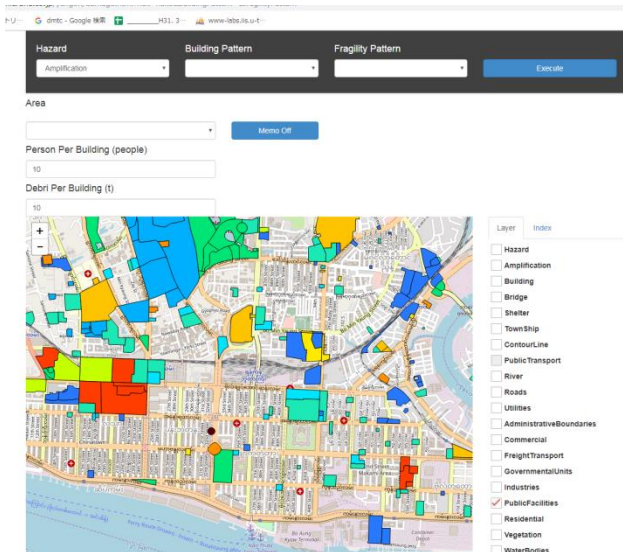


Situation visualize

Damage situation mapping

Situation visualize

Damage situation mapping



Access



<http://www.disasterinfo.jp/bs/mmr/>

Situation visualize to understand the situation

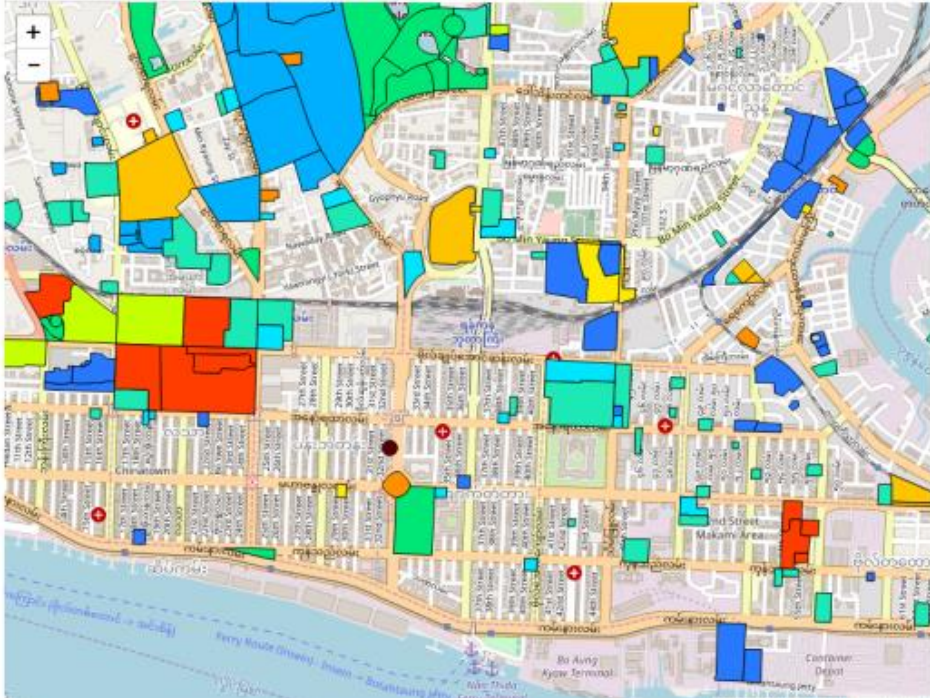
dmcc - Google 検索 H31. 3 www-labs.iis.u-t

Hazard: Amplification Building Pattern: Fragility Pattern: Execute

Area: Memo Off

Person Per Building (people): 10

Debris Per Building (t): 10



Layer Index

- Hazard
- Amplification
- Building
- Bridge
- Shelter
- TownShip
- ContourLine
- PublicTransport
- River
- Roads
- Utilities
- AdministrativeBoundaries
- Commercial
- FreightTransport
- GovernmentalUnits
- Industries
- PublicFacilities
- Residential
- Vegetation
- WaterBodies

Explain about the risk situation in your township

Sketch up the risk condition on the map

dmtc.mierune.co.jp/myanmar/mapedit.html

How to use the system

The screenshot shows a web browser window displaying a map editing interface. The browser's address bar shows the URL dmtc.mierune.co.jp/myanmar/mapedit.html. The page title is "Information sharing". The map shows a street grid with a "Fire risk area" circled in orange. A blue circle is placed on a street, labeled "2. Point the location". On the right side, there is a form with the following fields: "Enter the situation" (text input), "Category" (dropdown menu), "Situation" (text area), and a "Submit" button. The number "3. comment" is written next to the form. The number "4. Submit" is written below the "Submit" button. The browser's taskbar at the bottom shows several open applications, including a spreadsheet, image viewer, presentation, zip file, document, PDF viewer, and a file explorer.

What to sketch up

Step 1: Where are evacuation places ?

Step 2: How many people evacuate ?

Step 3: Where is dangerous road ?

Step 4: Where are dangerous buildings ?



<http://tdmtc.tokyo/>



DMTC