



[FTX Division]

# FTX Scenarios

## Building Collapse/Hazmat/Maritime/Medical

Kingdom of Thailand



Republic of Korea



## ***FTX Scenario* [Building Collapse]**

- I. Three story mansion partially collapsed-1
- II. Three story mansion partially collapsed-2
- III. Detached house partially collapsed
- IV. Five story hotel partially collapsed
- V. Store building partially collapsed
- VI. Collapsed bridge
- VII. Bus incident
- VIII. Store building collapsed

# **I. Three story mansion partially collapsed-1**

## **1. Situation**

Rescue team gets a rescue call to the three story mansion that collapsed partially due to earthquakes. On the outside, the building is oblique to the left and the entrances are blocked by debris. Neighbors ask for help saying that there are some people inside of the building. An engineer says that appropriate shoring and stabilization must be established prior to entering as the additional collapse could occur.

# I. Three story mansion partially collapsed-1

## 2. Information on the exercise site



# I. Three story mansion partially collapsed-1

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Shore the tilted wall before entering

Search for victims using the rescue dogs and technical search equipments

Identify the location of the trapped person

Find another survivor on the upper floor

Shore the ceiling before going upper floor

Down the survivor using rope rescue skill from the top of the building

Withdrawal after marking according to the INSARAG Guideline

# I. Three story mansion partially collapsed-1

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# I. Three story mansion partially collapsed-1

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue



# I. Three story mansion partially collapsed-1

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	



## **II. Three story mansion partially collapsed-2**

### **1. Situation**

After the first rescue mission, additional information was obtained from the rescued victim concerning two more victims are still on-site. The building manager informs of a passageway leading towards the basement on the right side of the building, and that it needs to be searched. Basement entrance however, is covered with debris, making it hard for search missions.

# II. Three story mansion partially collapsed-2

## 2. Information on the exercise site



## II. Three story mansion partially collapsed-2

### 3. The role of participants

#### Rescue team

Search the second floor

Break concrete downward

Search for victims using the rescue dogs and technical search equipments

Rescue the survivor using cribbing skill

Withdrawal after marking according to the INSARAG Guideline

## II. Three story mansion partially collapsed-2

### Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

## II. Three story mansion partially collapsed-2

### Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# II. Three story mansion partially collapsed-2

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

# **III. Detached house partially collapsed**

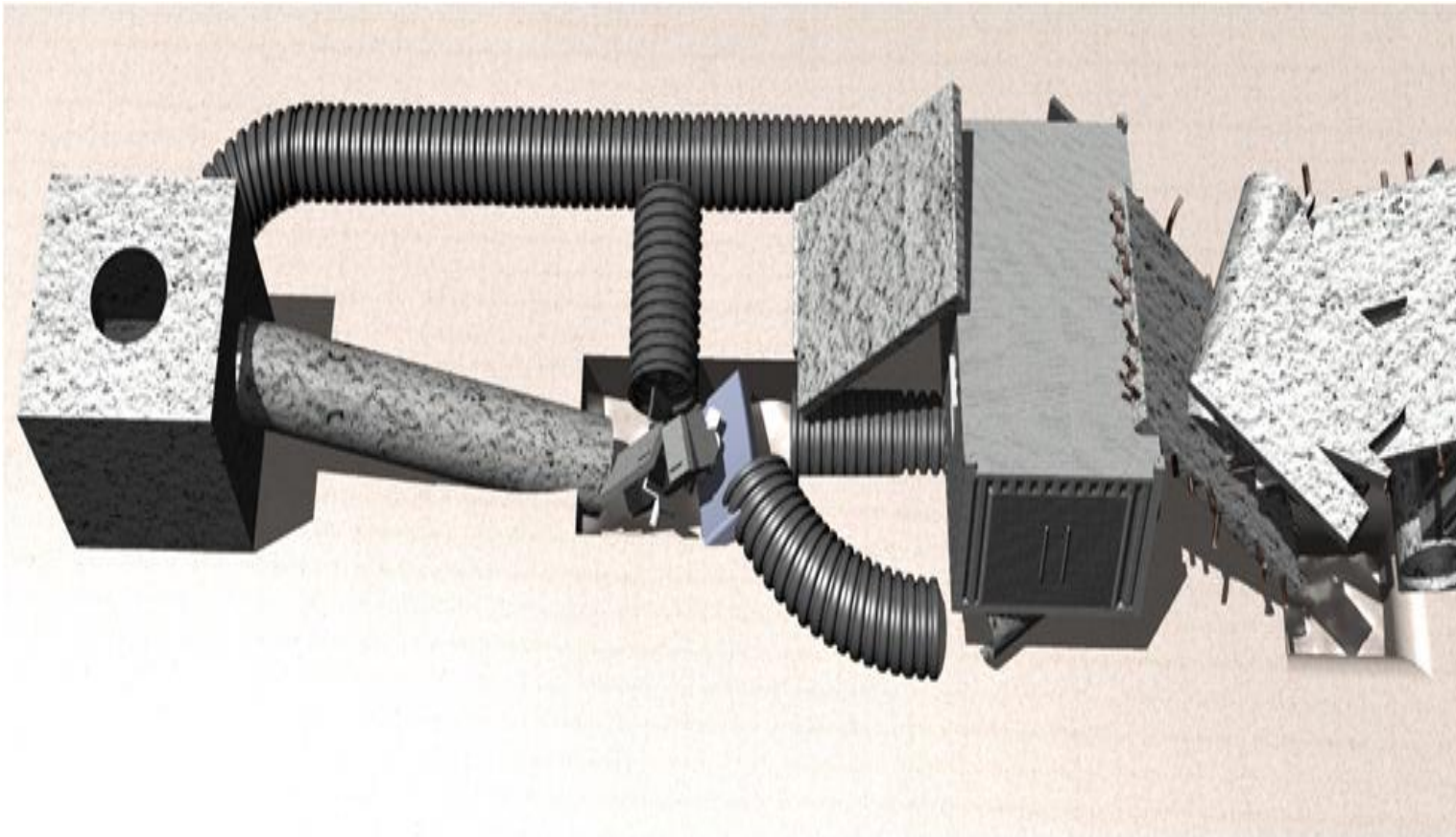
## **1. Situation**

Rescue team was called to a partially collapsed detached house. Due to extensive damage, entrance is not visible. After an engineer assessment, it was concluded that in order to get inside, shoring is needed for the safety of the rescue team. An evacuee says that her husband and son is still trapped inside the bedroom, and had contact with them over the phone one hour before, but currently not getting any connection. In addition, she informs of the location of her husband and son before the collapse. Failing to get connected on the phone, rescuers try to identify the exact location by the sound of the mobile phone.



# III. Detached house partially collapsed

## 2. Information on the exercise site



# III. Detached house partially collapsed

## 3. The role of participants

### Rescue team

Search for victims using the rescue dogs and technical search equipments

Break concrete vertically

Shore and stabilize the structures before entering

Withdrawal after marking according to the INSARAG Guideline

# III. Detached house partially collapsed

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# III. Detached house partially collapsed

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# III. Detached house partially collapsed

## Mobilized assets from the Republic of Korea

		Pesonnal	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

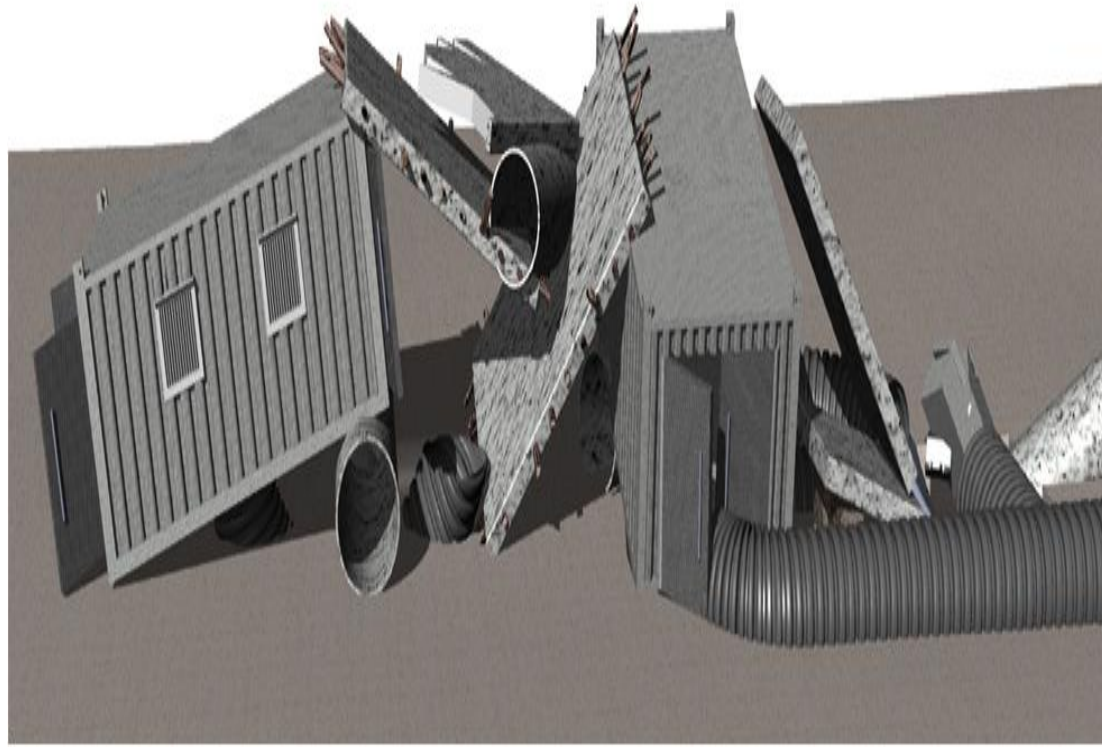
## **IV. Five story hotel partially collapsed**

### **1. Situation**

Rescue team gets a rescue call to a partially collapsed five story hotel. Only top of the hotel was visible as a result of a pancake type disruption. According to a hotel official, there are still guests trapped inside of the building. An engineer says there is no threat of any additional disruptions, but just in case, stabilization is needed for safety.

# IV. Five story hotel partially collapsed

## 2. Information on the exercise site





# IV. Five story hotel partially collapsed

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Search for victims using the rescue dogs and technical search equipments

Break concrete (clean cut)

Shore and stabilize the structures before entering

Cut concrete to rescue the isolated survivor

Withdrawal after marking according to the INSARAG Guideline

## IV. Five story hotel partially collapsed

### Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

## **IV. Five story hotel partially collapsed**

### **Military team**

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# IV. Five story hotel partially collapsed

## Mobilized assets from the Republic of Korea

		Pesonnal	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

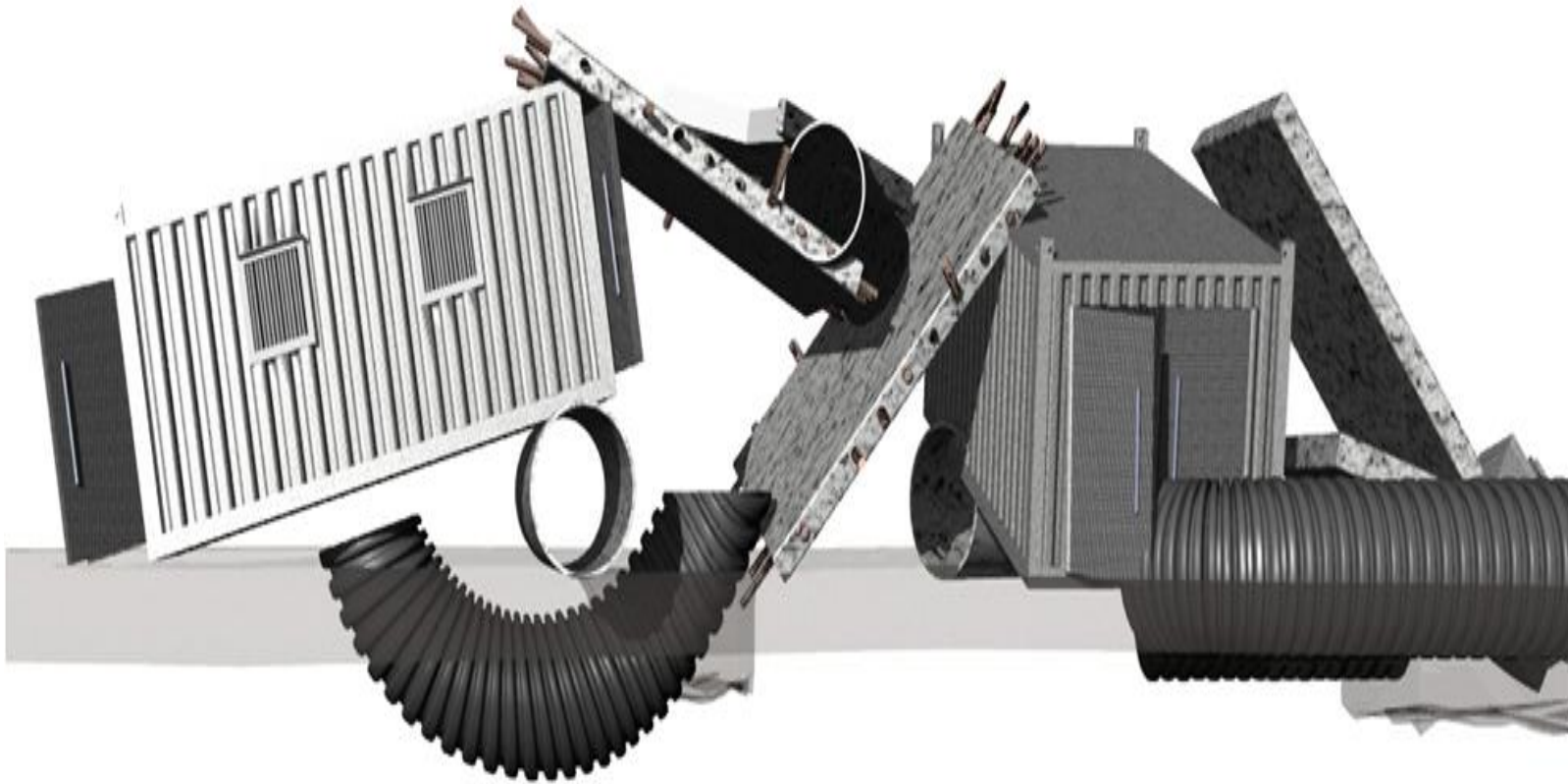
# **V. Store building hotel partially collapsed**

## **1. Situation**

Rescue team is dispatched to a partially collapsed store building. Due to extensive damage, entrance is not visible. After an engineer assessment, it was concluded that in order to get inside, shoring is needed for the safety of the rescue team. According to the statements of neighbors, they heard strange sounds repeatedly three to four hours before and guided rescue team to that location.

# V. Store building hotel partially collapsed

## 2. Information on the exercise site



# V. Store building hotel partially collapsed

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Search for victims using the rescue dogs and technical search equipments

Shore the structures horizontally

Break concrete (dirty cut)

Access to the survivor through the confined space

Withdrawal after marking according to the INSARAG Guideline



# V. Store building hotel partially collapsed

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# V. Store building hotel partially collapsed

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# V. Store building hotel partially collapsed

## Mobilized assets from the Republic of Korea

		Pesonnell	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

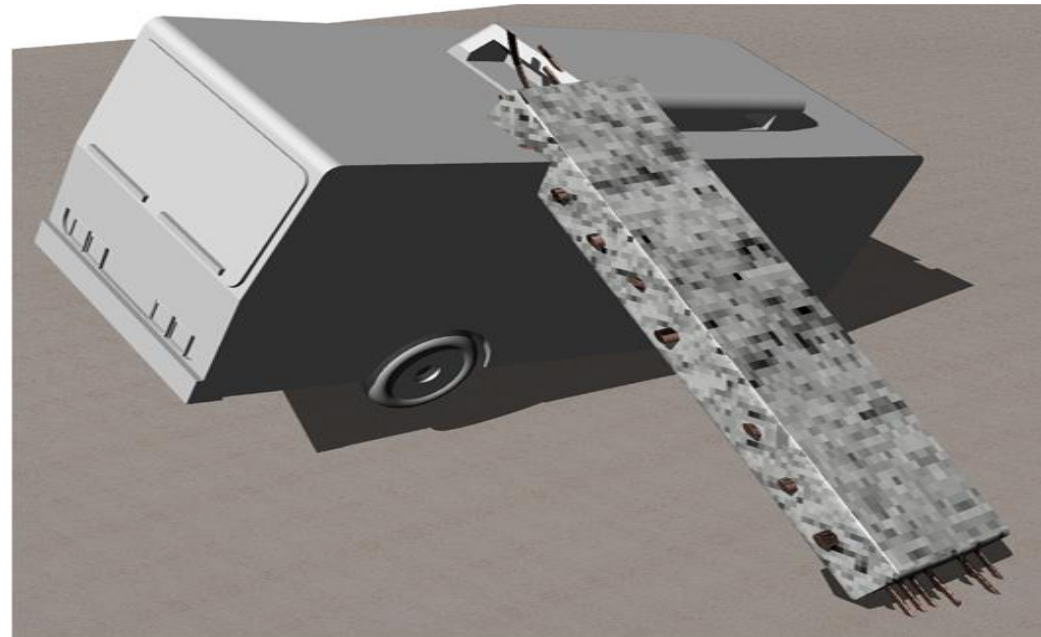
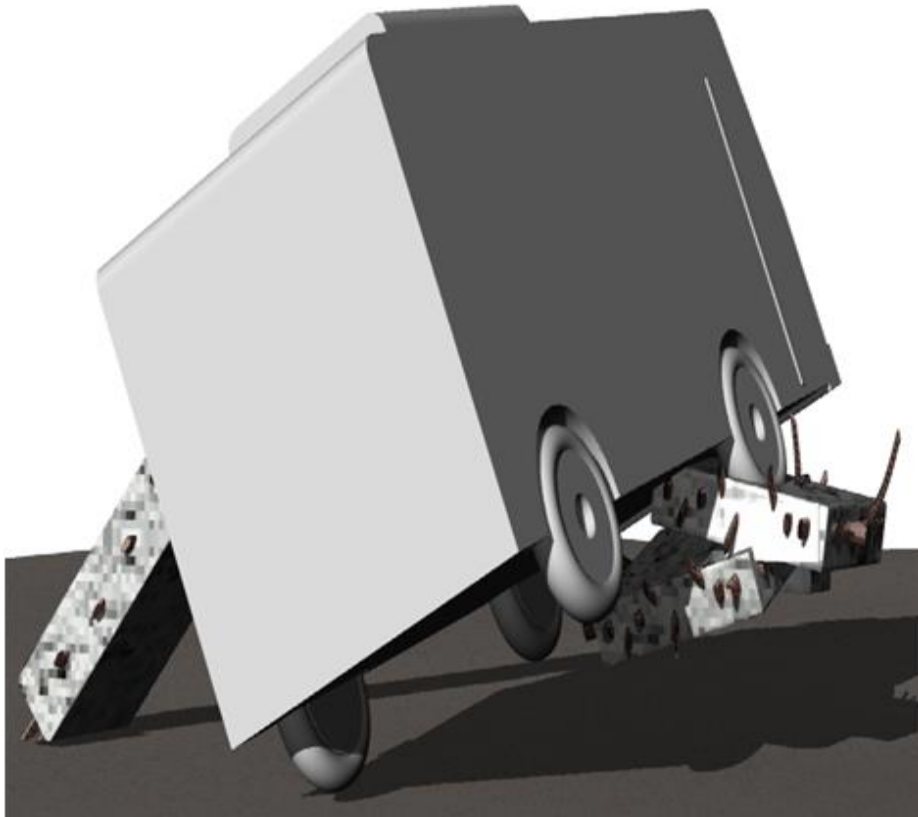
# **VI. Collapsed bridge**

## **1. Situation**

Rescue team is dispatched to a collapsed bridge. Two to three layers of concrete weighting more than twenty tons are stacked on top of each other, with survivors in between them. Rescue team starts a conversation with the survivors after finding them.

# VI. Collapsed bridge

## 2. Information on the exercise site



# VI. Collapsed bridge

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Lift and move the concrete layers

Use air bags and cribbing skill

Break concrete (dirty cut)

Be cautious of crush syndrome

Withdrawal after marking according to the INSARAG Guideline

# VI. Collapsed bridge

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# VI. Collapsed bridge

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue



# VI. Collapsed bridge

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

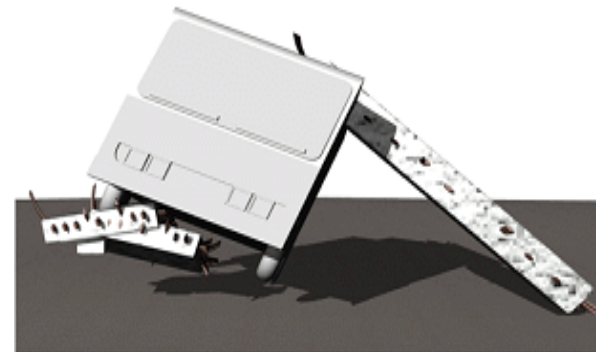
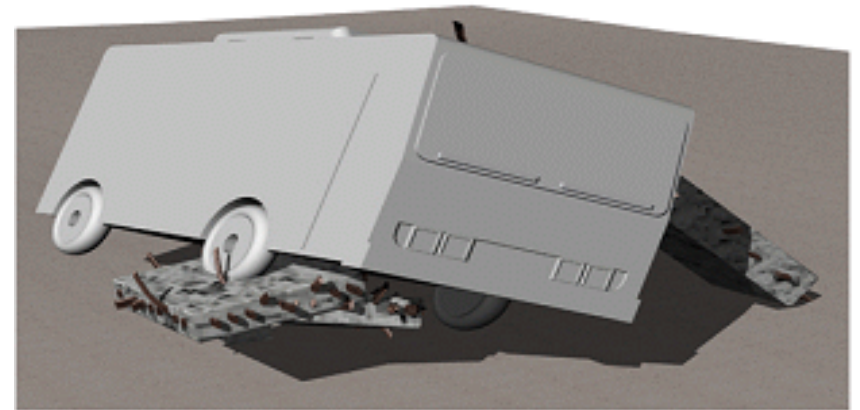
# **VI. Collapsed bridge**

## **1. Situation**

Rescue team is dispatched to the accident between a bus and a car due to earthquakes. The bus collided with an opposite car and was overturned. Many passengers are still in the bus, but the door is severely damaged, making it hard to get inside. Rescuers try to get inside through the window to give first-aid treatment.

# VI. Collapsed bridge

## 2. Information on the exercise site



# VII. Bus incident

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Get into the bus through the windows

Shore the structures horizontally

Move the survivors using the stretchers

Lift and stabilize the bus

Withdrawal after marking according to the INSARAG Guideline

# VII. Bus incident

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# VII. Bus incident

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# VII. Bus incident

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

# **VIII.Store building collapsed**

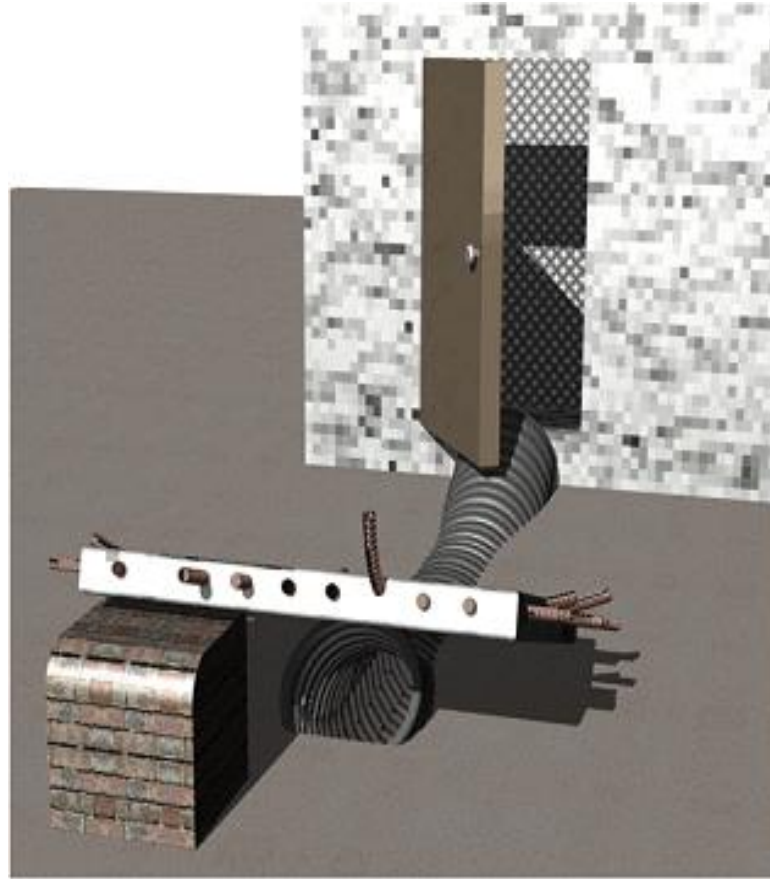
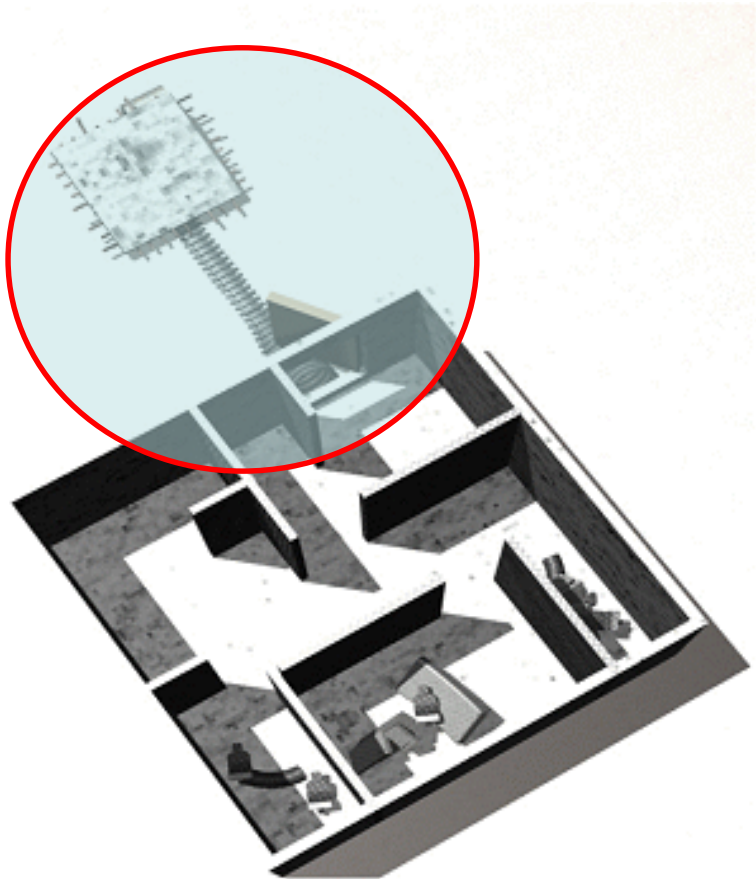
## **1. Situation**

Rescue team is dispatched to a partially collapsed store building. Ground entrance and windows cannot be used as debris covered them. Neighbors are asking for help of those still inside. Engineer says that there is a possibility of additional disruptions and stressed that shoring is requisite to enter the building.



# VIII.Store building collapsed

## 2. Information on the exercise site



# VIII.Store building collapsed

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Enter the building through the sewer system with the personal protective equipments

Check the oxygen content using the gas detector

Shore the ceiling

Search for victims using the rescue dogs and technical search equipments

Withdrawal after marking according to the INSARAG Guideline

# VIII.Store building collapsed

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# VIII.Store building collapsed

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# VIII.Store building collapsed

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	<b>Detection &amp; Analyzing device</b>	4 h
<b>Medical team</b>		2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

Store building collapsed

***FTX Scenario***[Hazmat]

Mobilized assets from the Republic of Korea

- I. Perchloric acid leakage
- II. Toluene* leakage
- III. Phenol leakage
- IV. Hydrogen fluoride leakage

# **I. Perchloric acid leakage**

## **1. Situation**

Hazardous material leaks after a tank lorry truck was overturned by an aftershock. Driver is trapped inside, and with spreads of leaking perchloric acid, people are being contaminated, requiring them to be evacuated.

# I. Perchloric acid leakage

## 2. Information on the exercise site





# I. Perchloric acid leakage

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Detect and analysis the hazardous materials

Set up the Hot Zone and Warm Zone

Rescue the driver

Set up the decon post for decontamination of the contaminated victims

Prevent the leakage

Measure the extent of contamination

Removal the contaminated material

Neutralize the contaminated zone

Decontaminate the rescuers and their equipments

# I. Perchloric acid leakage

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# I. Perchloric acid leakage

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# I. Perchloric acid leakage

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	Detection & Analyzing device, Leakage preventing equipment, PPE(Personal Protective Equipment), Weather measurement equipment, Stretchers, Waste cans, Rescue equipment(hydraulic equipment, etc)	4h
<b>Medical team</b>		2 persons	PPE(Personal Protective Equipment, level-c), Medical equipment(AED, Intubation kit, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

## **II. Toluen leakage**

### **1. Situation**

Hazardous material leaks after a connecting valve of Toluene storage tank was damaged by an aftershock. Without awareness of the incident, all workers kept on working while 500 liters of Toluene leaked out, contaminating workers and some of the neighbors.

# II. Toluene leakage

## 2. Information on the exercise site



## II. Toluene leakage

### 3. The role of participants

#### Rescue team

Shut down the damaged area and gather information

Detect and analysis the hazardous materials

Set up the Hot Zone and Warm Zone

Rescue the driver

Set up the decon post for decontamination of the contaminated victims

Prevent the leakage

Measure the extent of contamination

Removal the contaminated material

Neutralize the contaminated zone

Decontaminate the rescuers and their equipments

## II. Toluene leakage

### Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams



## II. Toluene leakage

### Military team

Aerial reconnaissance to search the affected area

Air medical evacuation (copter and cargo)

Airdrop (copter and cargo)

Flares drop (night time, cargo)

Rescue in collaboration with civil rescue

# II. Toluene leakage

## Mobilized assets from the Republic of Korea

		Personnel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	Detection & Analyzing device, Leakage preventing equipment, PPE(Personal Protective Equipment), Weather measurement equipment, Stretchers, Waste cans, Rescue equipment(hydraulic equipment, etc)	4h
<b>Medical team</b>		2 persons	PPE(Personal Protective Equipment, level-c), Medical equipment(AED, Intubation kit, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

## **III. Phenol leakage**

### **1. Situation**

Hazardous material leaks after a connecting valve of Phenol storage tank was damaged by an aftershock. Without awareness of the incident, all workers kept on working while 500 liters of Phenol leaked out on to the sewage, making a possibility of water supply being polluted.

# III. Phenol leakage

## 2. Information on the exercise site



# III. Phenol leakage

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Detect and analysis the hazardous materials

Set up the Hot Zone and Warm Zone

Rescue the driver

Set up the decon post for decontamination of the contaminated victims

Prevent the leakage

Measure the extent of contamination

Removal the contaminated material

Neutralize the contaminated zone

Decontaminate the rescuers and their equipments

# III. Phenol leakage

## Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# III. Phenol leakage

## Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# III. Phenol leakage

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	Detection & Analyzing device, Leakage preventing equipment, PPE(Personal Protective Equipment), Weather measurement equipment, Stretchers, Waste cans, Rescue equipment(hydraulic equipment, etc)	4h
<b>Medical team</b>		2 persons	PPE(Personal Protective Equipment, level-c), Medical equipment(AED, Intubation kit, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	



## **IV. Hydrogen fluoride leakage**

### **1. Situation**

Hazardous material leaks after a connecting valve of hydrogen fluoride storage tank was damaged by an aftershock, during the gas transferring from the delivering tank. Workers are killed right after the incident while 5000 liters of hydrogen fluoride leaked out to the atmosphere, making a possibility of water supply being polluted.

# IV. Hydrogen fluoride leakage

## 2. Information on the exercise site



# IV. Hydrogen fluoride leakage

## 3. The role of participants

### Rescue team

Shut down the damaged area and gather information

Detect and analysis the hazardous materials

Set up the Hot Zone and Warm Zone

Rescue the driver

Set up the decon post for decontamination of the contaminated victims

Prevent the leakage

Measure the extent of contamination

Removal the contaminated material

Neutralize the contaminated zone

Decontaminate the rescuers and their equipments

## IV. Hydrogen fluoride leakage

### Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

## IV. Hydrogen fluoride leakage

### Military team

Aerial reconnaissance to search the affected area

Air medical evacuation(copter and cargo)

Airdrop(copter and cargo)

Flares drop(night time, cargo)

Rescue in collaboration with civil rescue

# IV. Hydrogen fluoride leakage

## Mobilized assets from the Republic of Korea

		Pesonneel	Equipment	Operation hour
<b>Rescue team</b>		22 persons	Detection & Analyzing device, Leakage preventing equipment, PPE(Personal Protective Equipment), Weather measurement equipment, Stretchers, Waste cans, Rescue equipment(hydraulic equipment, etc)	4h
<b>Medical team</b>		2 persons	PPE(Personal Protective Equipment, level-c), Medical equipment(AED, Intubation kit, etc)	
<b>Military team</b>	<b>Ground rescue</b>	5 persons	-	
	<b>Aerial reconnaissance</b>	2 persons	1 cargo	
	<b>Air medical evacuation</b>	17 persons	1 cargo 1 copter	
	<b>Airdrop</b>	12 persons	1 cargo 1 copter	
	<b>Flares drop</b>	12 persons	1 cargo	

Store building collapsed

## ***FTX Scenario***[Maritime]

Mobilized assets from the Republic of Korea

- I. Ship collision and sinking  
on 'D' sea area**
  
- II. Victims by ship collision  
on the surface 'D2' area**
  
- III. Victims isolated in the island  
by tsunami on 'D' area**

# **I. Ship collision and sinking on 'D' sea area**

## **1. Situation**

Small fishing boat sunk up due to collision and 00 victims on the sea. Have to salvage a sunken ship to prevent pollution by oil leakages. Rescue team(Civil and Navy) get the information and dispatched to that area. Identify sunken ship under water using searching equipment their own. All participating nations discussing to the result. And then survey a sunken ship for more detail. Each countries has result of searching and discuss countermeasures how manage to salvage the ship. Finally, divers in the rescue team try to recover sunken ship. Small container will be simulated sunken ship.



# 1. Ship collision and sinking on 'D' sea area

## 2. Information on the exercise site



# I. Ship collision and sinking on 'D' sea area

## 3. The role of participants

Rescue team (Civil & Military)

Gather information

Identify sunken ship using underwater search equipment(sonar)

Sharing the result of search operation

Salvage the sunken ship

# I. Ship collision and sinking on 'D' sea area

Medical team

: N/A

# I. Ship collision and sinking on 'D' sea area

## Mobilized assets from the Republic of Korea

	<b>Pesonnel</b>	<b>Equipment</b>	<b>Operation hour</b>
<b>Rescue team</b>	8 persons	Boat, Searching equipment, Scuba diving equipment	4 ~5h
<b>Medical team</b>	2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	*10 persons (R.O.K NAVY)	Boat, Searching equipment, Diving	

## **II. Victims by ship collision on the surface 'D2' area**

### **1. Situation**

Ship sunk up due to collision and 00 victims on the sea. 0 victims had serious damage, they need rescue service immediately. All participating nation's Rescue team(Civil and Military) will dispatch to the mission area simultaneously. Prepare their rescue ships(boats) and rescue team, then request the rescue helicopter with Air rescue swimmer Team. 00 rescue boats will pick 00 victims up then move to shore where medical teams standing by. Rescue helicopter will pick 0 victims up then move to field hospital.

# II. Victims by ship collision on the surface 'D2' area

## 2. Information on the exercise site



## **II. Victims by ship collision on the surface 'D2' area**

### **3. The role of participants**

Rescue team(Civil & Military)

Gather information

Rescue the drifting people using boats and helicopters

Hand over the rescued people to the Medial Post

## II. Victims by ship collision on the surface 'D2' area

### Medical team

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams



# II. Victims by ship collision on the surface 'D2' area

## Mobilized assets from the Republic of Korea

	Pesonnal	Equipment	Operation hour
<b>Rescue team</b>	8 persons	Boat, Searching equipment, Scuba diving equipment	4 ~5h
<b>Medical team</b>	2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	*10 persons (R.O.K NAVY) •3 air rescue swimmers (R.O.K NAVY)	Boat, Searching equipment, Diving	

# **III. Victims isolated in the island by tsunami on 'D' area**

## **1. Situation**

00 victims isolated in an island by tsunami. Smoke signal of the victims was found by aerial reconnaissance. All participating nation's Rescue team (Civil and Military) get the information and dispatched to that area. Prepared rescue boats and rescue team. As soon as rescue team arrived, inland survey will be started. Rescue team will pick victims up then move to land & provide emergency care to victims.

# III. Victims isolated in the island by tsunami

## 2. Information on the exercise site

on 'D' area



# III. Victims isolated in the island by tsunami

## 3. The role of participants

on 'D' area

Rescue team(Civil & Military)

Gather information

Rescue the drifting people using boats and helicopters

Hand over the rescued people to the Medial Post

### **III. Victims isolated in the island by tsunami**

#### **Medical team**

#### **on 'D' area**

Provide a first-aid treatment in a confined space after entering in the collapsed structures with rescue teams

Triage the injured

Establish the 'Medical Post(MP)' at the safe area

Provide emergency veterinary care for rescue dogs in collaboration with the rescue dog's handlers

Provide emergency medical care for participants in an actual emergency

Provide patient transferring services by ambulances and helicopters

Keep health and welfare monitoring for all members of rescue teams as well as medical teams

# III. Victims isolated in the island by tsunami

Mobilized assets from the Republic of Korea

on 'D' area

	Personnel	Equipment	Operation hour
<b>Rescue team</b>	8 persons	Boat, Searching equipment, Scuba diving equipment	4 ~5h
<b>Medical team</b>	2 persons	Medical equipment(AED, Power saw, Suction device, Intubation kit, Splint, BVM, Long board with head immobilizer, etc)	
<b>Military team</b>	*10 persons (R.O.K NAVY)	Boat, Searching equipment, Diving	

Store building collapsed  
***FTX Scenario***[Medical]

- I. Field Hospital & Referral hospital

# **I. Field Hospital & Referral hospital**

## **1. Situation**

There are many victims as result of dam collapse caused by recently occurred earthquake. Thai government established shelters for victims and had a plan to establish field hospital to provide basic medical treatment for the victims. Thai government said that foreign medical team is needed and being welcomed. Also, Thai medical team couldn't provide the suitable medical treatments for all injured and chronic patients due to an increase in demand. Especially, the lack of medical teams in local community hospital was severe. In this reason, Thai government called upon foreign medical teams to provide medical treatments to victims in the local community hospitals.



# I. Field Hospital & Referral hospital

## 2. Information on the exercise site



# **I. Field Hospital & Referral hospital**

## **3. The role of participants**

Provide residents who have been evacuated with medical treatment or check-up

Practice 'Needs Assessment' using international tools

Practice cooperative treatment with either Thai and foreign medical teams or foreign medical teams

Provide emergency medical care for participants in an actual emergency

# I. Field Hospital & Referral hospital

Mobilized assets from the Republic of Korea

	<b>Pesonne</b>	<b>Equipment</b>	<b>Operation hour</b>
<b>Medical team</b>	20 persons	6 Field Hospitals	2 days