Annex 5: Working Group Member List

Working Groups

Working Group (WG)		Sub-WG	Member
WG1	**Disaster Management Plan** WG1 Coordinator: **D.Bazarragchaa** Disaster Risk Management Department, NEMA	Risk Assessment Guideline	**D.Serjmyadag** Law Enforcement University of Mongolia **P.Amarzaya** Disaster Research Institute, NEMA **D.Bazarragchaa** Disaster Risk Management Department, NEMA **B.Batbayar** Disaster Risk Management Department, NEMA
		Disaster Management Planning Guideline, Preparedness Planning Guideline and Risk Management Guideline	**B.Bayanmunkh** Policy Coordination and Cooperation Department, NEMA **B.Myagmardorj** Disaster Operation Department, NEMA **Ch.Otgontugs** Fire Department, NEMA **E.Batbayar** EMDC **A.Dashnyam (new member)** EMDC
		Database Guideline	**B.Purevnyam** Public Announcement and Emergency Administration Center, NEMA **D.Badamsuren** Disaster Research Institute, NEMA **D.Sodnomragchaa** Disaster Research Institute, NEMA **B.Boldkhuu** Public Announcement and Emergency Administration Center, NEMA
		Agreements & White papers	**E.Altankhishig** Policy Coordination And Cooperation Department, NEMA **B.Duvshin** Disaster Risk Management Department, NEMA
WG2	**Seismic Resistance** WG2 Coordinators: **D.Zanabazar** MCUD **Z.Battulga** Disaster Operation Department, NEMA	Seismic Diagnosis of Buildings	**D.Zanabazar** MCUD **Z.Battulga** Disaster Operation Department, NEMA **Sh.Uranchimeg** General Agency for Specialized Inspection **N.Ganchimeg (new member)** General Agency for Specialized Inspection **B.Tsend-Ayush** Master Planning Agency of Capital City, Construction Quality and Safety Department **G.Saruultuya** Construction Development Center **G.Erkhembayar** MCUD **B.Gantulga** Land Management, Geodesy and Cartography Agency, MCUD **Ts.Khulan (new member)** Master Planning Agency of Capital City, Construction
		Seismic Diagnosis of Infrastructures and Lifelines	**D.Zanabazar** MCUD **Z.Battulga** Disaster Operation Department, NEMA **Sh.Uranchimeg** General Agency for Specialized Inspection

Working Group (WG)		Sub-WG	Member
			N.Ganchimeg (new member) General Agency for Specialized Inspection **B.Munkhsaikhan** General Agency for Specialized Inspection **T.Galbadrakh** Finance and Logistics Department, NEMA **B.Gantulga** Land Management, Geodesy and Cartography Agency, MCUD
		Design for Seismic Strengthening	**D.Zanabazar** MCUD **Z.Battulga** Disaster Operation Department, NEMA **B.Tsend-Ayush** Master Planning Agency of Capital City, Construction Quality and Safety Department **G.Saruultuya** Construction Development Center **G.Erkhembayar** MCUD **Ts.Khulan (new member)** Master Planning Agency of Capital City, Construction
WG3	**DRR Education** WG3 Coordinator: **D.Munkhbat** Disaster Prevention Department, NEMA	School DRR Education	**J.Myagmar** MECSS **Ch.Gantsetseg** MECSS **P.Baljinnyam** MECSS **G.Mongolkhatan** Education Research Institute, MECSS **B.Erdenechimeg** Education Research Institute, MECSS **A.Enkhtogtokh** Education Research Institute, MECSS **G.Khaliun (new member)** Education Research Institute, MECSS **Munkhbayar (new member)** ITPD **D.Munkhbat** Disaster Prevention Department, NEMA **O.Tsend-Ayush** Disaster Prevention Department, NEMA
		Community DRR Education	**D.Munkhbat** Disaster Prevention Department, NEMA **D.Bat-Erdene** Disaster Prevention Department, NEMA **B.Uuriingegee** EMDC **B.Chinbat (new member)** EMDC **D.Dulamsuren** Public Information Center, Disaster Prevention Department, NEMA **S.Amgalan** Administrative Management Department, NEMA **M.Amartungalag** MECSS

Annex 6: O&M Plans

Operation and maintenance plan of procuring earthquake experience equipment for disaster prevention awareness of "DRR Training Center"

2017.06.29 NEMA

1. Introduction

This plan includes an introduction, operation and maintenance guide of procuring earthquake experience equipment within "The Project for Strengthening the National Capacity of Earthquake Disaster Protection and Prevention" in Mongolia" in "DRR Training Center"(temporary name) (hereinafter referred to as "Center").

2. The Roles and Importance of the Training Program and Equipment

1. Training program

Background

The current training program was approved through decree A/67 of the NEMA on October 2016 in connection with the opening of the DRR training center and during the implementation of the training, the need emerged to further refine the training program. The project to refine the training program was developed as a result of the discussion between Working Group 3.2 and training center instructors.

Contents of the training program

The training center's comprehensive DRR knowledge and practice program, as well as the training hall activities are included in the training program.

The comprehensive DRR knowledge and practice program aims to provide a sensory experience of potential disasters and instill the mindset for taking appropriate protection and prevention measures, and is composed of the following sections:

- Background,
- Objectives,
- Goals of the activities held in the training halls such as the movie theater, earthquake experience room, and the smoky environment experience room.
- The training program includes the training agendas for each classification of trainees that details the activities and exercises along with the time allotted to each of them.

Since there are not many occurrences in Mongolia of earthquakes that can be noticably felt, the earthquake experience equipment included in the comprehensive DRR knowledge and practice training program is significant in that it provides the opportunity to feel the tremors of a large earthquake in order to gain an understanding of earthquakes, learn to protect oneself and others in the event of an earthquake, learn about mitigating damages, as well as other appropriate measures to take.

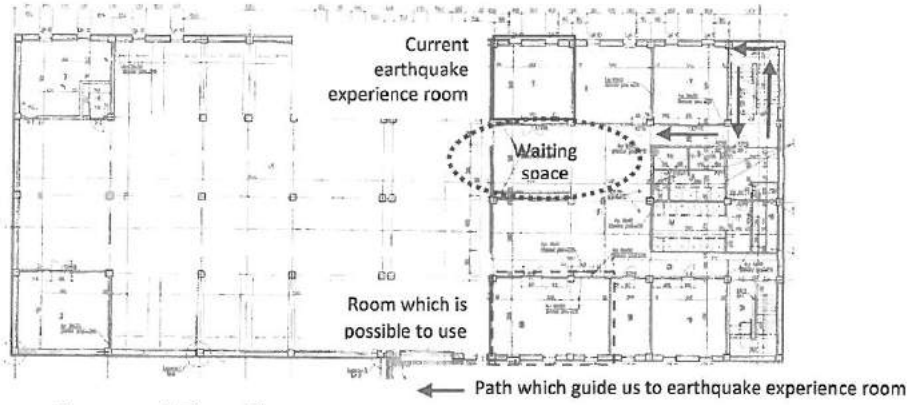
Please refer to the section titled "Project on Refining the Comprehensive DRR Knowledge and Practice Training Program" in Appendix 1 for the detailed contents of the comprehensive training program, and to Appendix 2 for the DRR training agenda. The comprehensive training program (hereinafter referred to as "proposal to refine the program") is planned to be approved through a decree issued by the head of the NEMA.

2. Operating conditions

The conditions for operating the training equipment were calculated according to a daily capacity of 300 people for 200 days per year (4 days per year).

3. Installation place

We assumed to use one room in basement in the training center as an earthquake experience room (internal space 6.16 m × 5.93 m, ceiling height 3400 mm, with beam exit) (see floor plan). Also, it is supposed to be a replacement room slightly wider than the current earthquake experience room (current rescue equipment storage room).



Basement Floor Plan

Front view of Center

Installation room

Current condition of installation room

(Temporarily installed shaking table)

4. Organizing conditions related to equipment procuring

1) Carrying in route

As for carrying equipment, it can be carried in from the garage of DRR training center. In addition, the walls of the earthquake experience room are a brick structure (non-earthquake resistant walls), and it is necessary to temporarily remove it at the time of carrying the equipment.

2) Matters regarding installation

After installed, the equipment will be fastened into the floor by using a post-installed anchor, and the Mongolian side will install it as needed. Also, since it is necessary to set up a foundation with a certain weight under the equipment to manage vibration, it is necessary to remove the existing concrete slab and to provide a foundation with sufficient strength and weight according to the situation of the procuring equipment.

5. Consideration related to procurement of equipment

1) Propriety of earthquake experience room

Based on the general specifications of earthquake experience equipment, confirm the validity of the existing earthquake experience room. Specific confirmation items are as follows.

- Indoor dimension

Width (from wall to wall) 5400 + 350 * 2 = 6100

Depth (from wall to wall) 5900

Ceiling height (from the lower end of the upper floor to the upper end of the relevant floor slab) 3450

Ceiling height 3400

Based on this, a layout diagram of the experience device is created.

- Floor slab strength

The current floor is dirt floor concrete. Since details of the floor are unknown, it is desirable to re-do the floor. In that case, chipping the existing floor, compacting of soil's, and placing dirt floor concrete (t = 300, the upper end muscle lower end muscle D16 - @ 200, cutting the edges so that vibration is not transmitted to the surroundings).

2) Consideration of earthquake experience equipment

Consider the assumed equipment composition.

(1) Vibration exciter

In order to do vibrations, the main device that generates the vibration basically split (divides) the vibration into several parts in a three-dimensional flow and gives the movement in two directions in the direction of the piston in each direction. The shaking table maker company expresses the number of divisions of the vibration motion by the cylinder axis of this piston and displays it as two axes (two directions) and six axes (division in six directions). Since it is said that six axes can sufficiently represent any earthquake, we intend to introduce a 6-axis shaking table. The cylinder is driven by a servo motor that is easy to maintain.

(2) Experience stage

From the viewpoint of safety fix the floorboards and handrails of experiencing person free space as a robust steel framework which is installed on the vibration exciter. The handrail can withstand the acceleration at the time of reproducing the earthquake motion with a margin. The furniture is a chair, table, and receives earthquake motions frequently, so it shall have appropriate strength.

(3) Operating equipment

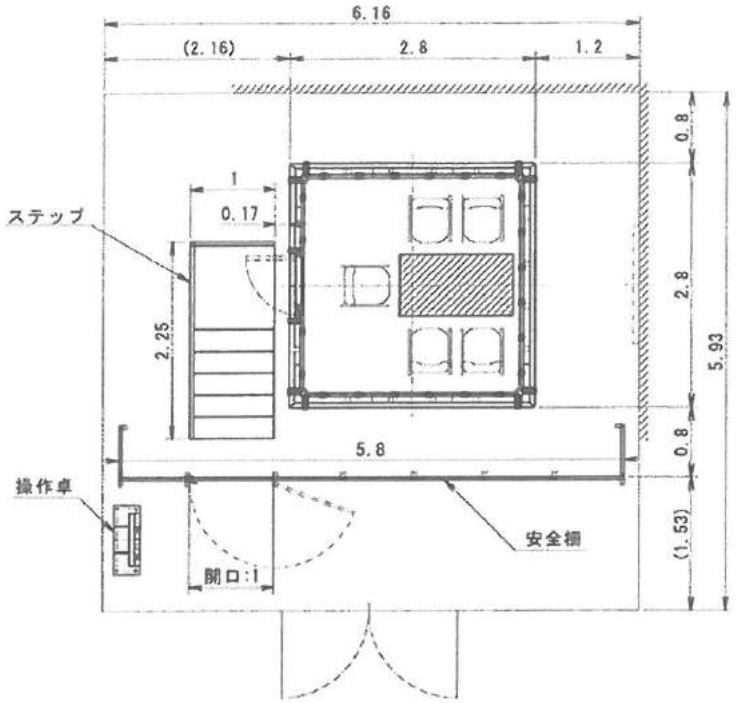
Considering the operation environment, the operation device is an operation console type, a touch panel type PC is embedded, and a key switch and an emergency stop switch are also embedded.

(4) Visual system

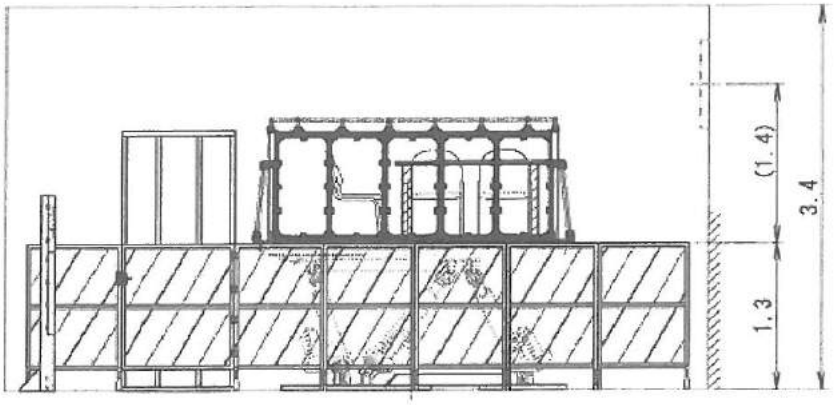
We set up display and narration on experience program reflecting the situation at the time of earthquake to feel more real things.

(5) Other

Establish installation of safety fence, steps, etc around the shaking table.



Layout plan (draft)



Layout elevation view · Outside side of safety fence (draft)

6. Summary of equipment procurement

1) Division of work related to equipment introduction

Table 1 Condition for introducing equipment

	Mongolian side	Japanese side	Remarks
Procurement preparation			
Survey	Discussion of introduction	Introduction survey	This survey
Request	Create O & M letter		
Procurement decision		Content of procurement, decision of whether or not	
Procurement			
1. Advance preparation	①Renovation of installed		

	slabs ② Installation of anchors ② Installation of switchboard		
2. Transportation of equipment	①Receiving, transportation (including customs)		
3. Installation	① implementation of the carry-in ② Installation and adjustment assistance	① Installation and adjustment	It is assumed that according to installation date Japanese manufacturer will come in Mongolia
4. Control · Maintenance	① O & M ②implementation of regular maintenance	① Field training for staff in charge	Conducting training for the training center staff by the manufacturer company specialist after installation

2) Equipment introduction assumption procedure

Work item		2017												2018		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	
Assumed schedule of Japanese side																
Review by the project team																
1	Consideration of equipment and installation method	■	■	■	■	■	■									
Japanese side procurement procedure																
2	Review of equipment content						■									
3	Procurement							■	■							
4	Equipment production, adjustment (Maker)								■	■	■	■				
5	Unloading / sending												■			
Assumed schedule of Mongolian side																
Mongolian side acceptance procedure																
6	Create O & M letter		■	■	■	■	■									
7	Advance preparation									▪	▪	▪	▪			
8	Carry in / installation													■		
9	Operation training													■		
	Operation														■	■

3) Check items of Mongolian side regarding to introduce equipment

(1) Advance preparation

- Improvement of installed slab

Make the foundation of the building of the earthquake experience equipment as the reinforced foundation concrete structure that can withstand the vibration of the equipment.

- Installation of anchors

Establish an anchor corresponding to the specifications of earthquake experience equipment.

- Installation of distribution board

Establish a distribution board corresponding to the specifications of earthquake experience equipment.

(2) Equipment transport

- Tax exemption procedure

If JICA side will submit the necessary documents for the customs duty free procedure Mongolian side will take responsibility of tax exemption procedure.

- Receiving and transporting at customs

We will carry it from the check post of Mongolian Customs to the training center.

(3) Installation

- Input, installation

Assemble and install in cooperation with the person in charge of earthquake experience equipment maker.

(4) Control Maintenance

- Control and maintenance system

The person in charge of earthquake experience equipment in training center will control and manage it follow by center program.

- Measure relating on budget

NEMA will take responsibility of maintenance cost for earthquake experience equipment.

Appendix 1

TRAINING PROGRAM ORGANIZED BY THE ULAANBAATAR CITIZENS' DISASTER RISK REDUCTION (DRR) TRAINING CENTER TO PROVIDE KNOWLEDGE AND PRACTICE RELATED TO DISASTER RISK REDUCTION FOR PRESCHOOLERS, SECONDARY SCHOOL STUDENTS AND CITIZENS.

Legal basis:

According to primary objective 1 (Understanding disaster risk) of the Sendai Framework for Disaster Risk Reduction to be implemented worldwide between 2015-2030, there is a need to develop a national strategy to improve public knowledge, education and understanding of DRR through the following means: (l) incorporating disaster risk knowledge that includes activities related to disaster prevention, risk reduction, ensuring preparedness, mitigating damages, disaster restoration and recovery into official and unofficial disaster education programs, the disaster education of citizens at all levels, and professional training programs; (m) organizing a campaign that addresses the needs and specificities of the public, and raising awareness through media outlets.

In line with this global framework, Article 13 of the Mongolian Disaster Law (amended version) passed in 2017 states that citizens shall be provided with disaster protection education through training programs and public awareness activities that shall be conducted in a systematic manner according to a specially planned program, and that these disaster protection training programs and public awareness activities shall be directed at improving the knowledge and expertise of state and regional administrative institutions, employees and officials of legal entities, and private citizens.

In this regard, the Ulaanbaatar Citizens' DRR Training Center was established in October 2016 with the purpose of providing disaster protection education and awareness to preschoolers, secondary school students, and private citizens.

Needs and requirements: Nowadays, technological advance has introduced faster, autonomous, more comprehensive and more responsive disaster management tools; and therefore officials are required to have a higher level of knowledge and expertise in order to be able to effectively provide citizens with elementary training and education for protecting themselves and others in the event of a disaster.

As such, in order to conduct DRR training directed at citizens, the successful acquisition of technical knowledge and expertise of newly developed technologies is required.

Objective:

The objective of the training program is to develop an effective sense-oriented approach to disaster protection education aimed at pre-schoolers, secondary school students and citizens based on their classification. The training program will provide them with knowledge on the disaster risks facing Mongolia and their potentially devastating impact through "seeing", "hearing", "touching" and "feeling" sensory inputs; teach them correct habits for safe living; and train them in elementary procedures for rescuing themselves and others in the event of a disaster.

Types of Disaster Protection Training Halls, and their Arrangement:

1. 3D Movie Theater

Trainees will, according to their age, be shown specially prepared documentary films that aim to provide visual disaster protection education using legally defined terms such as disaster, emergency, accident, disaster risk, hazards, vulnerability, disaster protection activities, disaster risk reduction activities, disaster announcement, search and rescue activities, disaster point of origin, victims, disaster relief efforts, disaster aftermath, damage reduction, immediate restoration activities, disaster response force, volunteer team etc.

2. Smoky Environment Training Hall

A specially designed hall in which to conduct training on formulating escape plans in smoky environments caused by fire, crouching or crawling through smoky exits, covering respiratory organs such as the mouth and nose with a wet cloth, and safely navigating through areas with the guidance of escape signs. Trainees will also improve their knowledge on the dangers that arise from smoke and reduced visibility, as well as learn to make decisions calmly.

3. Fire Hazard Prevention Training Hall

Trainees will learn about the different causes of fires (natural and man-made causes), factors that cause fires, the fire triangle, and fire fighting equipment. Trainees will then participate in a virtual training program to learn how to correctly select and use fire extinguishers, and will then practice extinguishing an on-screen fire. Trainees will also learn to: contact the emergency numbers 101 and 105 without delay in the event of a fire, extinguish fires with the material at hand, and request assistance from neighbors.

4. Infant Safety Training Hall

Trainees will obtain knowledge on hazards and accidents and learn to execute methods on preventing risks and protecting themselves from danger.

5. First Aid Medical Training Hall

Trainees will, with the help of educational equipment, learn how to administer first-aid medical assistance to people affected by water-related accidents or who are unconscious through cardiopulmonary resuscitation (CPR), haemostasis, splinting broken limbs, and taking rescue measures in the event of gagging and seizures. Trainees will also learn to call an ambulance through the number 103, provide elementary medical assistance, and request help from people nearby.

6. Earthquake Experience Hall

Trainees will sit on the earthquake platform and experience the tremors of a strong earthquake in order to better understand that during an earthquake people are overtaken

by panic, lose control of their movements, and face the risk of falling objects and buildings. Trainees will learn methods to protect themselves and others in the event of an earthquake. Furthermore, trainees will learn how to prevent secondary risks, mitigate damages, learn about what to focus on in order to not further increase damages, and learn to take risk prevention measures in normal situations such as fastening the necessary objects and furniture, and freeing up emergency exits.

7. Rescue from Height Training Hall

Trainees will learn about the risks related to falling from heights and rescue strategies through indoor climbing exercises, rope tying methods, and elementary safety precautions.

Principles to Follow in Implementing the Training:

1. The training shall be based on the vision, mission and stategic goals of the National Emergency Management Agency;

2. Trainees shall be informed of disaster management legislation, its changes, and the requirements placed on society;

3. The training shall be based on student-teacher cooperation, active participation, initiative, and productivity;

4. Maintaining trainees' faith in the program and their desire to learn;

Participants to the Training: Officials from institutions in charge of emergency situations, preschoolers, secondary school students, and citizens.

Results to be Reached: Improving the disaster protection knowledge of citizens, who will obtain the elementary skills to protect themselves and others in the event of a disaster.

Duration: Regular intervals of 4 weekdays.

Implementation Method: Hands-on training using technical equipment shall be carried out in two-hour sessions.

Goals:

1. Preschoolers

- Begin to learn self-protection practices and gain an understanding of hazards and accidents with the help of caretakers;

2. Secondary School Students

- Understanding potential hazards and their prevention, developing preparedness and responsiveness to emergencies, acquisition of skills to protect themselves and others, learning to provide first-aid assistance, volunteering, learning to be adaptable, adopting habits that promote safe living, becoming an active citizen;

3. Citizens

- Understanding potential hazards and their prevention, acquisition of skills to protect themselves and others, developing the preparedness of themselves and their households for emergencies, taking responsive action to reduce risk, learning to provide first-aid assistance, volunteering in regional disaster protection activities, providing support;

The training program has been planned in the following manner for the three classifications mentioned above.

One. Training Program to Provide Preschoolers with DRR Knowledge and Practice

№	Exercise Topic	Total Time (minutes)
1	3D Movie Theater (providing elementary information and conceptualization of disasters)	15
2	Forming an idea of smoke emergencies and learning to escape from smoky environments	20
3	Forming an idea of fire emergencies and beginning to learn self-protection methods	20
4	Forming an idea of hazards and accidents, beginning to learn self-protection methods, and learning how to safely evacuate their school buildings and homes.	20
5	Learning about the dangers of earthquakes, self-protection methods, and getting to safety with the guidance of adults.	20
Total (time)		1 h 35 m

Expected Results of the Training Program to Provide Preschoolers with DRR Knowledge and Practice

Topic	Contents	Expectations from Trainees
3D Movie Theater (providing basic information and conceptualization on disasters)	"Mazaalai" animated film (earthquakes, floods, thunder and lightning, building fires, wildfires, epidemics, strong winds, droughts).	Forming a concept of disasters and accidents, and telling their friends and family about it.
Experienceing and Escaping from Smoky Evironments	Conceptualizing smoke emergencies, quickly escaping from smoky environments, providing assistance, covering their mouths and noses with wet cloth, lying on the ground or crawling due to low visibility, learning how to crouch and calmly search for an exit.	Safely evacuating homes and school buildings in the event of a smoke. Gathering at the spot designated by the teacher.

Fire Hazards, Electrical Appliances and Household Accidents	Gaining an understanding about the causes of fire and taking precautions. Electrical appliances that cause fires or can potentially cause fires. (matches, candles, lighters, irons, water boilers, fire pans, stoves, ovens, electric cables, power sockets etc.) Quickly getting to safety and requesting assistance in the event of a fire.	Not playing with matches and lighters, and advising their friends about the dangers of fire. Staying away from electrical appliances and not touching or handling them. Playing away from hot stoves and ovens.
Maintaining Infant Safety (Exit)	Forming a concept of hazards and accidents, learning methods to protect themselves from accidents, and safely evacuating their homes, schools, and surroundings in the event of an accident.	Safely evacuating their homes and schools when necessary. Gathering at the spot designated by the teacher.
Earthquake Hazards, and Self-Protection	Learning about earthquake hazards (destruction of buildings, falling objects, understanding that earthquakes can happen anywhere at anytime). Experiencing earthquake tremors, learning about the actions to take in the event of earthquakes in order to protect themselves (SIT, HIDE, WAIT) Evacuating the building as soon as the first tremor stops. (NO RUNNING, NO PUSHING, NO TALKING, NO TURNING BACK) Moving to a safe location.	Protecting themselves from falling objects by hiding under strong tables when earthquake tremors occur. Keeping calm and evacuating the building in an orderly manned while refraining from pushing each other, turning back, shouting and clamoring. Protecting their heads with a hard object (bag, book, pillow etc.) from falling objects when evacuating the building. They will have determined a safe location to meet their parents and teachers in an open space outside their homes and schools.

Two. Training Program to Provide Secondary School Students with DRR Knowledge and Practice

№	Topic	Junior Grades	Middle Grades	Senior Grades
1	3D Movie Theater (providing elementary knowledge on disasters).	20	20	20
2	Gaining an idea of smoke emergencies, and escaping smoky environments.	20	20	20
3	Gaining an idea of fire emergencies, and beginning to learn self-protection methods.	20	20	20

4	Forming a concept of hazards and accidents, beginning to learn methods of self-protection, and learning how to safely evacuate their homes and schools in the event of an accident.	20	-	-
5	Providing first-aid medical assistance.	-	20	20
6	Learning about the dangers of earthquakes, self-protection methods, and getting to safety with the guidance of adults.	20	20	20
7	Learning to protect themselves from fall from heights with ropes, indoor climbing activities.	-	-	20
	Total (hours, minutes)	1.40	1.40	2

One. Training Plan by Topic to Provide Secondary School Students with DRR Knowledge and Practice

Junior Grades 1 hour 20 minutes

Topic	Contents	Allotted Time (minutes)	Total Time (minutes)
3D Movie Theater (providing elementary knowledge on disasters)	"Mazaalai" animated film (earthquakes, floods, thunder and lightning, building fires, wildfires, epidemics, strong winds, droughts). As well as risk prevention practices against floods such as chest compression and artificial respiration, methods to prevent the spread of infectious diseases to humans and animals, and video demonstrations of these methods.	20	80
Fire Hazards, Escaping Smoky Environments	- What causes fires? - What is the fire triangle? - Learning to contact the emergency numbers 101 and 105 without delay in the event of a fire, and requesting assistance from neighbors; - Warnings against leaving small children unattended and locking their exits from outside; - Information on the risks posed by candles, matches, damaged electrical appliances, mobile phones, chargers and earphones, and advice against their prolonged usage in case of an emergency; - Advice against incorrect, arbitrary treatment of burns (soap, sugar), and examples of the risks such treatments pose; - About Smoke: Discussion on the gradual spreading of smoke at the beginning of a fire;	20	

	- Information and exercises on how to bring oneself and others to safety from a smoky environment; - Information on covering the mouth and nose in a smoky environment, lying on the ground and crawling due to low visibility, and calmly locating the exit to crouch out into safety; - Strengthening the new knowledge gained, and dividing the trainees into groups of two in the training hall for an on-screen virtual fire extinguishing practice session,		
Household Electrical Appliances, and Reducing the Risk of Fire	- Providing advice on not using damaged electronic appliances, and encouraging the habit of disconnecting phone chargers and other electronic appliances from their sockets; - Providing knowledge and practice on not touching stoves, electrical sockets, water boilers and refrigerators with wet hands, and not using water on burning electronic devices.	20	
Earthquake Hazards, Self-Protection	- Understanding earthquake hazards (destruction of buildings, falling objects, closing of roads, understanding that earthquakes can happen anywhere at anytime, thinking about precautionary measures); - Experiencing earthquake tremors, learning about the actions to take in the event of earthquakes in order to protect oneself, and requesting assistance (SIT, HIDE, WAIT); - Evacuating the building as soon as the first tremor stops. (NO RUNNING, NO PUSHING, NO TALKING, NO TURNING BACK); - Moving to a safe location; - Determining a safe location to meet their parents and teachers in an open space outside their homes and schools; - Knowing about the items that could potentially pose a threat at home and at school, and knowing the locations of safe spots.	20	
Total (hours, minutes)			1.40

Middle Grades 1 hour 40 minutes

Topic	Contents	Allotted Time (minutes)	Total Time (minutes)
3D Movie Theater (providing elementary knowledge on disasters)	Documentary on earthquake disasters and their devastating effects – conditions of earthquake disasters, their duration, and damage evaluation. Video lesson on risk prevention practices against floods such as chest compression and artificial respiration. Video lesson on forest fire prevention and the measures to take in the event of burns.	20	

	Video lesson on preventing the spread of infectious diseases to humans and animals, and the measures to take.		100 minutes
Fire Hazards, Escaping Smoky Environments	- What causes fires? - What is the fire triangle? - Learning to contact the emergency numbers 101 and 105 without delay in the event of a fire, and requesting assistance from neighbors; - Advice on not starting open fires on school trips unless it is necessary and in case fires are started, extinguishing them properly; - Learning about the factors that cause intentional and unintentional fires; - Advice on not smoking in forbidden areas and thoroughly extinguishing cigarettes; - About smoke: discussion on the different types of smoke and their harmful effects; - Information and exercises on how to bring oneself and others to safety from a smoky environment; - Information on covering the mouth and nose in a smoky environment, lying on the ground and crawling due to low visibility, and calmly locating the exit to crouch out into safety; - Information on escape exit signs, and providing examples; - Strengthening the new knowledge gained, and dividing the trainees into groups of two in the training hall for an on-screen virtual fire extinguishing practice session.	20	
Household Electrical Appliances, and Reducing the Risk of Fire	- Advice on not using damaged electrical appliances, ensuring their proper functioning, promoting the habit of disconnecting phone chargers and other electrical appliances from their sockets, and discussing examples with trainees; - Providing knowledge and practice on not touching stoves, electrical sockets, water boilers and refrigerators with wet hands, and not using water on burning electronic devices, - Warning against the use of gas for household purposes, and in the case of its use, providing advice on ensuring full safety, - Placing fire extinguishers at home, the office and the car, and exercises to practice using fire extinguishers.	20	
Earthquake Hazards, Self-Protection and the Protection of Others	- Gaining an understanding of earthquake hazards; - Information on earthquakes that have occurred in Mongolia; - Learning about the methods to ensure preparedness for earthquake disasters, and methods to rescue and protect oneself and	20	

	others; - Experiencing earthquake tremors, learning about the actions to take in the event of earthquakes in order to protect oneself, and requesting assistance (SIT, HIDE, WAIT); - Evacuating the building as soon as the first tremor stops. (NO RUNNING, NO PUSHING, NO TALKING, NO TURNING BACK); - Moving to a safe location; - The purpose and importance of earthquake escape drills; - Understanding the importance of household disaster planning; - Knowing about the items that could potentially cause pose a threat at home and at school, knowing the locations of safe spots, using the materials at hand to provide first-aid medical assistance, and learning to make paper cups.		
Providing First-Aid Medical Assistance	- Learning how to administer first-aid medical assistance to people affected by water-related accidents or who are unconscious through cardiopulmonary resuscitation (CPR), haemostasis, splinting broken limbs, and taking rescue measures in the event of gagging and seizures, with the help of training equipment; - Calling an ambulance through 103; - Providing first-aid medical assistance, requesting help from people nearby.	20	
Total (hours, minutes)			1.40

Senior Grades 2 hours

Topic	Contents	Allotted Time (minutes)	Total Time (minutes)
3D Movie Theater (providing elementary knowledge on disasters)	Documentary on earthquake disasters and their devastating effects – conditions of earthquake disasters, their duration, and damage evaluation. Video lesson on risk prevention practices against floods such as chest compression and artificial respiration. Video lesson on forest fire prevention and the measures to take in the event of burns. Video lesson on preventing the spread of infectious diseases to humans and animals, and the measures to take.	20	120 minutes
Fire Hazards, Escaping Smoky Environments	- What causes fires? - What is the fire triangle? - Learning to contact the emergency numbers 101 and 105 without delay in the event of a fire, and requesting assistance from neighbors; - Advice on not starting open fires on school trips	20	

	unless it is necessary and in case fires are started, extinguishing them properly; - Learning about the factors that cause intentional and unintentional fires (not igniting dry, year-old grass and disposing of them safely) - Advice on not smoking in forbidden areas and thoroughly extinguishing cigarettes; - Warnings related to burns, smoke inhalation, and death from fires, and providing advice for ensuring fire safety; - Advice on using materials at hand (fire extinguisher, thick wet cloth, dust and sand etc.) to extinguish fires, and practicing using a fire extinguisher to quickly put out fires as they start; - Discussion on different types of fire extinguishers and their composition; - About Smoke: Discussion on the gradual spreading of smoke at the beginning of a fire; - Discussion on the different types of smoke and their harmful effects; - Information and exercises on how to bring oneself and others to safety from a smoky environment; - Information on covering the mouth and nose in a smoky environment, lying on the ground and crawling due to low visibility, and calmly locating the exit to crouch out into safety; - Information on the risk of death due to damage to the nervous system caused by smoke inhalation; - Warnings against leaving small children unattended and locking their exits from outside, followed by discussion with examples; - Strengthening the new knowledge gained, and dividing the trainees into groups of two in the training hall for an on-screen virtual fire extinguishing practice session.		
Household Electrical Appliances, and Reducing the Risk of Fire	- Advice on not using damaged electrical appliances, ensuring their proper functioning, and promoting the habit of disconnecting phone chargers and other electrical appliances from their sockets, as well as providing information on the risks posed by mobile phones and earphones and advice against their prolonged usage; - Providing knowledge and practice on not touching stoves, electrical sockets, water boilers and refrigerators with wet hands, and not using water on burning electronic devices; - Warning against the use of gas for household purposes, and in the case of its use, providing advice on ensuring full safety; - Developing the habit of disconnecting unused electrical appliances from their sockets;	20	

	- Placing fire extinguishers at home, the office and the car, and exercises to practice using fire extinguishers.		
Determining and Preventing Earthquake Hazards, Self-Protection and the Protection of Others	- Gaining an understanding of earthquake hazards; - Information on earthquakes that have occurred in Mongolia; - Learning about the methods to ensure preparedness for earthquake disasters, decision-making methods, and methods to rescue and protect oneself and others; - Experiencing earthquake tremors, becoming adept in the actions to take in the event of earthquakes in order to protect oneself and others (SIT, HIDE, WAIT); - Evacuating the building as soon as the first tremor stops and ensuring the safety of the people neraby (NO RUNNING, NO PUSHING, NO TALKING, NO TURNING BACK); - Actively participating in the organized effort to move to a safe location (escape shelter etc.); - Understanding the purpose and importance of emergency drills and actively participating in them; - Gaining the competence to develop household disaster plans; - Knowing about the location of items that could potentially pose a threat at home and at school, and advising others of them; - Using the materials at hand to provide first-aid medical assistance, and teaching others to make paper cups.	20	
Providing First-Aid Medical Assistance	- Learning how to administer first-aid medical assistance to people affected by water-related accidents or who are unconscious through cardiopulmonary resuscitation (CPR), haemostasis, splinting broken limbs, and taking rescue measures in the event of gagging and seizures, with the help of training equipment; - Calling an ambulance through 103; - Providing first-aid medical assistance, requesting help from people nearby.	20	
Rope Tying Methods and Indoor Climbing for Protection Against Fall from Heights	- Learning about fall hazards and rescue methods through indoor climbing and rope tying practices, as well as acquiring basic knowledge on ensuring safety.	20	
	Total (hours, minutes)		2

Three. Training Program to Provide Citizens with DRR Knowledge and Practice

Training Subject	Citizens
3D Movie Theater (providing elementary knowledge on disasters)	20
Fire Hazards, Escaping Smoky Environments	20
Household Electrical Appliances, and Reducing the Risk of Fire	20
Providing First-Aid Medical Assistance	20
Rope Tying Methods and Indoor Climbing for Protection Against Fall from Heights	20
Measures to Take During Earthquakes	20
Total (hours, minutes)	2

Training Plan by Topic to Provide Citizens with DRR Knowledge and Practice

Citizens 2 hours

Topic	Contents	Allotted Time (minutes)	Total Time (minutes)
3D Movie Theater (providing elementary knowledge on disasters)	Video lessons on different types of disasters and hazardous situations (earthquakes, droughts, floods, human and animal epidemics, strong snow and dust storms, wildfires etc.)	20	
Fire Hazards, Escaping Smoky Environments	- Providing an understanding of fires, the factors that play a role in starting fires, and the fire triangle; the measures to take as fires start; using, recharging and keeping fire extinguishers; using studies and examples to show and discuss the reason why fire emergency calls have been increasing recently by using methods that draw the trainees' attention and focus; briefly discussing the statistical data on the number of children and adults that have lost their lives due to fires; - Warning adults of the high probability of small children being affected by fire hazards, and of the dangers of leaving small children unattended for a prolonged period of time; - Warnings related to burns, smoke inhalation, and death from fires, providing advice for ensuring fire safety, and advice to seek professional help to treat burns instead of performing arbitrary, non-professional treatment; - Advising against starting open fires on outdoor trips unless necessary, and in case a fire is started, providing advice on thoroughly	20	120 minutes

	extinguishing it along with any cigarettes that were smoked; - Providing an understanding of natural and human factors that play a role in causing fires (practices such as not burning dry, year-old grass and disposing of it safely); - Using the materials at hand (fire extinguisher, thick wet cloth, sand and dust etc.) to extinguish fires, and practicing using a fire extinguisher to quickly put out fires as they start; - Preventing the spread of fires; - Discussing with and providing information for governmental and non-governmental institutions on fire safety standards and equipment such as keeping an information board on fire safety, fire hydrants, and extinguishers; - Expressing the importance of cooperating with fire inspectors of the emergency departments of districts, and collecting data; - Providing information on the ban on retail sales of flammable liquids, and the risks related to the improper use of flammable fluids; - About smoke: Providing information on the types of smoke and their harmful effects, as well as the risk of death from smoke inhalation; - Information on the risk of death due to damage to the nervous system caused by smoke inhalation; - Information and exercises on how to bring oneself and others to safety from a smoky environment; - Information on covering the mouth and nose in a smoky environment, lying on the ground and crawling due to low visibility, and calmly locating the exit to crouch out into safety; - Warnings against leaving small children unattended and locking their exits from outside, followed by discussion with examples; - Ensuring the proper functioning of the fire alarms of institutions (Nationally Significant Structures, the History Museum, archives, places with a significant concentration of people etc.) and discussing the importance of fire alarms.		
Household Electrical Appliances, and Reducing the Risk of Fire	- Advice on not using damaged electrical appliances, ensuring their proper functioning, promoting the habit of disconnecting phone chargers and other electrical appliances from their sockets, and discussing examples with trainees; - Providing knowledge and practice on not touching stoves, electrical sockets, water boilers and refrigerators with wet hands, and not using water on burning electronic devices;	20	

	- Warning against the use of gas for household purposes, and in the case of its use, providing advice on ensuring full safety; - Placing, and using, fire extinguishers at home and in the car; - Strengthening the new knowledge gained, and dividing the trainees into groups of two in the training hall for an on-screen virtual fire extinguishing practice session.		
Determining and Preventing Earthquake Hazards, Self-Protection and the Protection of Others	- Evaluating the risk of earthquake disasters and taking certain measures; - Obtaining information on the earthquake risks present in Mongolia; - Learning about the methods to ensure preparedness for earthquake disasters, decision-making methods, and methods to rescue and protect oneself and others; - Experiencing earthquake tremors, and performing the correct actions in the event of earthquakes and instruct others (SIT, HIDE, WAIT) in order to ensure safety for for oneself and for others; - Evacuating the building as soon as the first tremor stops, ensuring the safety of the people neraby, and providing them with support (NO RUNNING, NO PUSHING, NO TALKING, NO TURNING BACK); - Actively participating in the organized effort to move to a safe location (escape shelter etc.); - Understanding the purpose and importance of public emergency drills and actively participating in them; - Actively participating in regional DRR activities; - Developing and implementing a household disaster plan; - Knowing about the location of items that could potentially pose a threat at home, at commercial institutions, and at public spaces, and advising others of them; - Using the materials at hand to provide first-aid medical assistance, and teaching others to make paper cups.	20	
Providing First-Aid Medical Assistance	- Learning how to administer first-aid medical assistance to people affected by water-related accidents or who are unconscious through cardiopulmonary resuscitation (CPR), haemostasis, splinting broken limbs, and taking rescue measures in the event of gagging and seizures, with the help of training equipment; - Calling an ambulance through 103; - Providing first-aid medical assistance, requesting help from people nearby.	20	
Rope Tying	- Learning about fall hazards and rescue methods	20	

Methods and Indoor Climbing for Protection Against Fall from Heights	through indoor climbing and rope tying practices, as well as acquiring basic knowledge on ensuring safety.		
Total (hours, minutes)			2

Seismic Diagnosis Equipment

Operation and Maintenance plan

2017.6.29 NEMA

1. Introduction

Seismic diagnosis equipment manuals which we are using In Mongolia include only degradation and depreciation of building. Therefore, within "The Project for Strengthening the National Capacity of Earthquake Disaster Protection and Prevention in Mongolia", we will make instruction method to diagnosis the building seismic. For diagnosis building seismic we needed this equipment urgently. This plan is about procuring seismic diagnosis equipment in Mongolia and how to operate it.

2. About procuring seismic diagnosis equipment

The main aim of this project is to make earthquake resistant building evaluation standard (norm). For this we need building depreciation level defining equipment. We will define current building strength, depreciation and give earthquake degree of the building. For this diagnosis equipment purchase will be made from JICA side.

After the start of this project define the equipment's operation, performance and maintenance cost, NEMA will cooperate with other organizations to support the project activity.

Within the project activity during training period the diagnosis equipment will be used. Project unit will use it after the purchasing this equipment even in the training period.

We will conduct necessary training about how to use the diagnosis equipment for purpose to distribute the knowledge in common.

All equipment used on training shall be transferred to the Mongolian side at the completion of the project.

Table.1 Procuring seismic diagnosis equipment

Equipment name	Purpose
Concrete strength measuring instrument	Force from the rebound from the hit the concrete surface compression is considered strength
Ultrasonic measuring instrument	Concrete cracks depths and amount is determined through ultrasonic waves measuring the compressive strength and elasticity factors are calculated.
Rust & Corrosion measuring instrument	In the concrete rebar & metal potential is calculated from the amount of corrosion
Concrete covering thickness measuring instruments	Measure the thickness of the concrete structural reinforcement.
Brick Surface strength measuring instruments	Brick masonry structure building and struck the surface from the estimated power of the compressive strength of rebound.

As a decision at the WG, five earthquake-proof equipment will be required as it is necessary for five agencies in seismic diagnosis (NEMA, Urban Development Ministry, Ulaanbaatar City, National Auditing Agency and CDC).

The diagnosis equipment is managed by the project office during training, and the following departments will use and maintenance the equipment after the training.

Table.2 End user authorities of diagnosis equipment

	Surface strength measuring instruments	Ultrasonic-based measuring instruments	Corrosion measuring instruments	Concrete covering thickness measuring instruments	Brick Surface strength measuring instruments	Description
During Training						
Project Team	5	5	5	5	5	
After Training						
NEMA	1	1	1	1	1	It will be used for the rescue department staffs for training. To improve the tool's usage it'll be shared with Metropolitan City Planning and Basic Planning Bureau
Ministry of Construction and Urban Development / Land Management, Geodesy and Cartography Agency	1	1	1	1	1	Sub agency of Ministry of Construction and City Development Land Management Surveying and Mapping Agency will use the equipment in local regions.
General Agency for Specialized Inspection	1	1	1	1	1	When the building owner have argument regarding MPA the result will be reconsider
Master Planning Agency of Capital City	1	1	1	1	1	It'll be used for UB city existing building earthquake resistance evaluation passport work.
Construction Development Center	1	1	1	1	1	After the earthquake resistance evaluation guide is made from project team Construction Development Center training department will assess the engineer & staff for develop the program practical experience use. To increase instrument usage CDC will share it with the GZBZZG.

3. Survey related to the procuring of the evaluation tools

Examines whether the purchase tool meets the specification and needs.

Table3. Purchase list of assessment tool.

Seismic Diagnosis Equipment					Description
	Tools Names	Usage	Price in Mongolia (USD)		
RC and PC	Surface strength measuring instruments	Force from the rebound from the hit the concrete surface compression is considered strength	Original Schmidt Test Hammer N [310-01- 001]1,010	1010	Result direct read
	Ultrasonic-based measuring instruments	Concrete cracks depths and amount is determined through ultrasonic waves measuring the compressive strength and elasticity factors are calculated.	Pundit Lab+ [326-20- 001]	5600	
Masonry	Corrosion measuring instruments	In the concrete rebar & metal potential is calculated from the amount of corrosion	Profometer Corrosion- Rod electrode [392-50- 010]	754	
			Profometer Corrosion- 1 wheel electrode [330-01- 001]	4740	
	Concrete covering thickness measuring instruments	Measure the thickness of the concrete structural reinforcement.	Profometer PM-630 [392-20- 001]	7900	
	Brick Surface strength measuring instruments	Brick masonry structure building and struck the surface from the estimated power of the compressive strength of rebound.	Original Schmidt Test Hammer L [310-01- 002]	1915	

- Surface strength measuring instruments
  Force from the rebound from the hit the concrete surface compression is considered strength. Can be used in the countryside.
- Ultrasonic-based measuring instruments
  Concrete cracks depths and amount is determined through ultrasonic waves measuring the compressive strength and elasticity
- Corrosion measuring instruments

In the concrete rebar & metal potential is calculated from the amount of corrosion

- Concrete covering thickness measuring instruments
  Measure the thickness of the concrete structural reinforcement.
- Brick Surface strength measuring instruments
  Brick masonry structure building and struck the surface from the estimated power of the compressive strength of rebound. Can be used in the country side.

4. Operation plan for use diagnosis tools

(1) Role sharing for instruction of diagnosis equipment

When measurement tools are procured, both sides will take responsibility as shown below.

In introducing diagnosis equipment, as shown in Table 4

- Until completion of training
1)In the first period it will be used during training and NEMA will receive the equipment's, all end user authorities staff will listen user manual guidance.
2) During the training session the project team is responsible for the usage & storage.

-after completion of training
1) It'll be transferred to the end user authorities.
2) End user authorities are responsible for parts, configuration and usage.
Above item will be mentioned in the maintenance and operation letter and it will be handed over to the Japanese side from Mongolian side.

Table 4. Organize of conditions for procuring diagnosis equipment

	Mongolian side	Japanese side	Description
Procurement preparation			
Survey	Make negotiations with the delivery	Survey of the equipment	-
Request	Prepare the official letter for responsibility & maintenance		-
Procurement decision	-	Review of procurement contents and propriety	-
Procurement			
1. Preparation	-	-	-
2. Usage , maintenance 1	1) Deliver it to NEMA	2)During the project, The project team is responsible	Training
3. Usage, maintenance 2	1) Delivery it to FINAL Organization 2) supplies, usage, repair, configuration operating organization is	-	After training

	responsible		

(2) Operation and Maintenance Plan

1). When equipment's supplied to NEMA:

All end user authorities shall hear the explanation of the usage.

2) During the implementation of the project:

Project team will take responsibility for storage of equipment.

3). Delivery to the end user authorities

During the operation and use of supplies, configuration and maintenance services outlined in charge of the contract. On that bases NEMA will hand it over to the end user authorities.

4). Parts, usage, repair service.

End user authorities are responsible for the operation and maintenance, services, configuration, spare parts of the equipment's.

(3) Procure and use plan of diagnosis equipment's

Procure and use plan of diagnosis equipment's shown in Table 5:

Table 5. Procure and use plan of diagnosis equipment's

Work item		2017				2018				2019			
		1	2	3	4	1	2	3	4	1	2	3	4
Japanese side assumed schedule													
Project team survey													
1	Survey of the equipment												
Japanese side procurement plan													
2	Clarifying the equipment												
3	Procurement												
Mongolian side assumed schedule													
Mongolian side procedure.													
4	Operation, Maintenance letter												
5	Bringing into Mongolia, Instruction of use guideline												
Use in during project													
6	During the training of earthquake diagnosis.												
After completion of project													
7	Start use of end user authorities												

Notice:
2. Identify of equipment and 3. Procurement schedule plan is preliminary so it's not finalized.
5. Instruction of the equipment is not the subject part of the project training.

Appendix

1. Usage of the seismic diagnosis equipment to be supplied within the framework of the project

Once the seismic resistance evaluation norms are approved, thay shall be applied to the training on evaluating the seismic resistance of buildings.

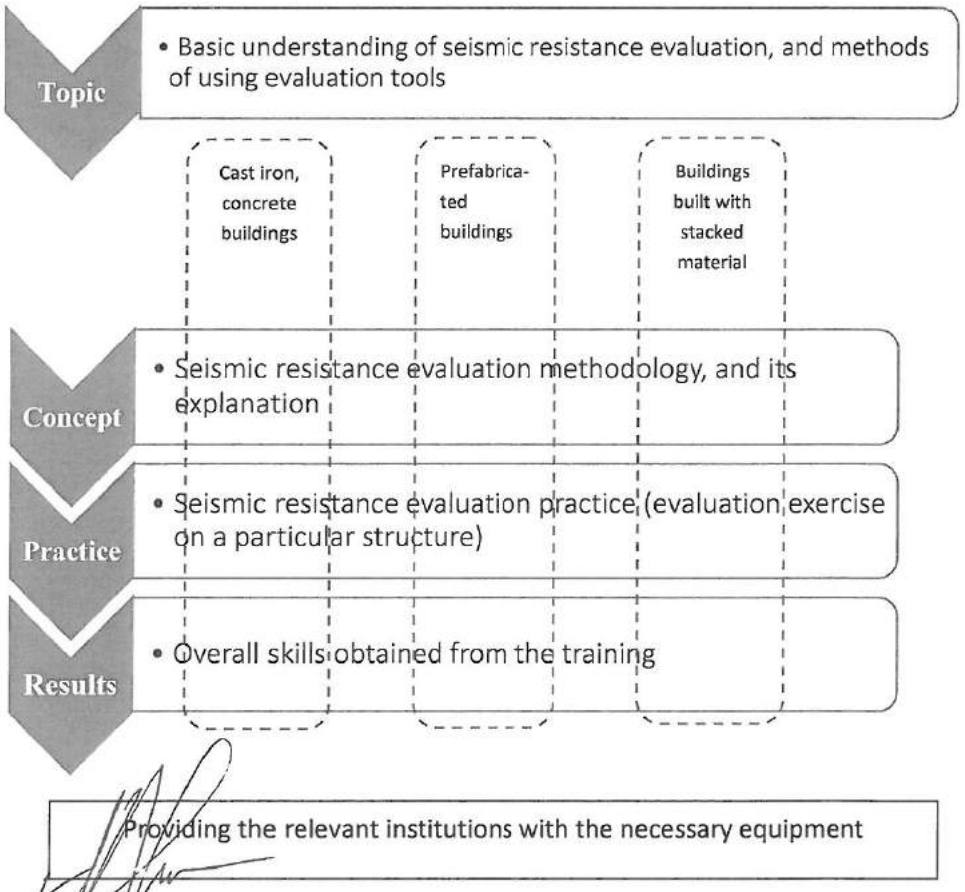
① Purpose of the Training

Improving trainees' knowledge and expertise on seismic resistance evaluation.

② Participating Institutions

NEMA, MCUD, GASI, and the Building Safety and Quality division of the Capital Urban Development Agency. Employees and specialists from the institutions will be participating.

③ Contents of the Training Program:

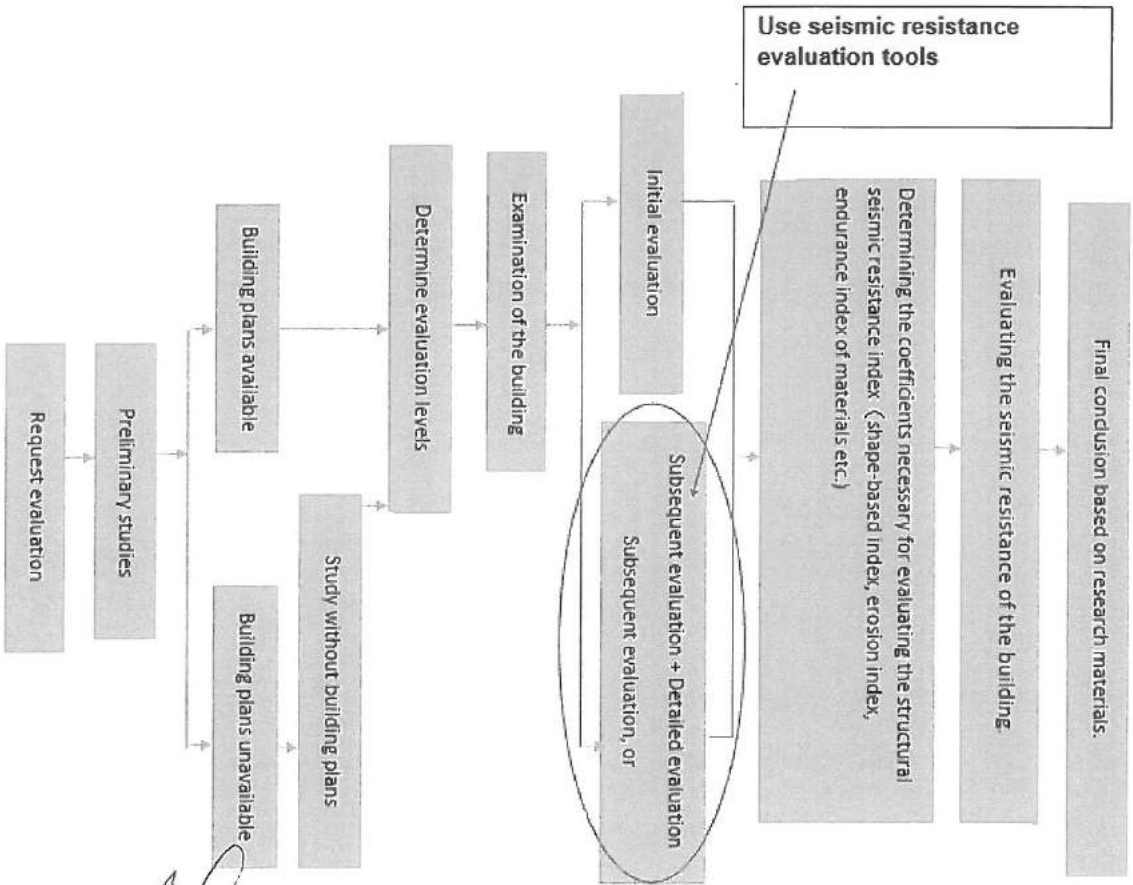


2. Procedure for the use of seismic resistance equipment by the relevant institutions

The following coefficients are necessary for determining the structural seismic resistance index for seismic resistance evaluation.

- Schmidt Hammer: determines the endurance of materials.
- Ultrasonic Probe: measures the depth of fissures in concrete.
- Corrosion Measurement Tool: Measures the level of corrosion of concrete armature.
- Tool to Measure the Protective Layer of Concrete: measures the diameter of the armature and the thickness of the protective layer of concrete.

Chart. Seismic Resistance Evaluation Activity Process, and the Order to Use Evaluation Equipments (This is the process implemented in Japan, and shall also be implemented in Mongolia.)



Appendix 2

Approve: .....
Head of Disaster prevention training and methodological center for citizens of Ulaanbaatar
Day .... Month 2017

Training plan and program of earthquake hall in Disaster prevention training and methodological center for citizens of Ulaanbaatar

Main objective of class

Provide knowledge about earthquake disasters risk and prevention to pre-scholar, student of elementary school, junior, senior students of high school and civilians based on training program. The program has reach contents about disaster prevention and earthquake self-feeling. Installation of deep understanding of disaster prevention to all people based on self-feeling methods such as "to watching" "to listening" "to touch" and "to feel" etc. Deep knowledge on actions of disaster risk prevention for connecting actions of nation based on training of earthquake self-feeling.

Targets of class:

Common targets
At first stage, Improvement of understanding of video based (cinema) earthquake disaster knowledge. Self-feeling stage, set on earthquake simulator and understanding of how tables and furniture are dangerous during earthquake disaster. Moreover learning how to self-protecting as well as protect others during disaster. Learning damage reduction methodology during the disaster happens as well as everyday readiness methods such as tight home furniture and other actions in home.

Pre-scholar

At first, learning about self-defense methods during earthquake happens. Following and learning about instructions of adults (Father, mother, Teacher).

Student of elementary school

Learn about self-defense and protecting head and chest of body firstly. Following and learning about instructions of adults (Father, mother, Teacher). Deeply concern on meaning of practical training in school.

Junior and senior students of high school

Learning about basic knowledge of earthquake (mechanism and magnitude of earthquake). Learn about self-defense and protecting head and chest of body firstly. Following and learning about instructions of adults (Father, mother, Teacher). Deeply concern on meaning of practical training in school. Stay far away from home, discuss and confirm with your parents about methods (readiness, gathered place, communication) during earthquake disaster.

Adults (normal people)

Learning about basic knowledge of earthquake (mechanism and magnitude of earthquake). Learn about self-defense and protecting head and chest of body firstly. Learning readiness of everyday (Keeping tight the every home furniture, preparing bag that has foods and other materials).

Program for each age category①for pre-scholar

Class type: Lecture

Duration: 10 min

	Subject name	Time period	Learning type
0	Watching video (Cinema)	3 min	・Learining about earthquake risk
1	Lecture (room for children)	5 min	・Learning self-defense methods during earthquake disaster
2	Guessing game (room for children)	2 min	・repeat contents of lecture

Supply of technical tools and materials:

Video, computers, **amplifier,** LCD monitor, tables, information board etc.

Program for each age category②for elementary school student (primary class)

Type of class: Lecture, practice

Duration: 15 min

	Subject name	Duration	Learning content
0	Watch the video (Movie theater)	3 min	・Learn more about earthquake hazards
1	Lecture / Practice (for children)	7 min	・Learn about safe ways to protect yourself during the disaster ・Purpose and importance of evacuation training ・How to make paper cup and plates when you are stay in shelter

2	Puzzles (Hall room for children)	2 min	· Repeat the lessons learned by lectures
3	Q & A (Hall room for children)	3 min	

Supply of technical tools and materials:

Audio, computer, amplifier, LCD display, desk, chair, newspaper, food wrap, information boards, etc.

Program for each age category ③ Elementary school student (senior grade)

Course form: lecture, simulation and practice

Duration: 20 min

	Subject name	Duration	Learning content
0	Watch the video (Movie theater)	3 min	· Learn more about earthquake hazards
1	Lecture / Practice (for children)	5 min	· Learn about safe ways to protect yourself during the disaster · Purpose and importance of evacuation training · How to make paper plates when you are stay in shelter
2	Remarks of earthquake experience equipment	2 min	· Describe about earthquake experience equipment · Stay under table and keep the chair legs, be careful and cover your head to protect from falling objects
3	Simulation of earthquake experience equipment	3 min	· Learn about what to do in case of earthquake
4	Practice (Conference room)	5 min	· Describe about paper cup and dishes when you are stay in shelter
5	Q & A/puzzle game (Conference room)	2 min	· Repeat the lessons learned by lectures

Supply of technical tools and materials:

Audio, computer, amplifier, LCD display, desk, chair, newspaper, food wrap, information boards, etc.

Program for each age category ④ Middle, high school student

Course form: lecture, simulation and practice

Duration: 20 min

	Subject name	Duration	Learning content
0	Watch the video (Movie theater)	3 min	· Learn about past historical earthquakes and get knowledge about damage of it · Learn basic earthquake knowledge such as earthquake mechanisms and magnitude
1	Lecture	5 min	· Learn about safe ways to protect yourself during the disaster · Purpose and importance of evacuation training · How to make paper cup and plates when you are stay in shelter · Measurement which should be taken in phase of pre-disaster, in case of disaster, post-disaster stage and some issues should be need to talk with family members
2	Remarks of earthquake experience equipment	2 min	· Describe about earthquake seismology · Stay under table and keep the chair legs, be careful and cover your head to protect from falling objects
3	Simulation of earthquake experience equipment	3 min	· Learn about earthquake response measurement
4	Practice (meeting room)	5 min	· Provide first aid service using simple material · Bag which will be use in case of disaster and description about some disaster prevention items

5	Q & A/puzzle game (Conference room)	2 min	· Repeat the lessons learned by lectures

Supply of technical tools and materials:

Audio, computer, amplifier, LCD display, desk, chair, newspaper, food wrap, information boards, etc.

Program for each age category ④ Adults (for ordinary people)

Course form: lecture, simulation and practice

Duration: 20 min

	Subject name	Duration	Learning content
0	Watch the video (Movie theater)	3 min	· Learn about past historical earthquakes and get knowledge about damage of it · Learn basic earthquake knowledge such as earthquake mechanisms and magnitude
1	Lecture	5 min	· Learn about safe ways to protect yourself during the disaster · Measurement which should be taken in phase of pre-disaster, in case of disaster, post-disaster stage and some contents should be need to talk with family members · Fix furniture to the walls, disaster preparedness in family level such as storage of drinking water, food and prepare bag
2	Remarks of earthquake experience equipment	2 min	· Describe about earthquake seismology · Stay under table and keep the chair legs, be careful and cover your head to protect from falling objects
3	Simulation of earthquake	3 min	· Learn about earthquake response action

	experience equipment		
4	Practice (meeting room)	5 min	・Provide first aid service using simple material ・Bag which will be use in case of disaster and description about some disaster prevention items
5	Q & A/puzzle game (Conference room)	2 min	・Repeat the lessons learned by lectures

Supply of technical tools and materials:

Audio, computer, amplifier, LCD display, desk, chair, newspaper, food wrap, information boards, etc.

Annex7: Question and Answer in the JCC meeting

1. Documentary of public awareness, Procuring Equipment, Amendment of WG member

Comment: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

I would like to mention a few things on the following subjects.

Firstly, as you may know the Deputy Prime Minister is planning to create a documentary to promote earthquake disaster awareness among the public and will include historical data on the earthquakes that have occurred in Mongolia. We would like to request the support of JICA in this documentary project.

Secondly, regarding equipment, we have been planning to get all the equipment transported to Mongolia within the year. Mr. Khurelbaatar, who is the Director of Disaster Protection Training and Methodology Center in EMDC (hereinafter referred to as "Training Center"), has talked to customs officials on this matter. With the authorization of the Deputy Prime Minister given to the customs officials, this process will continue more quickly. I suggest we make an effort to gather all the necessary customs documents as soon as possible in the scheduled date. In terms of the expenses related to transporting the equipment to the training centers, General Badral has given orders to the city administrators in this matter. Mr. Khurelbaatar shall be tasked with the detailed transportation planning such as border passing procedures, the weight of the equipment, what documents are necessary; and he shall deliver the detailed process including carrying-in way, using crane to install to Mr. Owada in two months.

Also, there have been changes in the composition of WG members. Mr. Dashnyam has joined WG1, Ms. Ganchimeg has joined in WG2, WG3 has a new member from the Education Research Institution named Ms. Khaliun and Mr. Chinbat from the NEMA,. In accordance with this change of WG members, the member of the training in Japan is to be decided.

Comment:Mr. Hosokawa, JICA:

With regards to the documentary, JICA will not be able to help in terms of financing, but we may be able to help on technical and methodological aspects.

Also, in relation to the equipment for training center, we would like to request the Mongolian side to take care of improvement of the slab and installation of anchors, installation of the switchboard on the appropriate place, and also conducting customs duties and transportation, any preparation to be required for installation of equipment as well as ensuring installation fees and maintenance system.

Comment:Mr. Owada JICA Expert Team:

With regards to WG members, we also acknowledge the change in WG members. The second training in Japan is coming up and I understand that this change of members is fixed.

2. Next Training in Japan

Comment: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

We had discussed the contents of the second training in Japan with Mr. Owada. I have heard Mr. Owada would take place an interview to every candidate of second training member.

Comment: Mr. Kiyotaka Owada, JICA Expert Team:

The second training in Japan will take place within 2017 and hopefully will not overlap with English the learning program to be planned by NEMA in India.

Comment: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

With regards to the English training in India, Mr.Ulziibayar has been responsible to it. I would like to request to check with Mr. Ulziibayar on this matter. I would like to coordinate so as not to overlap as much as possible.

Comment and Quation: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

We have not yet discussed whether or not to organize training in a third country. Also, translations from English to Mongolian were inadequate and I urge translators to be more responsible.

Answer and Question: Mr. Kiyotaka Owada, JICA Expert Team:

It's my understanding I understand that there is no discrepancy, because concerning understanding that we confirmed that we will consult later on whether to go to implement the training in a third country training or the second Japanese training in japan when at the time we formulated the of Work plan of the Project before the first JCC. And then, I understand that we decided to select the second training in japan after that. Can we understand that NEMA is requesting the training in a third country as an additional?

Answer: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

Yes, it is an additional proposal.

Comment: Mr. Yukinari Hosokawa, JICA:

Although we understand your proposal, since it is described as the training in a third country or additional training in Japan in the Work plan of the Project, we will carry out second training in Japan as additional so we cannot carry out the training in a third country.

3. Pilot Area

Comment: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

Next, we would like to inform you that the regional pilot area is still under consideration.

Question: Mr. Yukinari Hosokawa, JICA:

In the presentation for the progress of WG3 activity , there were explanation of pilot places proposed by WG3 for implementing Disaster Risk Reduction (hereinafter referred to as "DRR") awareness raising workshops. Don't you consider this proposal?

Answer: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

We will have further discussions on increasing the scope of regional pilot area.

Question: Mr. Yukinari Hosokawa, JICA:

We request a specific schedule by when the aimags will be chosen. Should we understand that the two districts in Ulaanbaatar City and one aimag are to be chosen in the future?

Answer: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

In terms of the capital districts, they may be the two districts which were proposed by WG3. However, we plan to increase the number of pilot aimags.

Comment: Mr. Yukinari Hosokawa, JICA:

It is better to decide the pilot places as soon as possible because the pilot activities for the DRR awareness raising are to be implemented from November, 2017, according to Monitoring Sheet 2,. I would like to point out that increasing the number of pilot aimags will affect increase in expenses., since it is the pilot activity, I would like you to understand that NEMA will propagate to other aimags based on the experience of the pilot activity after project implementation.

4. International conferences

Comment: Mr. Yukinari Hosokawa, JICA:

Now I would like to mention two international events that are planned for near future. As for the Bosai World Forum in November 2017, it will be organized in Sendai by Sendai City and Tohoku University in collaboration with the International Disaster and Risk Conference in Davos. The conference will be organized for four days where JICA has a 90-minute session with the theme of investment for disaster prevention on November 27th, 2017. JICA will invite representatives from three countries where JICA is implementing technical cooperation project for DRR including Mongolia. General Badral and Ms. Sayanaa who is Advisor of Deputy Prime Minister will attend. This is a good opportunity for NEMA to meet officials from around the world and to share good practices with them.

As for Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR), I will talk with General Badral tomorrow.

5. Closing Remarks

Comment: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

Thank you very much for participation on JCC. I would like to say that the three working groups are showing good progress and that Mr. Owada is doing a very good job. Now the general will say a few words.

Mr. Badral Tuvshin, Chief, Brigadier General, NEMA:

I would like to thank Mr. Sato and all the other participants for coming to the third joint meeting. It has been half a year since the project started and we have seen a good amount of progress. There is a good flow of information in both the Mongolian and Japanese sides.

The information is also sent to the Deputy Prime Minister, who sends his gratitude to project members. One thing I'd like to mention is that the initial plan for the Sendai Framework has been drafted and will be sent in to the next government meeting for authorization. This could

provide valuable support for our project. Most of the documents from the Mongolian side have already been compiled and now what's left is execution.

I also urge you to cooperate in the Asian Ministerial Conference on Disaster Risk Reduction, to be held next year, since the preparation activity was commenced.

I would like to comment as follows.

1. I will consider that documents such as the relevant legislation have been thoroughly researched already. Research takes a lot of time and I hope it is near completion because it needs to be done as soon as possible. I would like to request to make a presentation of the target documents in next JCC or other opportunities.

2. There is a state policy to develop risk evaluation guidelines and I am aware that WG1 is in charge of developing such guidelines. They are also tasked with developing more generalized guidelines. I would like to request that the Japanese side provide our specialists with information from their own experiences, as well as those of other countries.

3. Also, I propose that district officials in Ulaanbaatar city attend the October-November training in Japan along with the working members. I would like to request the consultation to provide training in Japan for the head of district on UB city that I requested in previous JCC.

4. The training in a third country must be discussed in next JCC.

5. Also, pay attention to how the equipment should be compiled and installed. I have appointed Mr. Khurelbaatar as a person in charge of preparation of procuring equipment. The expenses related to transporting and installation must also be calculated in cooperation with EMDC up to July.

6. There are numerous records of seismic activity occurring in Omnogovi aimag and perhaps it should be regarded as a high seismic-risk aimag. I would like to ask for consultation to include as a pilot area.

7. In terms of the database, I urge you to pay attention to share risk data, and to make a connection with related existing database, and arrange these systems so as to be used by residents. I heard that the database management system which is under construction will be available to share databases with related organizations later. Please notice that these databases should be worked towards cooperation with related organizations.

8. I understand that JICA have a plan to conduct session in the AMCDRR. Since the preparation WG has been established by the diet resolution, I would like to request to participate.

Overall, the project is proceeding according to schedule.

I invite you all to make efforts to fit in your work within the schedule. Perhaps there may be delays since some officials may need to travel abroad.

Thank you all once again for participating. The next meeting will be held after the study tour in Japan.

Question: Mr. Kiyotaka Owada, JICA Expert Team:

The schedule of next JCC is to be informed.

Answer: Mr. B. Uuganbayar, Director of Disaster Prevention Department, NEMA:

The next JCC will be held in the timing soon after finishing 2nd training in Japan.

Closing.