### Minutes of Meeting 1st Joint Coordinating Committee (JCC) Project for Enhancement of Earthquake and Tsunami Disaster Mitigation Technology in Peru

Date and Time: September 20th (Tue) 2011, 10:00am~12:20am

Venue: CISMID Meeting Room Attendees: As attached in ANNEX 1

The 1st Joint Coordinating Committee of the "Project for Enhancement of Earthquake and Tsunami Disaster Mitigation Technology in Peru" was held for the purpose of confirming this year project plan, reviewing the progress of the project and discussing issues that may arise during the implementation of the project. As a result of the Committee, the following items were notified and confirmed.

No.	Item	Action
1	Announcement from Moderator	
1.1	Dr. Zavala expressed the gratitude to the meeting attendees.	Notification
2	Opening Address from Chairman of JCC	
2.1	Dr. Padilla expressed the gratitude for JCC attendees and evaluated the joint research project for earthquake and tsunami disaster mitigation technology.	Notification
2.2	Dr. Padilla also expressed his sympathy to Japanese people suffering from Tohoku Earthquake disaster.	Notification
2.3	He acknowledged the donated equipment including the structure testing devices and seismometers.	Notification
3	Welcome Speech from Chief Representative of JICA Peru	
3.1	Mr. Nakao mentioned the long-term history between JICA and CISMID-UNI started at 1986.	Notification
3.2	He mentioned the importance of sharing the disaster mitigation technology between Japan and Peru with the consideration of the possible future occurrence of a huge earthquake in Peru such as Tohoku Earthquake.	Notification
4	Welcome Speech from Executive Director of APCI	
4.1	Ms. Bernuy expressed her gratitude to the JCC attendees. She mentioned the importance of this project for the strong relationship between Peru and Japan.	Notification
5	Opening Address from Japanese Ambassador	
5.1	Mr. Fukukawa expressed his pleasure to joining the JCC with the distinguished participants.	Notification
5.2	He explained the long-term relationship between Peru and Japan, and mentioned the successful coorporation in the field of disaster mitigation.	Notification
5.3	He mentioned high expectations from President Humala for Japanese technical cooperation.	Notification
6	Framework of the Project and Progress Reports	
6.1	Dr. Yamazaki explained the scope of the project with the framework of JST-JICA SATREPS.	Confirmation
6.2	He explained the structure and strategy of study groups with the	Confirmation

	current progress of those. He also mentioned that Tacna city was	
	selected as one of provincial target cities through the activities in	
	2010.	
6.3	It was explained that the 2nd international workshop was held in	Confirmation
	Japan by inviting the Peruvian researchers last March, and the 3rd	
	international workshop will be held in March, 2012 for the first year	
	memorial day after Tohoku earthquake. Dr. Yamazaki also mentioned	
	that 90% of the equipment procurement of the project would be	
	completed in this fiscal year.	
6.4	Dr. Aguilar explained the progress of the project by Seismic Motion	Confirmation
	and Geotechnical group focusing on the 1) Source Modeling and	
	Seismic Motion, 2) Site Response and Microzonation, 3) Slope	
	Failure Assessment, and 4) Human Resources Development for the	
	acceptance of two trainees at Chiba University.	
6.5	He also explained the coming schedule 2011-2012 of the group as	Confirmation
	shown in ANNEX2	
6.6	Dr. Koshimura explained the progress of the project by Tsunami group	Confirmation
	focusing on the 1) Tsunami Propagation and Impacts, 2) Tsunami	
	Hazard Mapping, 3) Tsunami Damage Mitigation Technology and 4)	
	Human Resources Development for Tsunami modeling technology.	
6.7	Dr. Koshimura also mentioned the importance of the stronger	Confirmation
	partnerships among the Peruvian institutions toward the new Tsunami	
	warning system.	
6.8	He also explained the coming schedule 2011-2012 of the group as	Confirmation
	shown in ANNEX3	
6.9	Dr. Zavala explained the progress of the project by Building group	Confirmation
	focusing on 1)Seismic Test Database 2)Diagnosis and Retrofit	
	3)Retrofit of Historical Buildings and 4)Human Resources	
	Development through seminars conducted at CISMID and University	
	of Tacna	
6.10	He also mentioned that key buildings for seismic diagnosis were	Confirmation
	determined to be Hospital Rebagliatti, Building of the Faculty of	
	Civil Engineering and Main Pavilion of UNI.	
6.11	He also explained the coming schedule 2011-2012 of the group as	Confirmation
	shown in ANNEX3	
6.12	Dr. Estrada explained the progress of the project for Damage	Confirmation
	Assessment group, focusing on 1)Geo-spacial Database2)Damage	
	Detection using Remote sensing 3)Damage Assessment of Scenario	
	Earthquake and 4)human resources development for exchange of	
	young researchers	
6.13	He also explained the coming schedule 2011-2012 of the group as	Confirmation
	shown in ANNEX4	
6.14	Mr.Bisbal made a brief introduction to Resource Information System	Confirmation
	for Disaster Response(SIRAD) of INDECI.	
7	Discussion about Implementation of the Project	<u> </u>
7.1	Dr. Yamazaki suggested to have opportunities at least twice a year to	Confirmation
7.0	exchange the progress among the research groups.	<u> </u>
7.2	Dr. Honkura suggested to have a technical meeting among research	Confirmation
8	groups before JCC.  Closure by JST	

8.1	Dr. Honkura evaluated the progress of the activities of each group	Notification
	since March 2011 Workshop at Chiba University.	
8.2	He mentioned 1) the importance of progress of science such as	Notification
	long-term forecasts of earthquakes and tsunamis, 2) the significance	
	of technical transfer of Tsunami Modeling, and 3) the importance of	
	application of studies by Peruvian researchers as a result of technical	
	transfer.	
9	Closure by Vice Chairman	
9.1	Dr. Pique closed JCC by appreciating the capacity development by	Notification
	Japanese government over generations.	

Mag.Aurelio Padilla Ríos Project Director/Rector National University of Engineering(UNI) Dr. Fumio Yamazaki Project Leader/Professor Department of Urban Environmental Systems Graduate School of Engineering Chiba University

Dr.Carlos Alberto Zavala Toledo Project Manager/ Director Japan-Peru Center for Earthquake Engineering Research and Disaster Mitigation(CISMID) National University of Engineering(UNI)

Ms.Paola Bustamante Suarez
Management and International Negotiation
Director
Peruvian International Cooperation
Agency (APCI)

Mr. Makoto NAKAO Chief Representative Japan International Cooperation Agency (JICA)

### Witnessed by

Dr. Yoshimori Honkura
Program Officer
Science and Technology Partnership for
Sustainable Development
Japan Science and Technology Agency(JST)

ANNEX 1	LIST OF ATENDEES
ANNEX 2	Coming Schedule for 2011-2012(Group 1: Seismic Motion and Geotechnical
group)	
ANNEX 3	Coming Schedule for 2011-2012(Group 2: Tsunami group)
ANNEX 4	Coming Schedule for 2011-2012(Group 3: Building group)
ANNEX 5	Coming Schedule for 2011-2012(Group 4: Damage Assessment group)

### LIST OF ATENDEES

### 1st Joint Coordinating Committee(JCC)

Project for Enhancement of Earthquake and Tsunami Disaster Mitigation Technology in Peru

No Name	Organization
Project Director(Chairman)	
1 Dr. Aurelio Padilla	Rector, National University of Engineering (UNI)
Project Manager(Moderator)	
2 Dr.Carlos Zavala	Director, Japan-Peru Center for Earthquake Engineering
	Research and Disaster Mitigation(CISMID),UNI
Perivian Side(APCI)	
3 Ms.Soledad Bernuy	Peruvian International Cooperation Agency(APCI)
4 Ms.Claudia Caldas Comas	Peruvian International Cooperation Agency(APCI)
Peruvian Side(Counterpart Personnel of CIS	MID-UNI and Collaborating Organizations)
5 Dr. Javier Pique	Dean,Faculty of Civil Engineering, UNI
6 Dr. Zenon Aguilar	Academic Director,CISMID,UNI
7 Dr. Miguel Estrada	Research Director, CISMID, UNI
8 Mr.Fernando Lazares	Head,Planning and Disaster Mitigation Department
9 Mr. Francisco Rios	Administrator, Faculty of Civil Engineering, UNI
10 Mr. Alberto Bisbal	National Director of Prevention, National Institute of Civil
	Defense(INDECI)
11 Mr. Cesar Jimenez	Researcher, Direction of Hydrology and Navigation(DHN)
Japanese Side(JICA Experts)	
12 Dr. Fumio Yamazaki	Project Leader,Chiba University
13 Dr. Shunichi Koshimura	Group 2 Leader, Tohoku University
14 Dr. Saburo Midorikawa	Group 4 Leader, Tokyo Institute of Technology
15 Dr. Yushiro Fujii	Group 2 Expert, Building Research Institute
16 Dr. Gaku Shoji	Group 2 Expert, Tsukuba University
17 Dr. Osamu Maruo	Group 5 Expert, Tsukuba University
18 Dr. Tadahiro Kishida	Assistant to the Project Leader, Chiba University
19 Ms. Hiromi Tsuzuki	Project Coordinator, Japan International Cooperation
	Agency(JICA)
Japanese Side(JICA Peru Office)	
20 Mr. Makoto Nakao	Chief Representative, JICA Peru
21 Mr. Katsuto Kida	Assistant Resident Representative, JICA Peru
22 Mr. Takuma Ito	JICA Peru
Observers(Japanese Side)	
23 Mr. Masahiro Fukukawa	Ambassador, Embassy of Japan in Peru
24 Mr. Shusuke Matsumoto	Secretary, Embassy of Japan in Peru
25 Dr. Yoshimori Honkura	Program Officer, Japan Science and Technology Agency (JS)
26 Ms. Naoko Yasuo	Japan Science and Technology Agency(JST)

### Source Modeling and Seismic Motion

Date	Topic	Organization
2011/09-	Simulation of Strong Motion	Chiba U, NIED, IGP
2011/08	Ground Motion Monitoring	CISMID, Chiba U.
2011/08-	Analysis of Earthquake Recordings	Chiba U, CISMID

### Site Response & Microzonation

Date	Topic	Organization
2011/09-	Boring and PS Wave Logging	CISMID, Chiba U.
2012/03-	Site Response Analysis	Chiba U, CISMID
2012/09-	Seismic Microzonation	CISMID, Chiba U.

### **Coming Schedule for 2011-2012**

### Slope Failure Assessment

Date	Topic	Organization
2012/03-	Site Characterization	CISMID
2012/09-	Seismic Response Analysis	Chiba U, CISMID
2012/09-	Slope Hazard Map	Chiba U, CISMID

## Tsunami Propagation/Inundation Mapping

Date	Topic	Organization
2011	Complete review of historical tsunami events and determine potential tsunami source scenarios for Callao, Lima	G1 IGP, DHN, Tohoku Univ., BRI
2011-2012	Developing archives of historical tsunami data, propagation simulation, inundation mapping.	IGP, DHN, CISMID, Tohoku Univ., BRI

## **Tsunami Damage/Loss Estimation**

Organization	G1, CISMID, Tohoku Univ.	DHN, CISMID, Tohoku Univ. Tsukuba Univ.
Topic	Developing house/building inventory, census data for Callao, Lima	Developing tsunami fragility curves and conducting damage/loss estimation for Callao, Lima.
Date	2011	2011-2012

## **Tsunami Damage Mitigation Technology**

Date	Topic	Organization
2011-2012	Complete hazard map for Callao, Lima	CISMID, INDECI, Tohoku Univ.
2011-2012	Strategic planning for tsunami evacuation by multi-agent simulation	CISMID, INDECI, Tohoku Univ.

### Seismic Test Database

Date	Topic	Organization
Feb. 2012	Structural test of wall in CISMID	CISMID, BRI, Yokohama National Univ., Nagoya Univ.

### Diagnosis and Retrofit

Popic Organization	Shaking table test of masonry in BRI BRI, Akita Prefectural Univ. Development of software	
Topic	Shaking ta Developm	
Date	Feb. 2012	

### Survey and Risk Assessment

Organization	CISMID, BRI	CISMID, BRI, Yokohama National Univ.
Topic	Seismic evaluation of buildings in Peru	Implementation of ITK Sensor Network CISMID, BRI, Yokohama National Univ.
Date	2012	

### Geo-Spatial Database

Date	Topic	Organization
Sep. 2011	Field Survey in Lima and Tacna	Tokyo Tech., CISMID
2012	Development of Building Inventory	Tokyo Tech., CISMID

# Semi-Automatic Damage Detection using Remote Sensing

Date	Topic	Organization
2012	Calibration of Damage Detection Method	AIST, Chiba Univ., CISMID

## Damage Assessment of Scenario Earthquake

Organization	CISMID, Tokyo Tech.
Topic	Development of Fragility Curves
Date	2012