No.34/37/2009-EO(F) Government of India Ministry of Personnel, P.G. and Pensions Department of Personnel & Training

North Block, New Delhi-1 Dated the May 2009.

TRAINING CIRCULAR

Subject : A Group Training Course in Seismology, Earthquake Engineering and Disaster Management Policy to be held in Japan from 28/9/2009 to 18/9/2010 (Core Phase).

The undersigned is directed to state that the Japan International Cooperation Agency (JICA), under the Technical Cooperation Programme of the Government of Japan has invited applications for a Group Training Course in Seismology, Earthquake Engineering and Disaster Management Policy. The total duration of the programme is from August 2009 to September 2010, out of this, the Core Phase from 28/9/2009 to 18/9/2010, will be held in Japan. The Preliminary Phase and the Finalization Phase will be held in the candidate's home country. This programme is approved as a Master's Degree Program by the GRIPS and the BRI. The details of the programme and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website (persmin.nic.in).

2. The Program is designed for the organization concerning to seismology, earthquake engineering and disaster mitigation. The overall goal of this training course is to mitigate earthquake disasters in developing countries.

3. The Candidates should be University Graduates in Seismology, Earthquake engineering or seismic disaster mitigation, or be university graduates in science and technology other than the above mentioned subjects with professional experience of three or more years in the field of seismology, earthquake engineering or seismic disaster mitigation; be well versed in advanced mathematics such as differentiation and integration, partial derivatives, differential equations, matrix, vector algebra, Fourier analysis, etc.; be able to write research reports on the individual study in English; have good command over English; be between twenty-two years and forty years of age; be in good health, both physically and mentally to undergo the training and not be serving in the military.

4. The fellowship award covers a Round-trip air ticket between an international airport designated by the JICA and Japan; travel insurance from arrival to departure in Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included). The participants are not allowed to take any family member during the training course.

5. It is requested that the nomination of the suitable candidates may please be forwarded to this Department in accordance with the eligibility criteria and the terms and conditions of the JICA's Circular dated 11th May 2009. The Ministry/ State Governments may sponsor the names of only Government/ Public Sector Undertaking functionary.

6. The nomination details should be submitted in the JICA's prescribed proformas (A2A3 Forms), duly authenticated by the Department concerned alongwith the country report.

7. The applications should reach this Department <u>through proper channel</u> not later than 21st May 2009. Nominations received after the prescribed date will not be considered. The circular inviting applications for training courses is available on this Department's website persmin.nic.in

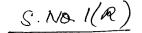
(Trishaljit Sethi) Director

- 1. The Secretary, Ministry of Earth Sciences, Mahasagar Bhavan, Block No. 12, CGO Complex, Lodhi Road, New Delhi.
- 2. The Secretary, Ministry of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.
- 3. The Secretary, Ministry of Home Affairs, North Block, New Delhi.

4. All State Governments/ Union Territories. [With the request to circulate it amongst the related organizations]

5. Director (Technical), NIC with the request to post the circular along with the JICA's circular and the enclosed application Proformas on the Department's website





Japan International Cooperation Agency (Government of Japan)

34/37

J'365 (F) 10°

No. 41/GT-CP/2009

11th May, 2009

Dear Mr. Kharb,

A Group Training Course Seismology, Earthquake Engineering and Disaster Management Policy will be held in Japan from 28th September, 2009 to 18th September, 2010 under the Technical Cooperation Programme of the Government of Japan.

We are forwarding herewith two copies of the General Information Booklet on the above offer. It is requested that the following documents of the selected candidate may please be submitted to this office by 22^{nd} May, 2009:-

(1) The Nomination Form A2A3 together with the medical history questionnaire,

(2) The desired Inception Report

(3) The Application Materials for GRIPS/BRI Master Program

Further details are available in the General Information Booklet. It may be noted that the completed Inception Report and Application Materials for GRIPS/BRI Master Program are essential for screening of applications.

It is further informed that 15 slots are available globally for the above course and it would be much appreciated if you could take further necessary action and submit the nomination(s) of suitable candidate(s) to this office by the designated date.

With regards,

Yours sincerely,

umiko Asakuma) Senior Representative

Encl: As stated above. Mr. R.K. Kharb Desk Officer Department of Personnel and Training Ministry of Personnel, Public Grievances and Pensions North Block New Delhi



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON SEISMOLOGY, EARTHQUAKE ENGINEERING AND DISASTER MANAGEMENT POLICY 集団研修「地震・耐震・防災政策」

Approved as a master's degree program by GRIPS and BRI

JFY 2009 <Type: Leaders Training / 類型:中核人材育成型> No. J09-00921 / ID. 0980875 From August 2009 to September 2010 Phases in Japan: From September 28, 2009 to September 18, 2010

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

I. Concept

Background

Seismic disasters, which instantly take human lives, destroy houses and devastate social properties, are clearly distinguished from other natural disasters. Fires and collapse of man-made structures caused by earthquakes may accelerate human losses, to say nothing of other aspects common to all natural disasters such as heavy economic losses, difficulty of preparedness and precautions due to unpredictability, and difficulty of immediate response to damages due to sudden occurrence.

The development of technologies in Seismology and Earthquake Engineering has materialized seismic-proof living environments in developed countries such as Japan and the United States. In the meantime, the situation in developing countries has not changed, although efforts to transfer seismic technologies from developed countries have been made.

In order to improve seismic resistance of buildings in developing countries located in earthquake-prone areas, it is not enough to merely transfer knowledge and technologies of Seismology and Earthquake Engineering from developed countries. It is, however, essential to develop earthquake-related technologies applicable to each country by its own efforts, taking into consideration actual conditions and systems of the respective countries. To achieve this aim, it is also necessary to nurture human resources to be highly capable of planning, instructing, and extending seismic mitigation technologies, by combining advanced relevant technologies with administrative capability to utilize and disseminate those technologies.

This Training Course, implemented with collaboration of the Building Research Institute (BRI), aims to foster persons to have high capabilities to plan, teach, and extend technologies related to seismic disaster mitigation, through the training not only in the fields of Seismology and Earthquake Engineering, but also in the field of Seismic Disaster Mitigation Policies.

<u>The curriculum of this course is approved as a master's degree program by National Graduate</u> <u>Institute for Policy Studies (GRIPS) and BRI.</u> Achieving required credits during the training, the participants will be awarded a Master's degree, "Master of Disaster Mitigation" by GRIPS and BRI. Accordingly this training is very demanding. <u>Applicants, with an excellent demonstrable</u> <u>educational and professional background, should be highly motivated and confident enough to</u> <u>pursue and attain the requirement of the program so that they can obtain the degree.</u>

The Overall Goal is to mitigate earthquake disasters in developing countries (e.g., mitigation of earthquake disasters through dissemination and transfer of technologies and knowledge of seismology and earthquake engineering).

II. Description

1. Title (J-No.):

Seismology, Earthquake Engineering and Disaster Management Policy (J09-00921)

2. Period of program:

Duration of whole program :	August 2009 to September 2010
(1) Preliminary Phase:	August 2009 to September 2009
(in a participant's home country)	
(2) Core Phase in Japan:	September 28, 2009 to September 18, 2010

3. Target Regions or Countries: 15 countries

Algeria, Bangladesh, China, Colombia, El Salvador, India, Indonesia, Malaysia, Mexico, Nepal, Nicaragua, Pakistan, Peru, Philippines, and Thailand.

4. Eligible / Target Organization:

This program is designed for the organization concerning to seismology, earthquake engineering and disaster mitigation.

5. Total Number of Participants:

20 participants

6. Language to be used in this program: English

7. Program Objective:

Nurture of personnel who have acquired advanced technologies and knowledge in the fields of seismology and earthquake engineering and are able to establish, utilize and disseminate earthquake disaster mitigation technologies applicable to their respective countries and/or regions under consideration of their actual conditions, regulations and institutions.

8. Overall Goal:

Seismic Disaster in developing countries will be reduced.

9. Outputs:

Participants are expected to achieve the following outputs;

- (1) To understand fundamental theories of seismology and earthquake engineering.
- (2) To acquire applied techniques of seismology and earthquake engineering.
- (3) To acquire techniques and knowledge for earthquake disaster mitigation.
- (4) To understand policies for earthquake disaster mitigation.

(5) To improve participants' capacities to apply techniques and knowledge through their studies on individual topics, and to make action plans in order to solve problems in their respective countries.

10. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below;

(1) Preliminary Phase in a participant's home country;
(August 2009 to September 2009)

Participating organizations make required preparation for the Program in the respective countries.

Outputs	Activities
Inception report is	Formulation and submission of Inception Report
formulated	

Methodology

Lecture

(2) Core P	Phase in Japa	ın;		
(Septembe	r 28, 2009 to	September 18, 2010)		
Participants	dispatched by the	he organizations attend th	e Program implemented in J	lapan.
Outputs	Subjects/Ag	endas		Metl
	Category	Seismology group (S group)	Earthquake Engineering group (E group)	
To understand	Orientation	Overview of Earthquake and Disasters	Introduction to Seismology Introduction to Earthquake Engineering	Lect

		Earthquake and	Seismology	
understand		Disasters	Introduction to	
fundamental			Earthquake Engineering	
			Computer	
theories of	Basic	Information	Structural Analysis	Lecture,
seismology	Subjects	Technology Related	-Structural Analysis	Practice and
and	Related	with Earthquake and	(1), (2) & (3)	Seminar
anu	with	Disasters	-Finite Element Method	
earthquake	Earthquake	-Computer	(1) & (2)	
engineering.	and	-Theory of Seismic	-Dynamic Aseismic	
engineering.	Disasters	Waves	Design	
		-Surface Waves	-Limit Analysis	
		-Scattering and	-Soil Mechanics	
		Attenuation	-Soil Dynamics (2)	
		Earthquake	Structural Dynamics	
		Phenomenology	-Structural Dynamics	
		-Practice on Theory	(1) & (2)	
		of Seismic Waves	-Shaking Table Testing	
		-Local Earthquake	-System Identification	
		Analysis	in Vibration Analysis	
		-Analysis of	-Structural Response	
		Teleseismic	Analysis	
		Records	-Soil Test and Survey	
		-Earthquake Focal	(2)	
		Mechanism	-Effect of Surface	
		-Seismicity and	Geology on Seismic	
		Statistics	Motion	

		-Crust and Upper	-Dynamic Soil Structure	
		Mantle Structure	Interaction	
		-Seismic Tomography	Seminar of Structure	
		Seminar of Basic	Analysis	
		Seismology	Anarysis	
T	Advanced	Earthquake	Seismic Design	Lecture,
To acquire	Subjects	Circumstance	-RC Structures	Practice and
applied	Related	-Earthquake	(1),(2),(3,) & (4)	Seminar
taahniguag	with	Generation and	-Steel Structures	Seminar
techniques	Earthquake	Prediction (1) &(2)	-Masonry Structures	
of	and	-Mathematics for	-Structural Testing	
seismology	Disasters	Seismology	-PC Structures	
seismology	Disusters	-Crustal deformation	-Foundation	
and		-Earthquake and Plate	Engineering	
earthquake		Tectonics	-Bridge Engineering	
•		-Earthquake Source	-Port and Harbor	
engineering.		Process	Structures	
		Characteristics of	-Dam Structures	
		Earthquake Disasters	-Underground	
		-Earthquake	Structures	
		Observation (1) &	-Lifeline Earthquake	
		(2)	Engineering	
		-Data Processing	Seismic Evaluation and	
		-Observation Tour for	Retrofitting	
		Earthquake	-Seismic Design Codes	
		Monitoring	(1) & (2)	
		-Geophysical	-Earthquake Resistant	
		Prospecting	Limit State Design (1)	
		-Effect of Surface	& (2)	
		Geology on Seismic	-Seismic Evaluation	
		Motion (1) & (2)	and Rehabilitation:	
		-Numerical	buildings (1) & (2)	
		Simulation of	-Seismic Evaluation	
		Seismic Wave	and Rehabilitation:	
		Propagation	bridges	
		Special Topics	-Seismic Isolation	
		-Observation Tours	-Design Earthquake	
		-Earthquakes and	Ground Motion and	
		Tsunami	Seismic Force (1) &	
		-Introduction to GIS	(2)	
		for Earthquake	-Structural Reliability	
		Disaster Mitigation	-Structural Response	
		-Earthquake Geology	Control	
		Seminar of Applied	Special Topics	
		Seismology	-Introduction to GIS for	
			Earthquake Disaster	
			Mitigation	
			Seminar of Seismic	
			Design, Seismic	
			Evaluation and	
			Retrofitting	

· _ ·	Forthqualto	Forthquelto Horand Ages	aamant	Laatura
To acquire	Earthquake Hazard	Earthquake Hazard Asse -Strong Earthquake Motio		Lecture, Practice and
techniques	and Risk	-Soil Dynamics (1)	m Observation	Seminar
and	Assessment	-Soil Test and Survey (1)		
		-Seismic Macro-zonation		
knowledge		-Seismic Micro-zonation		
for		Earthquake Risk Assessn		
earthquake		-Practice for Damage and		
disaster		-Simulation of Seismic Gi		
		-Microtremor Observation -Strong Motion Seismolog		
mitigation.		Seminar of Earthquake I		
То	Earthquake	Seismic Disaster Mitigati		Lecture,
	Disaster	-Social System against Dis		Practice and
understand	Mitigation	-Education on Basic Know	vledge for Disasters	Seminar
policies for	Policy	-Policy for Infrastructure		
earthquake		-Policy Making Process fo		
-		Disaster Risk Manageme		
disaster		- International activities for -Community based disaster	8	
mitigation.		-Community based alsoste -Practical risk assessment		
		Dissemination for Earthq		
		Mitigation		
		-Japanese ODA Policy and	l Development Support	
		Related with Disaster N	6	
		-Dissemination for Earthqu		
		-Project Cycle Managemer	nt for Disaster	
		Mitigation	N	
		Seminar of Earthquake I Policy	Disaster Mitigation	
	Case	Practice of Earthquak	e Disaster Mitigation	Lecture,
		Policy		Practice,
	Studies	-Colloquium	-Colloquium	Seminar and
		-Conoguium	-Conoquium	Presentation
		-Observatory Practice	-Observatory	Presentation
		-Observatory Practice -Earthquake	-Observatory Practice	Presentation
		-Observatory Practice -Earthquake Information	-Observatory Practice -Earthquake	Presentation
		-Observatory Practice -Earthquake	-Observatory Practice -Earthquake Information	Presentation
		-Observatory Practice -Earthquake Information -Study Trips	-Observatory Practice -Earthquake Information -Study Trips	Presentation
		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of	-Observatory Practice -Earthquake Information -Study Trips	Presentation
To improve	Individual	-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster	-
To improve	Individual Study	-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics	Presentation Practice, Seminar and
To improve participants'	Individual Study	-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster	Practice,
-		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺	Practice, Seminar and
participants' capacities to		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic	Practice, Seminar and
participants' capacities to apply		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance	Practice, Seminar and
participants' capacities to		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting	Practice, Seminar and
participants' capacities to apply		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses.	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques	Practice, Seminar and
participants' capacities to apply techniques and		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation	Practice, Seminar and
participants' capacities to apply techniques and knowledge		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response	Practice, Seminar and
participants' capacities to apply techniques and		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters.	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques	Practice, Seminar and
participants' capacities to apply techniques and knowledge		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters. -Analysis of Earthquake	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques -Nonlinear	Practice, Seminar and
participants' capacities to apply techniques and knowledge through their studies on		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters. -Analysis of Earthquake Source Process	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques -Nonlinear Earthquake	Practice, Seminar and
participants' capacities to apply techniques and knowledge through their studies on individual		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters. -Analysis of Earthquake Source Process -Seismicity Analyses	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques -Nonlinear Earthquake Response Analysis	Practice, Seminar and
participants' capacities to apply techniques and knowledge through their studies on		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters. -Analysis of Earthquake Source Process -Seismicity Analyses and Fault Plane	-Observatory Practice -Earthquake Information -Study Trips f Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques -Nonlinear Earthquake Response Analysis and Damage	Practice, Seminar and
participants' capacities to apply techniques and knowledge through their studies on individual		-Observatory Practice -Earthquake Information -Study Trips Practice for Seminar of Mitigation Menu for the topics of Individual Study ⁺ -Earthquake Hypocenter and Magnitude Determination. -Moment Tensor Analyses. -Determination of Earthquake Source Parameters. -Analysis of Earthquake Source Process -Seismicity Analyses	-Observatory Practice -Earthquake Information -Study Trips F Earthquake Disaster Menu for the topics of Individual Study ⁺ -Seismic Performance Design Method -Seismic Evaluation and Retrofitting Techniques -Seismic Isolation and Response Control Techniques -Nonlinear Earthquake Response Analysis	Practice, Seminar and

action plans	Relocation.	and Health	
in order to	-Crustal Structure	Monitoring	
in order to	Analyses Using	-Effect of Soil	
solve	Receiver Function.	Structure	
problems in	-Study on	Interaction	
their	Seismotectonics	-Planning of Earthquake	
respective	Based on Earthquake	Disaster Mitigation	
countries.	Parameter	of Urban Area -Post-earthquake	
	Determination.	Damage Inspection	
	-Physics of Earthquake	Method	
	Generation Process.	-Quality Control of	
	-Analysis of Strong	Building	
	Motion Generation	Construction	
	Using Empirical	-Others	
	Green's Function		
	Technique.		
	-Site Effect Studies		
	using Strong Ground		
	Motion Records.		
	-Geophysical		
	Prospecting for		
	Sedimentary Strata		
	Using Microtremors		
	and Surface Waves.		
	-Others		

Course					
CLIVE	Nurture of personnel who have acquired advanced establish, utilize and disseminate earthquake disast their actual conditions, regulations and institutions.	have acquired advanced technok minate earthquake disaster mitigat ulations and institutions.	Nurture of personnel who have acquired advanced technologies and knowledge in the fields of seismology and earthquake engineering and are able to establish, utilize and disseminate earthquake disaster mitigation technologies applicable to their respective countries and/or regions under consideration of heir actual conditions, regulations and institutions.	seismology and earthquake engir respective countries and/or regi	reering and are able to ons under consideration of
Course Outputs	Understanding fundame ntal theories of seismology and earthquake engineering through lectures and practices.	Acquiring applied te chniques of seismology and earthquake engineering through lectures and practices.	Acquiring te chniques and knowledge for earthquake disaster mitigation through lectures and practices.	Understanding policies for earthquake disaster mitigation through lectures and practices.	Improving participants' capacities to apply techniques and knowledge learnt in lectures and practices through their studies on individual topics. Action plans to solve problems in their respective countries.
The way of checking the outputs	Confirming participant's understanding level of technique and knowledge on lectures and practices by examinations, reports and discussions among participants.	Confirming participant's unde rstanding level of technique and knowledge on lectures and practices by examinations, reports and discussions among participants.	Confirming participant's understanding level of technique and krowledge on lectures and practices by examinations, reports and discussions among participants.	Confirming participant's understanding level of technique and krowledge on lectures and practices by examinations, reports among participants.	Confirming participant's level of understanding by evaluating thier technical reports and presentations, and also contents of their Action Plans.

III. Conditions and Procedures for Application

1. Expectations for the Participating Organizations

- (1) This project is designed primarily for organizations that intend to address specific issues or problems identified in their operations. Applying organizations are expected to use the Program for those specific purposes.
- (2) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section III-2 below.
- (3) Applying organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.

2. Nominee Qualifications

Applying Organizations are expected to select nominees who meet the following qualifications.

- be university graduates in seismology, earthquake engineering or seismic disaster mitigation, or be university graduates in science and technology other than the above mentioned subjects with professional experience of three or more years in the field of seismology, earthquake engineering or seismic disaster mitigation.
- 2) <u>be well versed in advanced mathematics</u> such as differentiation and integration, partial derivatives, differential equations, matrix, vector algebra, Fourier analysis, etc.
- 3) be able to write research reports on the individual study in English.
- 4) have a good command of English --- minimum TOEFL score; 79 (Internet Based Test), 213 (Computer Based Test) or 550 (Paper Based Test), or equivalent.
 *Applicants with these scores normally can give and understand detailed directives or instruction with technical terms.
- 5) be between the ages of twenty-two(22) and forty(40) years.
- 6) Must be in good health, both physically and mentally, to participate in the Program in Japan.
- 7) Must not be serving any form of military service.

3. Required Documents for Application

(1) Application Form: One (1) original and three (3) copies

Applicants should choose one of Seismology or Earthquake Engineering groups.

(2) Application Materials for GRIPS*/BRI** Master Program (See ANNEX I)

A part of Curriculum of this course is approved as a master's degree program by GRIPS and BRI. Therefore, each applicant is required to prepare and submit all of the following materials for admission to GRIPS/BRI Master Program as written in ANNEX I.

- Application Form
- Certificate of Health
- Certificate of Employment

- Two letters of Recommendation
- Official Transcripts or Official Copy of Transcripts
- Official Copy of Diploma or Degree Certificate
- Official Document Certifying English Proficiency

*GRIPS -National Graduate Institute for Policy Studies **BRI –Building Research Institute

(3) Inception Report (See ANNEX II)

Each applicant is required to originally write and prepare a <u>typewritten</u> Inception Report by him/herself in accordance with the Instruction for the Preparation of Inception Report (see ANNEX II).

The Inception Reports are used for screening applicants and for presentation. Each participant is required to make a 20-25 minutes presentation on Inception Report within about two weeks after the training begins. It is mandatory to bring these materials in digital forms.

Note: Applications without any of required documents will be out of the selections.

4. Procedure for Application and Selection :

(1) Submitting the Application Documents:

Closing date for application to the JICA Center in JAPAN: <u>May 22, 2009</u> <u>Note: Please confirm the closing date set by the respective country's JICA office</u> <u>or Embassy of Japan of your country to meet the final date in Japan.</u>

(2) Selection

- After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this project.
- The JICA Center in charge in Japan will carry out the screening jointly with BRI by the end of May and decide the passed applicants out of those who fulfill the set qualifications described above in III.2.
- A committee, which consists of GRIPS and BRI, will screen the above qualified applicants academically with the Application materials such as Official Transcripts by <u>the end of June</u>.
- The applicants who are accepted to participate in this program will be decided by a faculty council of GRIPS finally by <u>the middle of July</u> (This schedule cannot be delayed).

In case the number of applicants is more than the capacity of this course, some applicants may not be accepted due to the limited number of seats even though they fulfill the requirements.

(3) Notice of Acceptance

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than <u>July 31, 2009</u>**. In case of acceptance, Acceptance Agreement from GRIPS will be informed together.

5. Conditions for Attendance

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain,
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (7) to participate the whole program including a preparatory phase prior to the program in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to carry out the actions described in section -9 and section -4.

6. Certificate, Diploma and Master's Degree

- (1) Participants who have successfully completed the course will be awarded a certificate by JICA
- (2) Participants, who have successfully fulfilled requirements given by International Institute of Seismology and Earthquake Engineering (IISEE), will be awarded another certificate and a diploma by IISEE
- (3) Participants, who have successfully achieved required credits, will be awarded a Master's Degree, 'Master of Disaster Mitigation', by GRIPS and BRI

IV. Administrative Arrangements

1. Organizer:

(1) Name: JICA Tsukuba

2. Implementing Partner:

- (1) International Institute of Seismology and Earthquake Engineering (IISEE) at Building Research Institute(BRI)
 - 1) URL: http://iisee.kenken.go.jp
 - 2) Address: 1 Tachihara, Tsukuba, Ibaraki 305-0802, Japan
 - 3) TEL: +81-29-879-0679
 - 4) FAX: +81-29-864-6777
 - 5) E-mail: iisee@kenken.go.jp
 - 6) Remark: IISEE is an organization that trains participants from earthquake-prone developing countries on Seismology and Earthquake Engineering. In 1962, the BRI established the IISEE as an institute exclusive for training in the field of seismology and earthquake engineering.

(2) National Graduate Institute for Policy Studies (GRIPS)

- 1) URL: http://www.grips.ac.jp/
- 2) Address: 7-22-1 Roppongi, Minato-ku, Tokyo, 106-8677 Japan
- 3) TEL: +81-3-6439-6046
- 4) FAX: +81-3-6439-6050
- 5) E-mail: admissions@grips.ac.jp
- 6) Remark: The National Graduate Institute for Policy Studies (GRIPS) is a graduate school and research institute. GRIPS was established in October 1997. GRIPS aims to be an international center of excellence for the education of future leaders in the policy arena, for the advancement of policy research, and for the systematic collection and dissemination of policy-related information.

3. Travel to Japan:

(1) Air Ticket:

The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.

(2) Travel Insurance:

Term of Insurance: From arrival to departure in Japan.

4. Accommodation in Japan:

JICA will arrange the following accommodations for the participants in Japan:

JICA Tsukuba International Center (JICA TSUKUBA)

Address: 3-6 Koyadai, Tsukuba, Ibaraki 305-0074, Japan

TEL: +81-29-838-1111, FAX: +81-29-838-1790

(where "81" is the country code for Japan, and "29" is the local area code)

If there is no vacancy at JICA TSUKUBA, JICA will arrange alternative accommodations for the participants.

5. Expenses:

The following expenses will be provided for the participants by JICA:

- (1) Allowances for accommodation, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials

For more details, please see p. 9-16 of the brochure for participants titled "KENSHU-IN GUIDE BOOK," which will be given to the selected participants before (or at the time of) the pre-departure orientation.

6. Training Course and Master's Degree Program

The curriculum of this training course is approved as a master's degree program by GRIPS and BRI. <u>The entrance examination fee, admission fee and tuition for the Master's</u> <u>Degree Program will be provided by BRI.</u>

7. Pre-departure Orientation:

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

V. Other Information

1. Computer:

The participants are recommended to bring own laptop/notebook computers to prepare the Action Plan, presentation slides and to communicate by e-mail.

2. Relevant Data for Seismology and/or Earthquake Engineering in your country:

The participants are recommended to bring the relevant data in your country on your laptop/notebook computers for preparing the Action Plan, presentation slides etc.

END

ANNEX-I: Application Materials for GRIPS/BRI Master Program ANNEX-II: Instruction for the Preparation of Inception Report ANNEX-III: Syllabus of the Training Program (Tentative)

For Your Reference

JICA and Capacity Development

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that "capacity development" is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs and are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the "*adopt and adapt*" concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this "*adoption and adaptation*" process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan's developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of "tacit knowledge," a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

JICA Tsukuba International Center (JICA TSUKUBA) Address: 3-6 Koyadai, Tsukuba, Ibaraki 305-0074, Japan TEL: +81-29-838-1111 FAX: +81-29-838-1790

ANNEX I : Application Materials for GRIPS/BRI Master Program

Instructions: Please read this information carefully before completing application materials for the GRIPS/BRI program.

Any false or misleading statement or incomplete or inaccurate application may be the basis for denial of screening for admission or, if admitted, dismissal from the School. All questions must be answered, and the application form must be signed and dated. You must notify the School of any changes of status in any part of your application that may occur after the date of the signature on the application form and write an explanation required thereby within 30 days of the status change. All materials submitted by an applicant become the property of GRIPS and will not be returned.

Documents to be submitted: Applicants are requested to submit the following documents (preferably in one complete set so as to avoid delays in further evaluation):

Step1: Prepare the following supporting documents:

Please check I whether you have submitted all the necessary documents

- \Box completed application form
- \Box certificate of health
- 2 identical photographs (30 x 40 mm) (please paste one photograph on the application form)
- 2 letters of recommendation in sealed envelopes
- □ official certificate of employment describing applicant's <u>present</u> job title and employer. Information on civil servant qualification (e.g. BCS, IAS, IRS, CSS) should be also included there, if applicable. (The certificate of employment must bear official seal and sign obtained from the employer)
- official transcripts or official copies of transcripts from all undergraduate and postgraduate institutions previously attended*
- □ official copy of diploma or degree certificate from all undergraduate and graduate institutions previously attended*
- TOEFL/IELTS score report, or other official document certifying English proficiency of those applicants whose undergraduate education was in a language other than English (GRIPS TOEFL code no. 9040). Native speakers of English are exempted from this requirement. Those who received (under) graduate education in English should submit an official document confirming that the language of instruction was English.

Notes

- 1. *Letters of recommendation must be submitted in sealed envelopes, signed across the seal. Recommendations should be written by people who have supervised the applicant either in an academic or work capacity. Preferably, one letter should be written by a university professor and the other should be written by a senior member of the applicant's present work place.
- 2. *An official copy means a certified true copy of the original document with an official seal obtained from the administration office of the university attended. A true copy of the original document certified by a notary public may also be accepted. Copies attested by organizations/persons not having notary/legal functions will not be accepted or considered for screening.
- 3. All documents must be presented in English. Translations in English without an official seal obtained from the administration office of the university attended or without a signature of the recommender or the drawer of the document are not acceptable.
- 4. Faxed documents and digital copies sent through e-mail are not acceptable.

INQUIRIES

Details regarding to the graduate program may be obtained at the following websites: <u>http://www.grips.ac.jp</u> <u>http://isee.kenken.go.jp</u>

Disaster Management Policy Program by GRIPS and BRI In Co-operation with JICA, Japan Photographs

Application Form			Please write you name on the back
(Type or write in block letters)			each photo
PERSONAL DATA			Size:30 x 40 mm
1. Full Nameas written in your passport.			
as written in your passport.			
Name to be used in correspondence, if different from above.			
2. Date and Country of Birth 3 3.	Age (as of Octo	ber 1 st 2009)
4. Gender: male female 5.	Marital Status:	□single	married
6. Citizenship (as written in your passport)			
7. Present Employer Does your organization belong to a central or regional authority?		central	regional
8. Present Position			
9. Work Address			
tel: fax country code city code local number fax country code city code local num	email _ nber		
10. Home Address			
tel: fax fax	email_		
11. Present Mailing Address: home work other, namely:			
tel: fax fax	email_		

APPLICATION INFORMATION

12. List names and locations of educational institutions attended, with dates of attendance and degrees attained or expected. Please attach academic transcripts from all colleges and universities listed.

Elementary Education – Secondary Education	Dates (from-to)	Period of Schooling
(before higher education)		years
		months

Higher Education	Institution and Location	Dates (from–to) Month Year	Period of Schooling	Degree	Major
Undergraduate level			years		
			months		
Graduate level			years months		
Total years of s (including eler	Total years of schooling (including elementary and secondary education)		years months		<u>.</u>

13. [Optional] Undergraduate GPA ______ out of maximum GPA scale of (e.g. 4.0) ______, if available Please see appendix for GPA calculation procedure

14. [Optional] Graduate GPA ______ out of maximum GPA scale of ______, if available

15. [Optional] Undergraduate Class obtained or Passed Division ______, if available

16. **[Optional]** Graduate Class obtained or Passed Division ______, if available

17. Honors and Awards received:

18. TOEFL/IELTS scores or any other qualifications to show English proficiency:

TOEFL	•		IELTS:		
	score	date		score	date

All applicants must submit either TOEFL/IELTS score reportor an official document with the attestation from the university confirming that undergraduate/graduate education was instructed in English.

19. List below two persons familiar with your past academic or professional activity whom you have requested letters of recommendation.

name

name

position and affiliation

1.

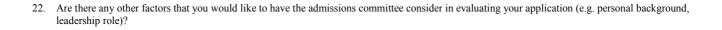
2.

position and affiliation

20. List all previous employment, starting with your current employment (please make sure to submit an official certificate of employment from the present employer)

Employer and Location	Dates (to-from)	Job Title and Description

21. Summarize your present duties and responsibilities (applicants, who are still studying but will have graduated by October, should describe their future career plans). Applicants with specific civil servant qualification and ranking (e.g. BCS, IAS, IRS, CSS) are also requested to provide the respective information. Please use only this space and pay special attention to completing this section, as it is often the principal source of information for evaluating the relevance of the program to the applicants' assignment, as well as the relative merits of each applicant.



CERTIFICATION

I certify that to the best of my knowledge all information given above is correct and complete, and I understand that any omission or misinformation may invalidate my admission or result in dismissal.

Signature of applicant

date

You need to submit this completed application form together with the supporting documents listed on page 1. Please use the check list to make sure that you have collected all the supporting documents.

Disaster Management Policy Program by GRIPS and BRI In Co-operation with JICA, Japan

CERTIFICATE OF EMPLOYMENT

EMPLOYER DETAILS		
Name of Organization:		
Address of Organization:	,	
	faxemail	
country code city code local number	country code city code local number	
EMPLOYEE DETAILS		
	to	
	MM/DD/YY MM/DD/YY	
Present position, rank, responsibilities, etc.:		
ful has been employed by this organization from	MM/DD/YY MM/DD/YY	

LEAVE OF ABSENCE APPROVAL SECTION

I will approve one year of Leave of Absence for the above employee to participate in the Disaster Management Policy program, if he/she is admitted to GRIPS and BRI.

Name of person completing the form		
Position/Title:		
Signature	Date	

*Please put Official Stamp or Seal on this space.

Disaster Management Policy Program by GRIPS and BRI In Co-operation with JICA, Japan

		LETTE	ER OF RECOM	MENDATIO	<u>N</u>	
то	THE APPLICANT: C	omplete this section. Give thi	s form to the person wl	nom you have asked	to recommend you.	
App	olicant's Name					
	as w	ritten in your passport				
Rec	ommender's Name					
seal	ed envelope to the applicat	ER: Please enclose the complete the comple	te a separate letter and			
1.	How long have you	known the applicant?	years	months		
2.	In what capacity ha	ve you known the applic	cant?			
3.	How often have you	ı seen him/her?				
	□ daily	□ weekly	□ monthly	C] rarely	
4.		other students/staff in the administrative ability?	he same field who	n you have knov	wn, how would you	rate the applicant's
	 Outstanding (hi Excellent (next Good (strong al) 	highest 5%) bility, but not in top 10%				
	 Average (upper Below Average Not Recommer 	e (lower 50%, but recom	nmended)			
5.	Please evaluate as e	xcellent, average or poo	pr:			
	Academic Performa Intellectual Potentia Creativity & Origin Motivation for Grac	ıl ality	excellent	average	poor 	
6.		essors and instructors of ord indicative of the app		l ability? If no, I	blease explain.	

7. Discuss the applicant's competence in his/her field of study, as well as the applicant's career possibilities as a professional worker, researcher or educator. In describing such attributes as motivation, intellect, and maturity, please discuss both strong and weak points. Specific examples are more useful than generalizations.

8.	Discuss the applicant leadership skills and	t's character and persona reliability.	ality. Please comme	ent on his/her social sk	ills, emotional stability,
9.	Additional comment	s, if any.			
10.	How would you eval	uate the applicant's over	rall suitability as a	candidate for admissio	n to the Graduate Program of
	GRIPS and BRI ?	🗌 good	average	poor	
-	Name of person com	pleting this form			
		· · · · · · · · · · · · · · · · · · ·			
	Organization				
	Address				
	phone	fax		email	
	Signature			date	

Disaster Management Policy Program by GRIPS and BRI In Co-operation with JICA, Japan

	LET	FER OF RECOM	MENDATIO	<u>N</u>	
то	THE APPLICANT: Complete this section. Give	this form to the person wh	nom you have asked	to recommend you.	
	licant's Nameas written in your passport ommender's Name				
seal	THE RECOMMENDER: Please enclose the con ed envelope to the applicant. If you prefer, you may v fidential and will be used for the applications screening	vrite a separate letter and			
1.	How long have you known the applicant?	9 years	months		
2.	In what capacity have you known the app	licant?			
3.	How often have you seen him/her?				
	□ daily □ weekly	\Box monthly] rarely	
4.	In comparison with other students/staff in overall academic or administrative ability		n you have knov	vn, how would you	rate the applicant's
	 Truly Exceptional (one of the best yc Outstanding (highest 5%) Excellent (next highest 5%) Good (strong ability, but not in top 1 Average (upper 50%) Below Average (lower 50%, but record) Not Recommended 	0%)			
5.	Please evaluate as <i>excellent</i> , <i>average</i> or <i>p</i> Academic Performance Intellectual Potential Creativity & Originality Motivation for Graduate Study	oor: excellent □ □ □ □	average	poor 	
6.	(For university professors and instructors Is the academic record indicative of the a		l ability? If no, p	lease explain.	

7. Discuss the applicant's competence in his/her field of study, as well as the applicant's career possibilities as a professional worker, researcher or educator. In describing such attributes as motivation, intellect, and maturity, please discuss both strong and weak points. Specific examples are more useful than generalizations.

8.	Discuss the applicant leadership skills and	t's character and persona reliability.	ality. Please comme	ent on his/her social sk	ills, emotional stability,
0					
9.	Additional comment	s, if any.			
10.	How would you eval GRIPS and BRI?	uate the applicant's over	rall suitability as a o	candidate for admissio	n to the Graduate Program of
	outstanding	good	average	poor	
	Name of person com	pleting this form			
	Position/title				
	Organization				
	Address				
	phone	fax		email	
	Signature			date	

<u>CERTIFICATE OF HEALTH</u> (to be completed by the examining physician) Please fill out (PRINT/TYPE) in English. <u>Do not leave any items blank.</u>

	$\Box Male Date of Birth :$ $\Box Female Age :$
Name :,	
Family name, First name Middle name	
 Physical Examinations Heightcm, Weightkg Blood pressuremm/Hg ~mm/Hg, Blood Type Pulse Rate/min, □ regular □ irregular Eyesight : (R) (L) (R) (R) without glasses with glasses or condition (4) Hearing : □ normal □ impaired speech : □ normal □ 	
2. Please describe the results of physical and X-ray examinations of appli	cant's chest X-ray (X-ray taken more than 6 months prior to the
certification is NOT valid). Lung : □ normal □ impaired <u>Date</u>	., <u>Film No.</u>
Describe the condition of the condition	
Cardiomegaly :	□ impaired
3. Disease Treated at Present □ Yes (Disease:) 🗆 No
 4. Past history : Please indicate with + or - and fill in the date of recover Tuberculosis□(), Malaria□(), Epilepsy□(), Kidney Disease□(), Diabetes□(), Drug Allergy□(), Functional Disorder in extremities□() 	Cry Other communicable disease□() Heart Diseases□() Psychosis□(),
5. Laboratory tests Urinalysis : glucose (), protein (), occult blood Feces : Parasite (egg of parasite) (+, -) ESR :mm/Hr, WBC count :x10 ³ /µl, RB Hemoglobin:g/dl, AST (GOT):u/l, AL	BC :x10 ⁻⁶ /μl,
6. Please describe your impression.	
7. In view of the applicant's history and the above findings, is it your obse Japan ? yes \square no \square	ervation his/her health status is adequate to pursue studies in
Date: Signature:	<u> </u>
Physician's Name in Print:	
Office/Institution:	
Address:	<u>.</u>

How to calculate your GPA

If GPA is not indicated on your transcript, take the value of the grade earned and multiply by the number of credits earned for each course. Add "total value" and divide by the "total number of credits" earned to get GPA.

Example:

grade	value		# of credits		total value
А	4.0	х	3	=	12.00
B-	2.7	х	4	=	10.80
A-	3.7	х	3	=	11.10
C+	2.3	х	3	=	6.90
total			13	/	40.80
GPA				=	3.14

Value of Letter Grades				
А	4.0			
A-	3.7			
B+	3.3			
В	3.0			
B-	2.7			
C+	2.3			
С	2.0			
C-	1.7			
D+	1.3			
D	1.0			
D-	0.7			
F	0.0			

ANNEX II: Instructions for the Preparation of Inception Report

The Inception Report should be originally written by the applicant herself/himself and typewritten including items listed below. Applicants are requested to follow strictly the technical instruction shown in the next page of this General Information. It is mandatory to record the Inception Report on the electronic medium such as CD or USB memory and bring it to Japan.

Inception Report should include,

for Seismology(S) group

- 1. Geographic and geo-scientific information of your country with Maps (Tectonics, Active Faults, Seismicity, Macro-zoning study etc.).
- 2. Damaging Earthquakes or Tsunami (hypocenter, magnitude, isoseismals, surface faulting, damage. casualties), Catalogs, photographs etc.
- 3. Responsibilities of your organization in the national government or country.
- 4. Internal structure of your organization with the Organization Chart.
- 5. Equipments and personals of your organization (Seismic Network, Research Activities).
- 6. Analysis of Capacity (Strong and Weak points) of your organization and country (Disaster Mitigation Plan, Responsible organization, Hazard and Risk maps, Micro-zoning study.
- 7. Other organizations collaborating with yours for the seismological activities.
- 8. Your own responsibility in your organization.
- 9. Potential target of your study in the course with difficulties or obstacle for you to obtain your target with listing up the Strong and Weak points of you.
- 10 Your expectations for the course: What do you want to get in the course?

for Earthquake Engineering(E) group

- 1. Seismic Design Code for buildings of each country*
- 2. Characteristics of building damage due to earthquakes in your country.
- 3. Microzoning and earthquake disaster mitigation planning of each country.
- 4. Responsibilities of your organization in the national government or country.
- 5. Internal structure of your organization with the Organization Chart.
- 6. Your own responsibility in your organization.
- 7. Potential target of your study in the course with difficulties or obstacle for you to obtain your target with listing up the Strong and Weak points of you.
- 8 Your expectations for the course: What do you want to get in the course?

* Applicants who do not have any seismic design code in their countries are requested to present practical measures to secure the seismic safety of buildings.

The cover page of Inception Report should include:

- (1) Name of Applicant,
- (2) Name of Organization to which Applicant belongs, namely, the affiliation,
- (3) Choice of Group (Select one of (S) or (E)).
 - Note: Ambiguous expression for the selection of group will cause a severe disadvantage in screening process.

Choice of Topic for Individual Study selected from the topics' list in "II. Description 9. Expected Module Output and Contents".

Note: Ambiguous expression or null answer will cause a severe disadvantage in screening process.)

The first page of Inception Report should include:

(4) Title and Author's Name,

(5) Abstract,

The abstract should be informative and include the principal findings and conclusions. References to formulas or figures are not necessary. It should not be consist of more than 200 words.

(6) Introduction,

(7) Affiliation of the Author. <u>Note: Affiliation should appear as a foot note on the first page as following sample shows.</u>

The main part of Inception Report that starts from the second page should include:

(8) Topic mentioned above,

(9) "Acknowledgement" and "Appendix" after the topic if necessary.

(10)References,

Applicants are requested to submit attached documents including 3 or 4 items,

(11) Attached Document

· Information about the structure of Organization, for example, Organization Chart,

- Research activity of Organization related to Seismology, Earthquake Engineering, or Seismic Hazard/Risk Analysis,
- A list of governmental or private organizations related to Seismology or Earthquake Engineering in the country of Applicant. and,
- (If you select 'others' for the topic of Individual Study) a concrete plan of Individual Study. IISEE may inquire about the plan during the selection process.

(12) Format

- **1.** The manuscript must be carefully prepared and should be submitted with A2A3 form and GRIPS application materials. The total pages of the Country Report should not exceed 15 pages including tables and figures.
- 2. Page Format: Use A4 white paper sheets (21 cm x 29.7 cm). Leave 2.5 cm margins at the top, right and left sides of the text and 3.5cm margin at the bottom. Special attention has to be paid in preparing papers using US letter-size paper. It should be appropriately arranged so that it conforms to the above requirements in appearance, namely the manuscript should occupy 16cm x 23.7cm in each page. All main text should be single spaced, Times New-Roman types. Use 18pt in capital letters and boldface for TITLE, 12pt for authors, and 11pt for the rest, including affiliations, abstract, main text, headings, sub-headings, sub-subheadings, acknowledgement, appendix, references, and captions for figures, photos and tables.
- **3. Organization of the papers:** Write the **TITLE** of your paper, centered and in 18pt capital letters and boldface types at the top of the first page. After two more line space, write your names in 12pt. Last names should be in capital. Affiliations should be cited by superscripts. Leave two lines, and then write abstract in 11pt. "**ABSTRACT**" should be in capital letters and boldface and be followed by the text of Abstract. After three lines, start main body of your paper in 11pt. The ordinary pages, starting from the second page, contain the main text from the top line. Avoid footnotes and remarks. Explain in the main text, or in Appendices, if necessary. Affiliation itself should be put at the bottom of the first page, cities, countries and e-mail addresses of all authors, as indicated above.

- 4. HEADINGS: Use at most three levels of headings, i.e., headings, subheadings and sub-subheadings. Headings shall be written in capital letters, boldface types, and centered of your text. Leave two lines space before headings and one after them. Do not indent the first line after headings, subheadings and sub-subheadings. First lines of the other text paragraphs should be indented as indicated here. Do not leave blank lines between paragraphs. Subheadings: Subheadings shall be written in lower-case letters and boldface types, right against the left side of your text, as indicated here. Leave one line space before and after subheadings. Use the above mentioned rules for indentation. Sub-subheadings: The only difference with respect to subheadings is that sub-subheadings shall be in Italic and no lines space shall be left after sub-subheadings. Don't put numbering to heading of any level.
- **5. EQUATIONS AND SYMBOLS:** Use high quality fonts for both mathematical equations and symbols. Papers with hand-written mathematical equations and symbols are not accepted. Equations should be centered and numbered. Leave one line above and below equations. The equation number, enclosed in parentheses, is placed flush right. Equations should be cited in the text as Eq. (1).
- 6. FIGURES, TABLES AND PHOTOS: Figures and tables shall be legible and well reproducible, and photos shall be clear. Colored figures, tables and photo will be printed in Black and White. Captions shall be written directly beneath figures and photos and above tables, and shall be numbered and cited as Figure 1, Table 1 or Photo 1. They should be written in 11pt, and centered. Long captions shall be indented. Do not use capital letter or boldface types for captions. Figures, tables and photos shall be set possibly close to the positions where they are cited. Do not place figures, tables and photos altogether at the end of manuscripts. Figures, tables and photos should occupy the whole width of a page, and do not place any text besides figures, tables and photos. Leave one line spacing above and bottom of figures, tables and photos. Do not use small characters in figures and tables. Their typing size should be at least 9pt or larger.
- **7. UNIT:** Use SI unit in the entire text, figures, and tables. If other units are used, provide it in parentheses after the SI unit as 1MPa (10.2 kgf/cm²).
- **8. CONCLUSIONS:** Write a **CONCLUSIONS** section at the end of your paper, followed by ACKNOWLEDGEMENT, APPENDICES and REFERENCES.
- 9. ACKNOWLEDGMENT: Acknowledgment should follow CONCLUSIONS.
- 10. APPENDIX: Appendix should be placed between Acknowledgment and References, if any.
- **11. REFERENCE:** All references should be listed in alphabetical order of the first author's family name. They are referred in the main text like (Richter 1935). Write the reference list as

Gutenberg, B., and Richter, C. F., 1954, Seismicity of the Earth and Associated Phenomena, 2nd ed. Princeton Univ. Press, Princeton, NJ.

Richter, C. F., 1935, An instrument earthquake magnitude scale, Bull. Seis. Soc. Am. 25, 1-32.

(13) Sample for Inception Report	
Sample for the cover sheet	Sample for the first page
THE GROUP TRAINING COURSE IN SEISMOLOGY, EARTHQUAKE ENGINEERING AND DISASTER MITIGATION 2009 – 2010 (COURSE ID: J-08-00750) INCEPTION REPORT ON	TITLE OF THE INCEPTION REPORT by AUTHOR* ABSTRACT
1. Name of Applicant	INTRODUCTION
2. Name of Organization	
3. Choice of Group (S), (E)Choice of Topic for Individual Study	*The Author's organization and occupation are to be written here.

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ANNEX III: Syllabus of the Training Program (Tentative)

Category	Title	Subtitle	Contents
Orientation	Orientation	Overview of	Introductory lectures for Seismology Group are given by
		Earthquake and	staff members of IISEE. Basic concepts and general scope
		Disasters	of seismology, earthquake phenomena, strong motion study and seismic hazard and risk etc. are described.
Basic Subjects Related with	Information Technology	Computer	Practices on FORTRAN programming for scientific computing and on UNIX and GMT are given using PC.
Earthquake and Disasters	Related with Earthquake and Disasters	Theory of Seismic	Basic expressions for strain and stress relations are induced
		Waves	from the fundamental concept of the property of elasticity. Mathematical background of the theory of elasticity is discussed from the standpoint of specific problems such as equilibrium conditions, strain energy and transmissions of elastic waves. Reflection and refraction of plane waves are
		Surface Waves	explained. P and S waves velocity distribution is discussed. Crust and upper mantle structure inferred from surface
			wave methods will be explained.
		Scattering and Attenuation	Stochastic modeling and measurement of small-scale heterogeneities and intrinsic attenuation of seismic waves in the crust will be explained.
	Earthquake	Practice on Theory of	This practice is presented for understanding the lecture,
	Phenomenology	Seismic Waves	"Theory of Seismic Waves" through practices. We use TauP Toolkit developed at University of South Carolina for practices of global scale problems.
		Local Earthquake	Analyses of seismograms obtained by local networks, e.g.,
		Analyses	Wadati diagram, particle motion, apparent velocity,
			hypocenter determination, and magnitude.
		Analyses of Teleseismic Records	Explanation of principles underlying the interpretation of seismograms and determination of earthquake parameters. Practice of the analysis of seismograms and determination
			of earthquake parameters.
		Earthquake Focal	Analysis and practical training in finding fault plane
		Mechanism	solutions is conducted by using seismic wave.
		Seismicity and Statistics	Fundamental concepts on seismic activity and earthquake statistics including prediction-oriented method analysis.
		Crust and Upper Mantle Structure	Crust and upper mantle structure inferred from explosion seismic and surface methods are explained.
		Seismic Tomography	Theory and application of seismic tomography in local, regional, and global scales are explained. Practice on computer is also given.
	Seminar of Basic Seismology		Discussion, presentation and practice for the topics of Basic Seismology
Advanced Subjects Related with Earthquake and Disasters	Circumstance a	Earthquake Generation and Prediction (1)	Earthquake dynamics and scaling laws are explained. Earthquake preparation processes and researches on short-term prediction are introduced.
		Earthquake Generation and Prediction (2)	Earthquake cycles and long- and intermediate-term prediction are introduced.
		Mathematics for	Basic concepts and technique of applied mathematics used
		Seismology	often in the field of seismology are explained. Subjects include linear differential equations, Fourier analysis, matrix algebra and vector analysis. Practice of applied mathematics is also given.
		Crustal Deformation	Introductory course of crustal deformation including geodetic survey and continuous measurement with special references to the problems on modeling of earthquake and volcanic events and earthquake forecasting.
		Earthquake and Plate	The basic concept of plate tectonics is presented. Methods
		Tectonics	to obtain plate motions are described.

S-Group (Seismology Group)

		Earthquake Source Process	Basic models and conceptions of earthquake source processes are provided. The following three subjects: 1) how to describe an earthquake source mathematically, 2) how to synthesize body waves generated from the source, 3) how to determine the model parameters are explained.
	Characteristics of Earthquake Disasters	Earthquake Observation (1)	Basic theory of seismometers is explained. A method for calibration of conventional type of short period seismometer is presented with a practical training.
		Earthquake Observation (2)	Data acquisition and seismic telemetry systems are explained
		Data Processing	Theory and practice of the least squares method used for seismological analyses and those of Discrete Fourier transform and digital filter are introduced.
		Observation Tour for Earthquake Monitoring	Observation tour to the institutes that have observational networks to monitor earthquakes.
		Geophysical Prospecting	Principles of seismic refraction and reflection and their applications to the real field are discussed. Field Practice is given.
		Effect of Surface Geology on Seismic Motion (1)	Effects of surface geology on seismic motion (ESG) are explained by showing results of ground motion case studies: amplification mechanisms of seismic waves, actual examples of site amplifications at sites with various site conditions, relations with earthquake damage.
		Effect of Surface Geology on Seismic Motion (2)	Subsurface explorations and strong motion synthetic techniques are explained in detail.
		Numerical Simulation of Seismic Wave Propagation	Basic theory of seismic wave propagation and numerical methods for solving the elastic equations are explained. Seismic wave propagation is demonstrated by animation made by computer. Practice on the numerical simulation is given by using PC.
	Special Topics	Observation Tour	Observation tour to the institutes that have notable activities in the field of Earth Sciences.
		Earthquakes and Tsunami	Basic concept and overview of tsunamis, including tsunami generation, propagation and tsunami warning and hazard reduction systems.
		Introduction to GIS for Earthquake Disaster Mitigation	Basics and conceptions of Geographical Information System (GIS) are explained through lecture and practice using free GIS software.
		Earthquake Geology	Geological subjects related to earthquake prediction, hazard assessment and countermeasures.
	Seminar of App	lied Seismology	Discussion, presentation and practice for the topics of Applied Seismology
Earthquake Hazard and Risk Assessment	Earthquake Hazard Assessment	Strong Earthquake Motion Observation	General procedures and system of a strong-motion earthquake observation are presented. Participants are introduced to the principle of strong-motion accelerometers (SMAC), data acquisition systems and data analysis procedures. Application of strong earthquake ground motion to seismic-resisting design is explained.
		Soil Dynamics (1)	Fundamental properties of soil such as non-linearity and constitutive law are reviewed. Dynamic behavior of soil deposits and analytical method are explained with evaluation of material constants. Liquefaction of sand deposits will be discussed and countermeasures against liquefaction are introduced.
		Soil Test and Survey (1)	Geotechnical field investigation and laboratory testing methods are discussed in this lecture. An emphasis is placed on providing the information about currently used practical methods.

		Seismic Macro-zonation	Seismic Hazard Assessment is discussed, that is an estimation of the likelihood of an earthquake occurrence and its magnitude in and around the location of interest and of the severity of strong ground motions expected for a certain return period.
		Seismic Micro-zonation	This lecture gives an introduction to seismic micro-zoning technique by presenting the methods to estimate the distribution of the local and regional seismic hazard, explaining the preparation process of seismic scenarios, describing the applications of micro-zoning results, and discussing the future of micro-zoning. Various examples of actual studies are also presented.
	Earthquake Risk	Practice for Damage and Risk Assessment	Topics related on Risk and Damage Assessment for buildings are given through lectures and observation visits.
	Assessment	Simulation of Seismic Ground Motion	Method to estimate the strong ground motion at the engineering bedrock based on the empirical formulas is explained.
		Microtremor Observation(1)	Practice in the field and analysis are introduced for microtremor that is one of the useful information to evaluate the characteristics of earthquake ground motion.
		Microtremor Observation(2)	Field practice of microtremor array observation
		Strong Motion Seismology	Strong-motion seismology is concerned with high frequency seismic waves from large earthquakes. Its ultimate goal is to predict strong ground motion from the basic understanding of fault mechanics and seismic wave propagation in the Earth.
	Seminar of Eart	hquake Disaster Mitigation	Discussion, presentation and practice for the topics of Earthquake Disaster Mitigation
Earthquake Disaster	Seismic Disaste	r Mitigation Policy	Disaster mitigation policy and seismic risk management of national level are discussed with practical system and laws.
Mitigation Policy	Disaster Risk M	lanagement	A broad understanding of disaster risk management, including prevention / preparedness before disasters and recovery / reconstruction after disasters is provided.
	Dissemination for Earthquake Disaster	Japanese ODA Policy and Development Support related with Disaster Mitigation	Japanese ODA policy and implementation and the international trend of development assistance related with disaster mitigation activities, e.g., poverty and gender issues are explained.
	Mitigation	Dissemination for Earthquake Disaster Mitigation	Dissemination process for Earthquake Disaster Mitigation in Japan is explained through observation visits.
		Project Cycle Management for Disaster Mitigation	Methodology and practice for Project Management Cycle and its facilitation techniques.
	Seminar of Eart Policy	hquake Disaster Mitigation	Discussion, presentation and practice for the topics of Earthquake Disaster Mitigation Policy
Case Studies	Practice of Earthquake Disaster Mitigation	Colloquium	Three colloquiums are planned: 1) for the report on the seismic observation and its results in the countries of each participant, 2) for the practice of reading scientific papers, and 3) for explaining the plan of individual study.
	Policy	Observatory Practice	Seismic array observation is explained in the Matsushiro Seismological Observatory, Japan Meteorological Agency. The practical training of the analysis of array data is carried out.
		Earthquake Information	Theory and practice on HTML for public provision of earthquake and disaster information and related topics.
		Study Trips	Study trip to northern part of Japan (Hokkaido and/or Tohoku) for a week and to western part of Japan(Kansai) for a week.
	Practice for Sen Disaster Mitigat	ninar of Earthquake tion	Practice for the topics of Earthquake Disaster Mitigation

Individual Study	Individual Study	During individual study period, each participant makes a research on a specific subject and writes a paper under the
		direction of an instructor. The subject is selected in the list shown in "II. Description, 9.Expected Module Output and
		Contents".

<u>E- Group (Earthquake Engineering Group)</u>

Category	Title	Subtitle	Contents
Orientation	Orientation	Introduction to	An introduction of seismology to engineers, focusing on
		Seismology	basic understanding of the physics of earthquakes including
			a new direction of earthquake research after the 1995 Kobe earthquake.
		Introduction to	Basic concepts and real facts of the 1995 Kobe earthquake,
		Earthquake Engineering	as an introductory lecture for engineering course.
		Eurinquake Engineering	us un introductory recture for engineering course.
		Computer	The lecture introduces the computer environment at
			International Institute of Seismology and Earthquake
			Engineering (IISEE) and the usage. Participants practice the
			computer programming of basic numerical analysis in the
			engineering field. Visualizing technique of numerical
			results using commercial softwares is also explained in the lecture.
Basic Subjects	Structural	Structural Analysis (1),	Fundamental concepts and principles which are utilized in
Related with	Analysis	(2) & (3)	the current structural analysis are introduced in the matrix
Earthquake and	1 11111 9 515	$(2) \approx (3)$	algebra language. The displacement method and the force
Disasters			method with some extension to the finite element method
			and the elastic-plastic analysis of structures are discussed in
			some detail.
			Fundamental theories for non-linear analyses of building
			structures are introduced. Some member models and basic
			concepts of the direct stiffness method are discussed. These
			theories are also learned with some exercises using available software in IISEE.
		Finite Element Method	1) Basic concepts of finite element method
		(1)	2) Procedures for static linear analysis
		(-)	3) Formulation of some elements' matrices
			4) Example programs
		Finite Element Method	1) Application of FEM to RC Structures : Analytical
		(2)	Techniques of Shear in Reinforced Concrete Structures by
			FEM
			2) Finite Element Analysis of Reinforced Concrete Structures in Japan
			3) Finite Element Analysis of RC Members with High
			Strength Materials Panels, Shear Walls, Beams, Columns
			and Beam-Column Joints
			4) Shear Resisting Mechanisms of RC Members Based on
			FEM Analysis
			5) Finite Element Analysis of Masonry Structures
		Dynamic Aseismic	Dynamic aseismic design procedure is introduced. Problems
		Design	which frequently occur during the design of high-rise
		Limit Analysia	building are presented with some examples.
		Limit Analysis	Fundamentals of plastic analysis of structures are presented. Elementary techniques to calculate the collapse loads of
			structures are also presented.
		Soil Mechanics	This lecture covers an introduction to fundamental soil
			mechanics which will give the basis for understanding
			dynamic behaviors of soil and foundation.
		Soil Dynamics (2)	Fundamental properties of soil such as non-linearity and
			constitutive law are reviewed. Dynamic behavior of soil
			deposits and analytical method are explained with
			evaluation of material constants.

	Structural	Structural Dynamics (1)	The objective of this subject is to study the behavior of
	Dynamics	& (2)	structures by dynamic loadings. The lecture covers from the SDOF (single-degree-of-freedom) system to the MDOF (multi-degree-of-freedom) system. The deterministic procedure is discussed in detail with exercises. This lecture covers the spectrum analysis of time-history data of building response. The data obtained by both strong earthquake observation and micro-tremor measurement are used.
		Shaking Table Testing	General concept of structural dynamic test is introduced. Simple shaking table test and free vibration test are practically performed using a small single mass model. Data processing technique is also discussed through the practice.
		System Identification in Vibration Analysis	This subject introduces several system identification methods to determine structural characteristics such as natural periods and damping ratios from measuring data of buildings.
		Structural Response Analysis	Inelastic earthquake response analyses using SDOF systems with various kind of hysteresis models and introduction of some applications using inelastic earthquake response analyses. Member models and structural idealization which are utilized in the current nonlinear structural analysis of buildings are outlined. Examples of dynamic and nonlinear analysis of reinforced concrete structures are presented. Methods for the theoretical interpretation on the results from the numerical analysis are introduced.
		Soil Test and Survey (2)	Some common methods on the field survey of soil deposits and laboratory tests are introduced.
		Effect of Surface Geology on Seismic Motion	Effects of surface geology on seismic motion (ESG) are explained by showing results of ground motion case studies: amplification mechanisms of seismic waves, actual examples of site amplifications at sites with various site conditions, relations with earthquake damage.
		Dynamic Soil Structure Interaction	The physical meaning of dynamic Soil-Structure Interaction (SSI) and the influences of SSI on dynamic behaviors of structure are explained first. Next, Numerical procedures for evaluating SSI analysis for raft and pile foundation are instructed. Finally, the practical seismic design analysis methods are shown incorporating SSI effects.
	Seminar of	Structure Analysis	Discussion, presentation and practice for the topic of Structural Analysis
Advanced Subjects Related with Earthquake	Seismic Design	RC Structures (1)	The structural performance from cracks to collapse about the RC members is predicted by using some equations. The prediction is made by the equations for designs.
and Disasters		RC Structures (2)	Detailed structural design procedure of reinforced concrete members for flexure, shear and bond is lectured. Design practice of RC members according to the presented design procedure is conducted.
		RC Structures (3) & (4)	The recent research topics in Japan including performance based design, Composite/Hybrid Structures, New RC (High Rise RC structure with High Strength materials), and Boxed Wall-Buildings are presented. Outline of the seismic design procedure in accordance with the Japanese codes is presented. The related codes in U.S. and New Zealand and the design guidelines currently proposed in Japan are also introduced.
		Steel Structures	Outline of the design procedure for steel building structures in Japan is explained.

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	Masonry Structures	The lecture covers an introduction to Performance of Masonry-based Structures and seismic design. The lecture covers an introduction to structural performance and seismic design of Confined Masonry structures, which has been studied as a research projects in BRI. It also includes housing construction conditions in the Third World
	Structural Testing	Countries and their comparison with Japan's. Objectives, testing techniques, loading and measuring techniques are presented with some examples of the previous tests. Static tests for RC members are also conducted to observe structural performance.
	PC Structures	The earthquake resistant design of prestressed concrete and the application of prestressed concrete in primary seismic resistant elements such as building frames are presented.
	Foundation Engineering	Design concept and design procedures for static and earthquake loads for several types of foundation i.e. pile, spread and caisson foundations are presented. Furthermore their characteristics, construction methods, selection procedures, repairing methods, etc. are explained.
	Bridge Engineering	Problems related to "Earthquake and Bridge" are discussed. Each section is accompanied with a general introduction which may be necessary for those who are not familiar with bridge engineering.
	Port and Harbor Structures	Earthquake resistant design for port and harbor structures is explained with some examples of actual earthquake damage.
	Dam Structures	The types of dams including concrete arch, gravity, and embankment dams are explained first. Next, design concepts of each type are given. The design of dams to resist earthquakes is discussed with the performance of dams during earthquakes, dynamic properties of dam materials, and analysis. Particularly, behaviors of dams during the 1995 Hyogoken-Nanbu Earthquake (Kobe Earthquake) and the 2000 Western Tottori Prefecture Earthquake are explained.
	Underground Structures	 Damage to buried structures (tunnels, pipelines, etc.) Observation of earthquake response of buried structures Earthquake resistant design of buried structures and future problems Other topics
	Lifeline Earthquake Engineering	This lecture covers damage and functional loss of lifeline systems due to urban earthquakes. Recent earthquake countermeasure technologies, e.g., real-time damage assessments, are also introduced.
Seismic Evaluation and Retrofittin	Seismic Design Codes (1) & (2)	Participants investigate the design concept and methods of the selected seismic codes in the world. Presentation and discussion are given for comparison of the surveyed codes. Differences in each code are discussed.
g	Earthquake Resistant Limit State Design (1) & (2)	The lecture covers an introduction to fundamental energy input concept which gives better understanding of the dynamic behavior of buildings.
	Seismic Evaluation and Rehabilitation: buildings (1) & (2)	Seismic capacity evaluation and seismic rehabilitation (retrofit) of existing buildings are introduced with emphasis on our practice after the 1995 Hyogoken-Nanbu Earthquake (Kobe Earthquake) Inspection and evaluation of earthquake damage to buildings and post-earthquake countermeasures for damaged buildings are also introduced.

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		Seismic Evaluation and Rehabilitation: bridges	Damage of bridges by the past earthquakes in Japan is presented. The Japanese highway bridge codes have been revised by analyzing the seismic damage. The history of the revision of the codes is briefly explained. Repair of damaged highway structures due to the 1995 Hyogoken-Nanbu Earthquake (Kobe Earthquake) and seismic retrofit of the existing bridges are shown
		Seismic Isolation	bridges are shown. Seismic isolation system is explained as one of structural response control methods. The Seismic isolation system is most effective to reduce the response and improve safety of a superstructure. Principles of the seismic isolation, merits and demerits of the seismic isolation, and behaviors of buildings with the seismically isolated buildings during earthquake are discussed.
		Design Earthquake Ground Motion and Seismic Force (1)& (2)	Seismic design code of Japan is introduced. Some international seismic design codes are also introduced and compared with each other.
		Structural Reliability	Introduction to reliability concept. Probability of failure as a measure for the safety degree. Extreme value distributions as probability model for load intensity. Load and resistance factor format based on the second moment reliability. Target safety degree due to the optimum reliability.
		Structural Response Control	Basic theory on structural seismic response control and its practical applications in Japan
	Special Topics	Introduction to GIS for Earthquake Disaster Mitigation	Basics and conceptions of Geographical Information System (GIS) are explained through lecture and practice using free GIS software.
		Seismic Design, Seismic and Retrofitting	Discussion, presentation and practice for the topic of Seismic Design, Seismic Evaluation and Retrofitting
Earthquake Hazard and Risk Assessment	Evaluation a Earthquak e Hazard Assessme nt	Strong Earthquake Motion Observation	General procedures and system of a strong-motion earthquake observation are presented. Participants are introduced to the principle of strong-motion accelerometers (SMAC), data acquisition systems and data analysis procedures. Application of strong earthquake ground motion to seismic-resisting design is explained.
		Soil Dynamics (1)	Fundamental properties of soil such as non-linearity and constitutive law are reviewed. Dynamic behavior of soil deposits and analytical method are explained with evaluation of material constants.
		Soil Test and Survey (1)	Geotechnical field investigation and laboratory testing methods are discussed in this lecture. An emphasis is placed on providing the information about currently used practical methods.
		Seismic Macro-Zonation	Seismic hazard assessment is discussed, that is an estimation of the likelihood of an earthquake occurrence and its magnitude in and around the location of interest and of the severity of strong ground motions expected for a certain return period.
		Seismic Micro-Zonation	This lecture gives an introduction to seismic micro-zoning technique by presenting the methods to estimate the distribution of the local and regional seismic hazard, explaining the preparation process of seismic scenarios, describing the applications of micro-zoning results, and discussing the future of micro-zoning. Various examples of actual studies are also presented.
	Earthquak e Risk	Practice for Damage and Risk Assessment	Topics related on Risk and Damage Assessment for buildings are given through lectures and observation visits.
	Assessme nt	Simulation of Seismic Ground Motion	Method to estimate the strong ground motion at the engineering bedrock based on the empirical formulas is explained.

		Microtremor Observation(1)	Practice in the field and analysis are introduced for microtremor that is one of the useful information to evaluate the characteristics of earthquake ground motion.
		Microtremor Observation(2)	Field practice of microtremor array observation
		Strong Motion Seismology	Strong-motion seismology is concerned with high frequency seismic waves from large earthquakes. Its ultimate goal is to predict strong ground motion from the basic understanding of fault mechanics and seismic wave propagation in the Earth.
	Seminar of I Mitigation F	Earthquake Disaster Policy	Discussion, presentation and practice for the topics of Earthquake Disaster Mitigation
Earthquake Disaster	Seismic Dis	aster Mitigation Policy	Disaster mitigation policy and seismic risk management of national level are discussed with practical system and laws.
Mitigation Policy	Disaster Ris	k Management	A broad understanding of disaster risk management, including prevention / preparedness before disasters and recovery / reconstruction after disasters is provided.
	Dissemina tion for Earthquak e Disaster	Japanese ODA Policy and Development Support related with Disaster Mitigation	Japanese ODA policy and implementation and the international trend of development assistance related with disaster mitigation activities, e.g., poverty and gender issues are explained.
	Mitigation	Dissemination for Earthquake Disaster Mitigation	Dissemination process for Earthquake Disaster Mitigation in Japan is explained through observation visits.
		Project Cycle Management for Disaster Mitigation	Methodology and practice for Project Management Cycle and its facilitation techniques.
	Seminar of Mitigation F	Earthquake Disaster Policy	Discussion, presentation and practice for the topics of Earthquake Disaster Mitigation Policy
Case Study	Practice for Earthquak e Disaster Mitigation	Colloquium	 Three colloquiums are planned : 1) for the report on the seismic observation and its results in the countries of each participant, 2) for the practice of reading scientific papers, and, 3) for explaining the plan of individual study.
	Policy	Observation Tours	Observation of research institutes, administrative organs, and construction sites are conducted.
		Conferences and/or Symposium	Opportunities to attend some international conference and symposium are provided in order to understand the state-of-the-arts of earthquake engineering.
		Study Trips	Study trip to northern part of Japan (Hokkaido and/or Tohoku) for a week and to western part of Japan(Kansai) for a week.
	Practice for Disaster Mi	Seminar of Earthquake tigation	Practice for the topics of Earthquake Disaster Mitigation
Individual Study			During individual study period, each participant makes a research on a specific subject and writes a paper under the direction of an instructor. The subject is selected in the list shown in "II. Description, 9.Expected Module Output and Contents".

Guidelines of Application Form for the JICA Training and Dialogue Program

The attached form is to be used to apply for the training and dialogue programs of the Japan International Cooperation Agency (JICA), which are implemented as part of the Official Development Assistance Program of the Government of Japan. Please complete the application form while referring to the following and consult with the respective country's JICA Office - or the Embassy of Japan if the former is not available - in your country for further information.

1. Parts of Application Form to be completed

1) Which part of the form should be submitted?

It depends on the type of training and dialogue program you are applying for.

>Application for Group and Region Focused Training Program

Official application and Parts A and B must be submitted.

>>Application for Country Focused Training Program including Counterpart Training Program

Part B will be submitted. Official application and Part A need not to be submitted

2) How many parts does the Application Form consist of?

The Application Form consists of three parts as follows;

Official Application

This part is to be confirmed and signed by the head of the relevant department/division of the organization which is applying.

Part A. Information on the Applying Organization

This part is to be confirmed by the head of the relevant department/division of the organization which is applying.

Part B. Information About the Nominee

This part is to be completed by the person who is nominated by the organization applying. <u>The applicants for Group and Region Focused Training Program are required to fill in **every** <u>item</u>. As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated "**required**" items as is shown on the Form.</u>

Please refer to the General Information to find out which type the training and dialogue program that your organization applies for belongs to.

2. How to complete the Application Form

In completing the application form, please be advised to:

- (a) carefully read the General Information (GI) for which you intend to apply, and confirm if the objectives and contents are relevant to yours,
- (b) be sure to write in the title name of the course/seminar/workshop/project accurately according to the GI, which you intend to apply,
- (c) use a typewriter/personal computer in completing the form, of which the electronic



version is available on the web site: <u>http://www.jica.go.jp/</u>, or write in <u>block</u> <u>letters</u>,

- (d) fill in the form in **English**,
- (e) use \square or "x" to fill in the () check boxes,
- (f) attach a picture of the Nominee,
- (g) attach additional page(s) if there is insufficient space on the form,
- (h) prepare the necessary document(s) described in the General Information (GI), and attach it (them) to the form,
- (i) confirm the application procedure stipulated by your government, and
- (j) submit the original application form with the necessary document(s) to the responsible organization of your government according to the application procedure.

Any information that is acquired through the activities of the Japan International Cooperation Agency (JICA), such as the nominee's name, educational record, and medical history, shall be properly handled in view of the importance of safeguarding personal information.

3. Privacy Policy

1) Scope of Use

Any information used for identifying individuals that is acquired by JICA will be stored, used, or analyzed only within the scope of JICA activities. JICA reserves the right to use such identifying information and other materials in accordance with the provisions of this privacy policy.

2) Limitations on Use and Provision

JICA shall never intentionally provide information that can be used to identify individuals to any third party, with the following three exceptions:

- (a) In cases of legally mandated disclosure requests;
- (b) In cases in which the provider of information grants permission for its disclosure to a third party;
- (c) In cases in which JICA commissions a party to process the information collected; the information provided will be within the scope of the commissioned tasks.

3) Security Notice

JICA takes measures required to prevent leakage, loss, or destruction of acquired information, and to otherwise properly manage such information.



Training Programs under Technical Cooperation with the Government of Japan

Application Form for the JICA Training and Dialogue Program

OFFICIAL APPLICATION

(to be confirmed and signed by the head of the relevant department / division of the applying organization)

1. Title: (Please write down as shown in the General Information)

2. Number: (Please write down as shown in the General Information)								
J	0		-					

3. Country Name:

4. Name of Applying Organization:

5. Name of the Nominee(s):

1)	3)
2)	4)

Our organization hereby applies for the training and dialogue program of the Japan International Cooperation Agency and proposes to dispatch qualified nominees to participate in the programs.

Date:			Signature:		
Name:					
Designation / I	Position				
Department / [Division				Official Stamp
Office Address	and	Address:			
Contact Inform	nation	Telephone:	Fax:	E-mail	:

Confirmation by the organization in charge (if necessary)

I have examined the documents in this form and found them true. Accordingly I agree to nominate this person(s) on behalf of our government.

Date:	Signature:	
Name:		
Designation / Position		Official Stamp
Department / Division		



Part A: Information on the Applying Organization

(to be confirmed by the head of the department / division)

1. Profile of Organization

1) Name of Organization:

2) The mission of the Organization and the Department / Division:

2. Purpose of Application

1) Current Issues: Describe the reasons for your organization claiming the need to participate in the training and dialogue program, with reference to issues or problems to be addressed.

2) Objective: Describe what your organization intends to achieve by participating in the training and dialogue program.



3) Future Plan of Actions: Describe how your organization shall make use of the expected achievements, in addressing the said issues or problems.

4) Selection of the Nominee: Describe the reason(s) the nominee has been selected for the said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of organization and 5) Others.



Part B: Information about the Nominee

(to be completed by the Nominee)

NOTE>>>The applicants for Group and Region Focused Training Program are required to fill in "Every Item". As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated "**required**" items as is shown below.

1. Title: (Please write down as shown in the General Information) (required)

2. Number: (Please write down as shown in the General Information) (required)											
J	0		-								

Attach the nominee's photograph (taken within the last three months) <u>here</u> Size: 4x6 (Attach to the documents to be submitted.)

3. Information about the Nominee(nos. 1-9 are all required)

1) Name of Nominee (as in the passport)

Family Name

Fi	First Name														
Μ	Middle Name														
												 			L

2) Nationality		5) Date of Birth (please write out the						
(as shown in the passport)			month in English as in "April")					
3) Sex	() Male	() Female	Date	Month	Year	Age		
4) Religion								

6) Present Position and Current Duties

Organization							
Department / Division							
Present Position							
Date of employment by the	Date Month		Year	Date of assignment to the	Date	Month	Year
present organization				present position			

7) Type of Organization

() National Governmental	() Local Governmental	() Public Enterprise
() Private (profit)	() NGO/Private (Non-profit)	() University
() Other ()	

8) Outline of duties: Describe your current duties



9) Contact Information

	Address:						
Office	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					
	Address:						
Home	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					
	Name:						
	Relationship to you:						
Contact person in emergency	Address:						
In enlergency	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					

10) Others (if necessary)

4. Career Record

1) Job Record (After graduation)

	City/	Pei	riod		Brief Job Description	
Organization	Country	From	То	Position or Title		
		Month/Year	Month/Year			

2) Educational Record (Higher Education)(required)

	•	• •		,, ,			
		City/ Country	Pei	riod			
	Institution		From	То	Degree obtained	Major	
			Month/Year	Month/Year	ar		
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Ī							
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3) Training or Study in Foreign Countries; please write your past visits to Japan specifically as much as possible, if any.

	City/ Country	Per	riod							
Institution		From	То	Field of Study / Program Title						
		Month/Year	Month/Year							

5. Language Proficiency (required)

1) Language to be used in the progra	am (as in GI)			
Listening	() Excellent	()Good	()Fair	()Poor
Speaking	() Excellent	()Good	()Fair	()Poor
Reading	() Excellent	()Good	()Fair	() Poor
Writing	() Excellent	()Good	()Fair	() Poor
Certificate (Examples: TOEFL, TOEIC)				
2) Mother Tongue				
3)Other languages ()	() Excellent	() Good	()Fair	() Poor

¹ Excellent: Refined fluency skills and topic-controlled discussions, debates & presentations. Formulates strategies to deal with various essay types, including narrative, comparison, cause-effect & argumentative essays.

¹ Good: Conversational accuracy & fluency in a wide range of situations: discussions, short presentations & interviews.
 ² Compound complex sentences. Extended essay formation.
 ³ Fair: Broader range of language related to expressing opinions, giving advice, making suggestions. Limited compound compound complex sentences.

and complex sentences & expanded paragraph formation. ¹ Poor: Simple conversation level, such as self-introduction, brief question & answer using the present and past tenses.



6. Expectation on the applied training and dialogue program

1) Personal Goal: Describe what you intend to achieve in the applied training and dialogue program in relation to the organizational purpose described in Part A-2.

2) Relevant Experience: Describe your previous vocational experiences which are highly relevant in the themes of the applied training and dialogue program. (required)

3) Area of Interest: Describe your subject of particular interest with reference to the contents of the applied training and dialogue program. (required)

*7. Declaration (to be signed by the Nominee) (required)

I certify that the statements I made in this form are true and correct to the best of my knowledge.

- If accepted for the program, I agree:
- (a) not to bring or invite any member of my family (except for the program whose period is one year or more),
- (b) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating government and the Japanese Government regarding the program,
- (c) to follow the program, and abide by the rules of the institution or establishment that implements the program,
- (d) to refrain from engaging in political activity or any form of employment for profit or gain,
- (e) to return to my home country at the end of the activities in Japan on the designated flight schedule arranged by JICA,
- (f) to discontinue the program if JICA and the applying organization agree on any reason for such discontinuation.
- (g) to consent to waive exercise of my copyright holder's rights for documents or products that are produced during the course of the project, against duplication and/or translation by JICA, as long as they are used for the purposes of the program.

Date:	Signature:
	Print Name:



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MEDICAL HISTORY AND EXAMINATION

1. Present Status

(a) Do you currently use any drugs for the treatment of a medical condition? (Give name & dosage.)

() No	() Yes >> Na	ame of Medication	(), Quantity				
	()							
(b) Are you pregnant?									
() No	() Yes (() Yes (months)							
(c) Are yo	u allergic to any	medication or foo	d?						
() No	() Yes >>>	()	() Food	() Other:			
		Medication							
(d) Please	d) Please indicate any needs arising from disabilities that might necessitate additional support or facilities.								

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Note: Disability does not lead to exclusion of persons with disability from the program. However, upon the situation, you may be directly inquired by the JICA official in charge for a more detailed account of your condition.

2. Medical History

(a) Have you had any significant or serious illness? (If hospitalized, give place & dates.)

Past:	() No	() Yes>>Name of illness (), Place & dates	
		()		
Present:	() No	() Yes>>Present Condition		
		()	
(b) Have you ever been a patient in a mental hospital or been treated by a psychiatrist?				
Past:	() No	() Yes>>Name of illness (), Place & dates	
		()		
Present:	() No	() Yes>>Present Condition		

(c) High blood pressure

Past:	() No	() Yes		
Present:	() No	() Yes>>Present Condition () mm/Hg to () mm/Hg

(d) Diabetes (sugar in the urine)							
Past:	() No	() Yes				
Present:			()	Yes>>Present		Condition
	() No	()	
			Are you taking any m	edicine or insulin?		() No	() Yes

(e) Past History: What illness(es) have you had previously?

() Stomach and () Liver Disease		() Heart Disease	() Kidney Disease	
Intestinal Disorder				
() Tuberculosis	() Asthma	() Thyroid Problem		
() Infectious Disease >>> Specify name of illness				
()		
() Other >>> Specify				
()	

(e') Has this disease been cured?

		() No (Specify name of illness)	
() Yes	Present Condition:	
		()



3. Other: Any restrictions on food and behavior due to health or religious reasons?

I certify that I have read the above instructions and answered all questions truthfully and completely to the best of my knowledge.

I understand and accept that medical conditions resulting from an undisclosed pre-existing condition may not be financially compensated by JICA and may result in termination of the program.

Date:	Signature:
	Print Name: