Activities of PDM	Field	2002.10-2003.3 (JFY2002Q3-4)	2003.4-2003.9 (JFY2002Q1-2)
1-1. To examine the building seismic performance listed in the MLPTL's retrofit projects 1-2. To support and evaluate MLPTL's retrofit projects 1-3. To study the methods of building retrofitting (strength and ductility, and displacement-based methods) 1-4. To prepare manual explaining retrofit methods 1-5. To disseminate the technical information to structural engineers by seminar 2-1. To prepare equipment and facilities for seismic structural testing 2-2. To implement experiment and analyze data 2-3. To study the methods of seismic design (shear strength and ductility, and displacement-based design) 2-4. To prepare equipment for strong-motion earthquake record (underground, free field and building) 2-5. To collect ground information (microtremor characteristic, underground soil condition) and analyze/accumulate the data 2-6. To prepare equipment and facilities for soil test/ investigation 2-7. To study the methods for soil test 2-8. To accumulate the data on earthquake intensity corresponding to ground condition 2-9. To accumulate the data on input earthquake -ground-motion to buildings 2-10. To prepare the manual of input design earthquake- ground-motion 2-11. To disseminate the technical information to structural engineers by seminar 2-12. To prepare draft of technical manuals, regulations and new	① Seismic evaluation	 RM version of Report on 1st and 2nd Screening Method of Japanese Seismic Evaluation Method (1-1,1-4,1-5) 	RM version of Report on 3 rd Screening Method of Japanese Seismic Evaluation Method (1-1,1-4,1-5)
	② Retrofit technique	 RM version of Report on Strength Upgrading Method of Japanese Seismic Retrofitting (1-3,1-4,1-5) 	RM version of Report on Ductility Upgrading Method of Japanese Seismic Retrofitting (1-3,1-4,1-5)
	③ Inspection/Res toration	RM version of Report on Japanese Quick Inspection and first-aid restoration Method for damaged buildings (3-1,3-2,3-3)	Inspection and restoration Method for damaged buildings (3-1,3-2,3-3)
	④ Seismic design	 RM version of Report on Shear Designing Method of Japanese Seismic Evaluation Method (2-3,2-11,2-12) 	RM version of Report on Ductility Designing Method of Japanese Seismic Evaluation Method (2-3,2-11,2-12)
	⑤ MLPTL Retrofit	 Annual report on Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2) 	
	6 Structural experiment	 Report on Structural Testing Facilities, Testing Methods and Data Processing Methods (2-1,2-2,2-11) 	
codes 3-1. To collect information concerning post- earthquake evaluation techniques (quick inspection of damaged buildings and judgment of damage degree)	⑦ Database		
 3-2. To prepare technical manual explaining the methods of postearthquake evaluation techniques 3-3. To disseminate the technical information to structural engineers by seminar 4-1. To investigate disaster prevention preparedness of the citizens 4-2. To disseminate information on disaster prevention preparedness to the citizens by seminar 4-3. To publish printed matter concerning disaster prevention preparedness to the citizens 	8 Strong motion	 Data collection plan of earthquake intensity according to ground condition (2-8,2-9) Study report on past earthquake records (2-8,2-9) Data collection plan of input earthquake ground motion to building (2-9) 	 Installation/ Operation manual of strong motion observation equipment (2-4) Study report on past building vibration characteristics (2-9) Study report on ground motion characteristics (2-11,12)
	⑤ Soil test/Ground survey	 Data collection plan of ground information (2-5) Study report of ground info. On existing /new points (2-5) Report on Ground survey /prove technique (2-7) 	 Study report of ground info. On existing /new points (2-5) Study report on micro tremor and ground condition (2-5,2-8) Operation manual of soil testing / ground investigation (2-6) Report on Ground survey /prove technique (2-7)
	① Dissemination/ Awareness	 Technical/Awareness seminar (1-5,2-11,3-3,4-2 Newsletter (4-3) 	 Newsletter (4-3) Pamphlet on mitigation of earthquake disaster (4-3)

ACTIVITIES OF PDM	Field		2003.10-2004.3 (JFY2002Q3-4)	2004.4-2004.9 (JFY2002Q1-2)
1-1. To examine the building seismic performance listed in the MLPTL's retrofit projects 1-2. To support and evaluate MLPTL's retrofit projects 1-3. To study the methods of building retrofitting (strength and ductility, and displacement-based methods) 1-4. To prepare manual explaining retrofit methods 1-5. To disseminate the technical information to structural engineers by seminar	① Seismic evaluation	•	Report on Applicability of the Japanese Seismic Evaluation Method to Romanian Buildings (1-1,1-4,1-5)	 ⑦Input ground earthquake motion→ Framework of the Manual for Seismic Evaluation of Buildings in Romania (1-1,1-4,1-5)
	② Retrofit technique	•	Report on Applicability of the Japanese Seismic Retrofitting Method to Romanian Buildings (1-3,1-4,1-5)	
2-1. To prepare equipment and facilities for seismic structural testing2-2. To implement experiment and analyze data2-3. To study the methods of seismic design (shear strength and	③ Inspection/R estoration	•	Report on Applicability of the Japanese Post-Earthquake Inspection and Restoration Method to Romanian Buildings (3-1,3-2,3-3)	 ⑦Input ground earthquake motion→ Framework of the Manual for Post-Earthquake Inspection and Restoration (3-1,3-2,3-3)
ductility, and displacement-based design) 2-4. To prepare equipment for strong-motion earthquake record (underground, free field and building) 2-5. To collect ground information (microtremor characteristic,	④ Seismic design	•	Report on Applicability of the Japanese Earthquake-Resistant Design Method to Romanian Buildings (2-3,2-11,2-12)	
underground soil condition) and analyze/accumulate the data 2-6. To prepare equipment and facilities for soil test/ investigation 2-7. To study the methods for soil test	⑤ MLPTL Retrofit	•	Annual report of Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2)	
2-8. To accumulate the data on earthquake intensity corresponding to ground condition 2-9. To accumulate the data on input earthquake -ground-motion to buildings	6 Structural experiment	•	Planning of the Structural Test to Develop the Retrofitting Technique (1-3,1-4,1-5,2-2,2-11) Operation manual on structural experiment (2-1)	
2-10. To prepare the manual of input design earthquake- ground-motion 2-11. To disseminate the technical information to structural engineers by seminar	⑦ Database	•	Building up/ updating database on ground info. (2-5)	Building up/ updating database on ground info. (2-5)
2-12. To prepare draft of technical manuals, regulations and new codes 3-1. To collect information concerning post- earthquake evaluation techniques (quick inspection of damaged buildings and judgment	8 Strong motion	•	Report on micro tremor measurement for evaluation of building vibration characteristics (2-9)	 Report on micro tremor measurement for evaluation of building vibration characteristics (2-9)
of damage degree) 3-2. To prepare technical manual explaining the methods of post-earthquake evaluation techniques 3-3. To disseminate the technical information to structural engineers by seminar 4-1. To investigate disaster prevention preparedness of the citizens 4-2. To disseminate information on disaster prevention preparedness to the citizens by seminar 4-3. To publish printed matter concerning disaster prevention preparedness to the citizens	Soil test/Ground survey	•	Summary of ground information based on ground survey and investigation (2-7) → ⑦ Building up/ updating database on ground info. (Feed to 2-5)	 Reference study on the deep ground structure and effect of ground condition (2-5,2-8) Summary of ground information based on ground survey and investigation (2-7) →⑦Building up/ updating database on ground info. (Feed to 2-5) Report on ground investigation techniques (2-7) Report on indoor soil testing techniques (2-7) Report on ground vibration characteristics (2-11,12)
	Disseminati on/Awarenes s	•	Technical/Awareness seminar (1-5,2-11,3-3,4-2)) Newsletter (4-3) Educational video on mitigation of earthquake disaster (4-3)	 Newsletter (4-3) Home page on Mitigation of earthquake disaster (4-3)

ACTIVITIES OF PDM	Field	200410-20053 (JFY2002Q3-4)	2005.4-2005.9 (JFY2002Q1-2)
1-1. To examine the building seismic performance listed in the	①		⑦Input ground earthquake motion→
MLPTL's retrofit projects	Seismic		Draft of the Manual for Seismic Evaluation of
1-2. To support and evaluate MLPTL's retrofit projects			
1-3. To study the methods of building retrofitting (strength and	evaluation		Buildings in Romania (1-1,1-4,1-5)
ductility, and displacement-based methods)			
1-4. To prepare manual explaining retrofit methods	2	6structural experiment method→	
1-5. To disseminate the technical information to structural	Retrofit	Framework of the Manual for Seismic Retrofitting	
engineers by seminar	technique	of Buildings in Romania (1-3,1-4,1-5)	
2-1. To prepare equipment and facilities for seismic structural		of buildings in Romania (1-5,1-4,1-5)	
testing	(3)		⑦Input ground earthquake motion→
2-2. To implement experiment and analyze data	Inspection/Res		Draft of the Manual for Post-Earthquake Inspection
2-3. To study the methods of seismic design (shear strength and	toration		and Restoration (3-1,3-2,3-3)
ductility, and displacement-based design)		• Framework of the Advanced	Interim proposal of new codes for seismic design
2-4. To prepare equipment for strong-motion earthquake record	(±)		Internit proposal of new codes for seismic design
(underground, free field and building)	Seismic design	Earthquake-Resistant Design Manual for	
2-5. To collect ground information (microtremor characteristic,		Buildings (2-3,2-11,2-12)	
underground soil condition) and analyze/accumulate the data	5	Annual report on Technical Assistance for MLPTL	
2-6. To prepare equipment and facilities for soil test/investigation	MLPTL	Retrofitting Projects (1-1,1-2)	
2-7. To study the methods for soil test	Retrofit	rocconcerning i rojecto (i 1,1 2)	
2-8. To accumulate the data on earthquake intensity corresponding	_		
to ground condition	6	 Testing of Beam and Column Elements 	
2-9. To accumulate the data on input earthquake -ground-motion to	Structural	(1-3,1-4,1-5,2-2,2-11)	
buildings 2-10. To prepare the manual of input design earthquake- ground-	experiment	→ ② Development of retrofit technique (Feed to	
motion	схрегинен	1-3, 1-4)	
2-11. To disseminate the technical information to structural			
engineers by seminar	7	Building up/ updating database on ground info.	Building up/ updating database on ground info. (2-5)
2-12. To prepare draft of technical manuals, regulations and new	Database	(2-5)	
codes			
3-1. To collect information concerning post- earthquake evaluation	(8)	Report on micro tremor measurement for evaluation	
techniques (quick inspection of damaged buildings and judgment	Strong motion	of building vibration characteristics (2-9)	
of damage degree)	Strong motion	of building vibration characteristics (2 0)	
3-2. To prepare technical manual explaining the methods of post-			
earthquake evaluation techniques	9	• Report on the investigation of deep ground	
3-3. To disseminate the technical information to structural	Soil	structure (2-5)	survey and investigation (2-7)
engineers by seminar	test/Ground	Summary of ground information based on ground	→ ⑦ Building up/ updating database on ground info.
4-1. To investigate disaster prevention preparedness of the citizens	survey	survey and investigation (2-7)	(Feed to 2-5)
4-2. To disseminate information on disaster prevention	Survey	→ ⑦ Building up/ updating database on ground	
preparedness to the citizens by seminar			Report of the analyzing techniques (2-7)
4-3. To publish printed matter concerning disaster prevention		info. (Feed to 2-5)	Reference study on soil-structure interaction (2-9)
preparedness to the citizens			Reference study on input earthquake ground motion
			(2-10)
			Summary of the ground vibration characteristics
			(2-11,12)
	(10)	• Technical/Awareness seminar (1-5,2-11,3-3,4-2))	• Newsletter (4-3)
			TYCWSICILEI (4-0)
	Dissemination/	• Newsletter (4-3)	
	Awareness	 Handbook on mitigation of earthquake disaster 	
		(4-3)	

ACTIVITIES OF PDM	Field	2005.10 (JFY2002Q3-4)	2006.4 (JFY2002Q1-2)
1-1. To examine the building seismic performance listed in the	(1)	,	⑦Input ground earthquake motion→
MLPTL's retrofit projects	Seismic		Manual for Seismic Evaluation of Buildings in
1-2. To support and evaluate MLPTL's retrofit projects	evaluation		Romania (1-1,1-4,1-5)
1-3. To study the methods of building retrofitting (strength and ductility, and displacement-based methods)	Cvaraacion		(11,11,10)
1-4. To prepare manual explaining retrofit methods	2	©structural experiment method→	
1-5. To disseminate the technical information to structural			
engineers by seminar	Retrofit	Draft of the Manual for Seismic Retrofitting of	
2-1. To prepare equipment and facilities for seismic structural	technique	Buildings in Romania (1-3,1-4,1-5)	
testing	_		
2-2. To implement experiment and analyze data	3		⑦Input ground earthquake motion→
2-3. To study the methods of seismic design (shear strength and	Inspection/Res		Manual for Post-Earthquake Inspection and Restoration
ductility, and displacement-based design) 2-4. To prepare equipment for strong-motion earthquake record	toration		(3-1,3-2,3-3)
(underground, free field and building)	(4)	Draft of the Advanced Earthquake-Resistant	Interim proposal of new codes for seismic design
2-5. To collect ground information (microtremor characteristic,	Seismic design	Design Manual for Buildings (2-3,2-11,2-12)	
underground soil condition) and analyze/accumulate the data	Seisinic design	Design Manda for Dandings (2 0,2 11,2 12)	
2-6. To prepare equipment and facilities for soil test/investigation	(5)	Annual report on Technical Assistance for MLPTL.	
2-7. To study the methods for soil test	_	- Immadi report on recimied risolstance for mai ra	
2-8. To accumulate the data on earthquake intensity corresponding	MLPTL	Retrofitting Projects (1-1,1-2)	
to ground condition	Retrofit		
2-9. To accumulate the data on input earthquake -ground-motion to buildings	6	• Testing of Wall Elements (1-3,1-4,1-5,2-2,2-11)	
2-10. To prepare the manual of input design earthquake- ground-	Structural	→②Development of retrofit technique (feed to 1-3,	
motion	experiment	1-4)	
2-11. To disseminate the technical information to structural	(7)	 Building up/ updating database on ground info. 	Building up/ updating database on ground info (2-5)
engineers by seminar			building up/ updating database on ground into (ε-5)
2-12. To prepare draft of technical manuals, regulations and new	Database	(2-5)	
codes			
3-1. To collect information concerning post- earthquake evaluation techniques (quick inspection of damaged buildings and judgment	8		Draft of the manual for input earthquake ground
of damage degree)	Strong motion		motion (2-10)
3-2. To prepare technical manual explaining the methods of post-			Summary of the ground vibration characteristics
earthquake evaluation techniques			(2-11,12)
3-3. To disseminate the technical information to structural			→⑦Building up/ updating database on ground info.
engineers by seminar			(Feed to 2-5)
4-1. To investigate disaster prevention preparedness of the citizens	9	Summary of ground information based on ground	Summary of ground information based on ground
4-2. To disseminate information on disaster prevention	Soil	survey and investigation (2-7)	survey and investigation(2-7)
preparedness to the citizens by seminar 4-3. To publish printed matter concerning disaster prevention	test/Ground	→ ⑦Building up/ updating database on ground	→ ⑦Building up/ updating database on ground info.
preparedness to the citizens		info. (Feed to 2-5)	(Feed to 2-5)
preparedness to the crezens	survey		(Feed to 2-5)
		Report on the effect of soil-structure interaction	
		considering the characteristics of ground and	
		building (2-9)	
		Draft of the manual of input earthquake ground	
		motion (2-10)	
	10	• Technical/Awareness seminar (1-5,2-11,3-3,4-2))	• Newsletter (4-3)
	Dissemination/	• Newsletter (4-3)	Revision of pamphlet on mitigation of earthquake
	Awareness		disaster (4-3)
L			

ACTIVITIES OF PDM	Field	2006.10-2007.3 (JFY2002Q3-4)	2007.4-2007.9 (JFY2007Q1-2)
1-1. To examine the building seismic performance listed in the MLPTL's retrofit projects 1-2. To support and evaluate MLPTL's retrofit projects 1-3. To study the methods of building retrofitting (strength and ductility, and displacement-based methods) 1-4. To prepare manual explaining retrofit methods	① Seismic evaluation		 ⑦Input ground earthquake motion→ Dissemination and Application of the Manual for Seismic Evaluation of Buildings in Romania (1-1,1-4,1-5)
1-5. To disseminate the technical information to structural engineers by seminar 2-1. To prepare equipment and facilities for seismic structural testing 2-2. To implement experiment and analyze data 2-3. To study the methods of seismic design (shear strength and ductility, and displacement-based design) 2-4. To prepare equipment for strong-motion earthquake record (underground, free field and building) 2-5. To collect ground information (microtremor characteristic, underground soil condition) and analyze/accumulate the data 2-6. To prepare equipment and facilities for soil test/ investigation 2-7. To study the methods for soil test 2-8. To accumulate the data on earthquake intensity corresponding to ground condition 2-9. To accumulate the data on input earthquake -ground-motion to buildings 2-10. To prepare the manual of input design earthquake- ground-motion 2-11. To disseminate the technical information to structural engineers by seminar 2-12. To prepare draft of technical manuals, regulations and new codes 3-1. To collect information concerning post- earthquake evaluation techniques (quick inspection of damaged buildings and judgment of damage degree) 3-2. To prepare technical manual explaining the methods of post-earthquake evaluation techniques 3-3. To disseminate the technical information to structural engineers by seminar 4-1. To investigate disaster prevention preparedness of the citizens 4-2. To disseminate information on disaster prevention preparedness to the citizens by seminar 4-3. To publish printed matter concerning disaster prevention preparedness to the citizens	② Retrofit technique	 ⑥structural experiment method→ Manual for Seismic Retrofitting of Buildings in Romania (1-3,1-4,1-5) 	 ⑦Input ground earthquake motion→ Dissemination and Application of the Manual for Seismic Retrofitting of Buildings in Romania (1-3,1-4,1-5)
	③ Inspection/Res toration		Dissemination and Application of the Manual for Post-Earthquake Inspection and Restoration (3-1,3-2,3-3)
	④ Seismic design	 Advanced Earthquake-Resistant Design Manual for Buildings (2-3,2-11,2-12) 	 ⑦Input ground earthquake motion→ Dissemination and Application of the Advanced Earthquake-Resistant Design Manual for Buildings (2-3,2-11,2-12) Final proposal of new codes for seismic design
	⑤ MLPTL Retrofit	 Annual report on Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2) 	Summary report on Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2)
	6 Structural experiment	 Testing of Structural Frame (1-3,1-4,1-5,2-2,2-11) →②Development of retrofit technique (feed to1-3, 1-4) 	Dissemination of the Structural Testing Technique (1-3,1-4,1-5,2-2,2-11)
	⑦ Database	 Building up/ updating database on ground info. (2-5) 	Building up/ updating database on ground info. (2-5)
	8 Strong motion	• Earthquake intensity map using the database (2-10)	
	⑤ Soil test/Ground survey	 Summary of ground information based on ground survey and investigation (2-7) →⑦ Building up/ updating database on ground info. (Feed to 2-5) 	 Summary of ground information based on ground survey and investigation (2-7) →⑦Building up/ updating database on ground info. (Feed to 2-5) Summary of new findings about ground vibration characteristics (2-11,12) →⑦Building up/ updating database on ground info. (Feed to 2-5)
	Dissemination/ Awareness	 Technical/Awareness seminar (1-5,2-11,3-3,4-2)) Newsletter (4-3) Revision of handbook on mitigation of earthquake disaster (4-3) 	• Technical/Awareness seminar (1-5,2-11,3-3,4-2))