Achievement Plan by every 6 month

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 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	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 3rd 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/Restoration	● RM version of Report on Japanese Quick Inspection and first-aid restoration Method for damaged buildings (3-1,3-2,3-3)	● RM version of Report on Japanese Post-Earthquake 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)	
	⑦ Database		
	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)
	⑨ 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)
	⑩ 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）

Achievement Plan by every 6 month

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 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	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)	
	③ Inspection/Restoration	● 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)
	④ Seismic design	● Report on Applicability of the Japanese Earthquake-Resistant Design Method to Romanian Buildings (2-3,2-11,2-12)	
	⑤ MLPTL Retrofit	● Annual report of Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2)	
	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)	
	⑦ Database	● Building up/ updating database on ground info. (2-5)	● Building up/ updating database on ground info. (2-5)
	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)
	⑨ Soil test/Ground survey	● Summary of ground information based on ground survey and investigation (2-7) **→⑦Building 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)
	⑩ Dissemination/Awareness	● 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）

Achievement Plan by every 6 month

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 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 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	① Seismic evaluation		**⑦Input ground earthquake motion→** ● Draft of the Manual for Seismic Evaluation of Buildings in Romania (1-1,1-4,1-5)
	② Retrofit technique	**⑥structural experiment method→** ● Framework of the Manual for Seismic Retrofitting of Buildings in Romania (1-3,1-4,1-5)	
	③ Inspection/Restoration		**⑦Input ground earthquake motion→** ● Draft of the Manual for Post-Earthquake Inspection and Restoration (3-1,3-2,3-3)
	④ Seismic design	● Framework of the Advanced Earthquake-Resistant Design Manual for Buildings (2-3,2-11,2-12)	● Interim proposal of new codes for seismic design
	⑤ MLPTL Retrofit	● Annual report on Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2)	
	⑥ Structural experiment	● Testing of Beam and Column Elements (1-3,1-4,1-5,2-2,2-11) **→②Development of retrofit technique（Feed to 1-3, 1-4）**	
	⑦ Database	● Building up/ updating database on ground info. (2-5)	● Building up/ updating database on ground info. (2-5)
	⑧ Strong motion	Report on micro tremor measurement for evaluation of building vibration characteristics (2-9)	
	⑨ Soil test/Ground survey	● Report on the investigation of deep ground structure (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 ground information based on ground survey and investigation (2-7) **→⑦Building up/ updating database on ground info. (Feed to 2-5)** ● Report on the analyzing techniques (2-7) ● Reference study on soil-structure interaction (2-9) ● Reference study on input earthquake ground motion (2-10) ● Summary of the ground vibration characteristics (2-11,12)
	⑩ Dissemination/ Awareness	● Technical/Awareness seminar（1-5,2-11,3-3,4-2)） ● Newsletter（4-3） ● Handbook on mitigation of earthquake disaster（4-3）	● Newsletter（4-3）

Achievement Plan by every 6 month

ACTIVITIES OF PDM	Field	2005.10 (JFY2002Q3-4)	2006.4 (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 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	① Seismic evaluation		**⑦Input ground earthquake motion→** ● Manual for Seismic Evaluation of Buildings in Romania (1-1,1-4,1-5)
	② Retrofit technique	**⑥structural experiment method→** ● Draft of the Manual for Seismic Retrofitting of Buildings in Romania (1-3,1-4,1-5)	
	③ Inspection/Restoration		**⑦Input ground earthquake motion→** Manual for Post-Earthquake Inspection and Restoration (3-1,3-2,3-3)
	④ Seismic design	● Draft of the Advanced Earthquake-Resistant Design Manual for Buildings (2-3,2-11,2-12)	● Interim proposal of new codes for seismic design
	⑤ MLPTL Retrofit	● Annual report on Technical Assistance for MLPTL Retrofitting Projects (1-1,1-2)	
	⑥ Structural experiment	● Testing of Wall Elements (1-3,1-4,1-5,2-2,2-11) **→②Development of retrofit technique（feed to 1-3, 1-4）**	
	⑦ Database	● Building up/ updating database on ground info. (2-5)	● Building up/ updating database on ground info (2-5)
	⑧ Strong motion		● Draft of the manual for input earthquake ground motion (2-10) ● Summary of the ground vibration characteristics (2-11,12) **→⑦Building up/ updating database on ground info. (Feed to 2-5)**
	⑨ Soil test/Ground survey	● 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 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)	● Summary of ground information based on ground survey and investigation(2-7) **→⑦Building up/ updating database on ground info. (Feed to 2-5)**
	⑩ Dissemination/ Awareness	● Technical/Awareness seminar（1-5,2-11,3-3,4-2)） ● Newsletter（4-3）	● Newsletter（4-3） ● Revision of pamphlet on mitigation of earthquake disaster（4-3）

Achievement Plan by every 6 month

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 1-5. 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	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)
	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/Restoration		● 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)	
	⑨ Soil test/Ground survey	● 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 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)**
	⑩ 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)）