

3. Summary List of Disaster Reduction Technologies

(1) Category A1: Technologies Developed under Implementation Strategies
- Features of the Developed Technology & Next Step Developments

Hazard	Ser No.	Title of Technology	Contact Person	Affiliation / Organization	Contact Details
Multi-Hazard	A1-MH-01	Development of Comprehensive Disaster Reduction Planning Scheme, Techniques and Tools Focusing on Stakeholder Involvement	Haruo Hayashi & Norio Maki	Earthquake Disaster Mitigation Research Center, National Research Institute for Earth Science and Disaster Prevention	Human Renovation Museum, 4th Floor 1-5-2 Wakino-hama-kaigan-dori, Chuo-ku, Kobe 651-0073, JAPAN hayashi@drs.dpri.kyoto-u.ac.jp maki@edm.bosai.go.jp
	A1-MH-02	Implementation of Risk Adaptive Regional Management System by Spatial-Temporal GIS "DiMSIS" and Application of Information Processing in Normal-Emergency Situations of City/Municipality	Shigeru Kakumoto	EDM-Kawasaki Laboratory, National Research Institute for Earth Science and Disaster Prevention	1-2 Minamiwatarida-cho, Kawasaki-ku, Kawasaki 210-0855, JAPAN kaku@kedm.bosai.go.jp
	A1-MH-03	Disaster-Monitoring Using Earth-Observation Satellites	Yukio Haruyama	Earth Observation Research and Application Center, Japan Aerospace Exploration Agency	Harumi Island Triton Square, Office Tower X 23rd Floor 1-8-10 Harumi, Chuo-ku, Tokyo 104-6023, JAPAN haruyama.yukio@jaxa.jp
Earthquake & Tsunami	A1-ET-01	Economic and Efficient Method for Strengthening Unreinforced Masonry / Adobe Structures in Developing Countries	Kimiro Meguro	Institute of Industrial Science, University of Tokyo	4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, JAPAN meguro@iis.u-tokyo.ac.jp
	A1-ET-02	Development of Seismically Improved Design for the Non-Engineered RC Frame with Masonry Wall Structure Utilizing Ethnographical Approach	Satoshi Tanaka	Fuji Tokoha University	325 Obuchi, Fuji, Shizuoka 417-0801, JAPAN tanaka_s@fuji-tokoha-u.ac.jp
	A1-ET-03	Improvement of Seismic Design Method for Composite Block Masonry Buildings and Its Implementation	Norio Inoue	Department of Architecture and Building Science, Graduate School of Engineering, Tohoku University	6-6-06 Aramaki Aoba, Aoba-ku, Sendai 980-8579, JAPAN inoue@struct.archi.tohoku.ac.jp
	A1-ET-04	Seismic Confined Masonry Walls	Kenji Kikuchi & Masayuki Kuroki	Department of Architecture, Faculty of Engineering, Oita University	700 Dan-no-haru, Oita, Oita 870-1192, JAPAN kikuchi@cc.oita-u.ac.jp

	A1-ET-05	Seismic Evaluation of Existing Buildings	Koichi Kusunoki	Structural Engineering Department, Building Research Institute	1 Tatehara, Tsukuba, Ibaraki 305-0802, JAPAN kusunoki@kenken.go.jp
	A1-ET-06	Guideline for Damage Survey Methods of Earthquake Disaster Related with Buildings and Houses	Mitsumasa Midori-kawa	Building Research Institute	1 Tatehara, Tsukuba, Ibaraki 305-0802, JAPAN midori@kenken.go.jp
	A1-ET-07	Earthquake Risk Evaluation Technology for Electric Power Facilities	Yoshiharu Shumuta	Central Research Institute of Electric Power Industry	1646 Abiko, Abiko, Chiba 270-1194, JAPAN shumuta@criepi.denken.or.jp Phone: +81-4-7182-1181 / Fax: +81-4-7184-2941 http://criepi.denken.or.jp
	A1-ET-08	Impact Analysis of Metropolitan Policies for Development and Environmental Conservation in the Philippines	Tatsuo Ohmachi	Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology	4259 Nagatsuta-cho, Midori-ku, Yokohama 226-8502, JAPAN ohmachi@enveng.titech.ac.jp
	A1-ET-09	Training System in the Fields of Seismology and Earthquake Engineering	Tatsuhiko Hara	International Institute of Seismology and Earthquake Engineering, Building Research Institute	1 Tatehara, Tsukuba, Ibaraki 305-0802, JAPAN thara@kenken.go.jp
	A1-ET-10	Information Network for Earthquake Disaster Mitigation of Developing Countries		International Institute of Seismology and Earthquake Engineering, Building Research Institute	1 Tatehara, Tsukuba, Ibaraki 305-0802, JAPAN iisee@kenken.go.jp
	A1-ET-11	Reduction of Tsunami Flow Pressure in Greenbelt	Tetsuya Hiraishi	Port and Airport Research Institute	3-1-1 Nagase, Yokosuka, Kanagawa 239-0826, JAPAN Phone: +81-46-844-5042 / Fax: +81-46-841-3888 hiraishi@pari.go.jp
	A1-ET-12	Development of Numerical Model for Tsunami Inundation and Making Tsunami Hazard Map	Fumihiko Imamura	Disaster Control Research Center, Tohoku University	6-6-06 Aramaki Aoba, Aoba-ku, Sendai 980-8579, JAPAN imamura@tsunami2.civil.tohoku.ac.jp
Flood & Debris	A1-FD-01	The Method of Flood Extent Estimation Using Satellite SAR	Yasuharu Yamada	National Institute for Rural Engineering	2-1-6 Kannondai, Tsukuba, Ibaraki 305-8609, JAPAN yamaday@affrc.go.jp
	A1-FD-02	Generalized Flood Prediction Technology in Continental-Scaled Basins	Akira Mano	Disaster Control Research Center, Tohoku University	6-6-06 Aramaki Aoba, Aoba-ku, Sendai 980-8579, JAPAN mano@civil.tohoku.ac.jp

(2) Category A2: Technologies Developed under Implementation Strategies
- Future Technology - projects ongoing or planned

Hazard	Ser No.	Title of Technology	Contact Person	Affiliation / Organization	Contact Details
Multi-Hazard	A2-MH-01	Reasonable Implementation Method of Spatial-Temporal GIS Application for Regional Management and Disaster Information Sharing	Toshihiro Urayama	EDM-Kawasaki Laboratory, National Research Institute for Earth Science and Disaster Prevention	1-2 Minamiwatarida-cho, Kawasaki-ku, Kawasaki 210-0855, JAPAN ura@kedm.bosai.go.jp
	A2-MH-02	The Application of Satellite Communication for Disaster Management	Kazunori Inagaki	Satellite Applications Center, Japan Aerospace Exploration Agency	Marunouchi Kitaguchi Building, 1-6-5 Marunouchi, Chiyoda-ku, Tokyo 100-8260, JAPAN inagaki.kazunori@jaxa.jp
Earthquake & Tsunami	A2-ET-01	Diffusion of Knowledge about Tsunamis, Tsunami Disasters and Tsunami Defense Works	Nobuo Shuto	Faculty of Policy Studies, Iwate Prefectural University	Faculty of Policy Studies, Iwate Prefectural University, Iwate 020-0193, JAPAN shuto@iwate-pu.ac.jp
	A2-ET-02	Study on Sharing of the Tsunami Observation Data on the Internet	Fumihiko Imamura	Disaster Control Research Center, Tohoku University	6-6-06 Aramaki Aoba, Aoba-ku, Sendai 980-8579, JAPAN imamura@tsunami2.civil.tohoku.ac.jp
	A2-ET-03	Development of Technical Manual and Database for Earthquake Disaster Estimation for Developing Countries		International Institute of Seismology and Earthquake Engineering, Building Research Institute	1 Tatehara, Tsukuba, Ibaraki 305-0802, JAPAN iisee@kenken.go.jp
Flood & Debris	A2-FD-01	Development of Debris-Flow Monitoring Technology to Mitigate Worldwide Its Disaster	Yasumasa Itakura	Shiga University	2-5-1 Hiratsu, Otsu, Shiga 520-0862, JAPAN itakura@sue.shiga-u.ac.jp
	A2-FD-02	Real-time Decision Support System of Water Resources Management	Toshiharu Kojiri	Disaster Prevention Research Institute, Kyoto University	Gokasho, Uji, Kyoto 611-0011, JAPAN tkojiri@wrcs.dpri.kyoto-u.ac.jp
	A2-FD-03	Estimation and Countermeasures of Water Environment Disaster in River Basin Due to Global Warming	Toshiharu Kojiri	Disaster Prevention Research Institute, Kyoto University	Gokasho, Uji, Kyoto 611-0011, JAPAN tkojiri@wrcs.dpri.kyoto-u.ac.jp
	A2-FD-04	Modeling of Flood Influence on Inland Fishery Catch in Cambodia	Hajime Tanji	National Institute for Rural Engineering	2-1-6 Kannondai, Tsukuba, Ibaraki, 305-8609, JAPAN tanji@nkk.affrc.go.jp

(3) Category B: Transferable Technologies
 - Features of the Developed Technology & Next Step Developments

Hazard	Ser No.	Title of Technology	Contact Person	Affiliation / Organization	Contact Details
Multi-Hazard	B-MH-01	Emergency Mobile Broadcasting Service Technology	Tomohisa Wada	Department of Information Engineering, University of the Ryukyus	1 Senbaru, Nishihara, Okinawa 903-0213, JAPAN wada@ie.u-ryukyu.ac.jp
	B-MH-02	Teleoperating System of Small Unmanned Helicopter for Surveillance in Disaster Area: SWIFT	Masanao Koeda, Yoshio Matsumoto & Tsukasa Ogasawara	Robotics Laboratory, Graduate School of Information Science, Nara Institute of Science and Technology	8916-5 Takayama-cho, Ikoma, Nara 630-0192, JAPAN Phone: +81-743-72-5376 / Fax: +81-743-72-5379 robotics-staff@is.aist-nara.ac.jp (masana-k@is.naist.jp / yoshio@is.naist.jp / ogasawar@is.naist.jp) http://robotics.naist.jp/
Earthquake & Tsunami	B-ET-01	Let's Talk about Earthquakes!	Kimiro Meguro	Institute of Industrial Science, University of Tokyo	4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, JAPAN meguro@iis.u-tokyo.ac.jp
	B-ET-02	Yoshi and Derolin: An Earthquake Preparation Book	Koji Ichii	Port and Airport Research Institute	3-1-1 Nagase, Yokosuka, Kanagawa 239-0826, JAPAN ichii@pari.go.jp
	B-ET-03	The Community-Training Method for Community Based Urban Reconstruction Planning	Itsuki Nakabayashi	Dept. of Urban Science, Tokyo Metropolitan University	1-1 Minamiosawa, Hachioji, Tokyo 192-0397, JAPAN nakabasi@comp.metro-u.ac.jp aib@comp.metro-u.ac.jp (Shin Aiba, Mr.)
	B-ET-04	Anti-Seismic & Anti-Corrosion Light Steel Bridge	Kotobu Nagai	Steel Research Center, National Institute for Materials Science	1-2-1 Sengen, Tsukuba, Ibaraki 305-0047, JAPAN NAGAI.Kotobu@nims.go.jp
	B-ET-05	FLIP: Finite element analysis program for Liquefaction Process	Koji Ichii	Port and Airport Research Institute	3-1-1 Nagase, Yokosuka, Kanagawa 239-0826, JAPAN ichii@pari.go.jp
	B-ET-06	Techniques for Evaluating Site-Specific Ground Motion and Probabilistic Seismic Hazard Taking Account of Regional Seismicity	Takaiki Kusakabe	National Institute for Land and Infrastructure Management	1 Asahi, Tsukuba, Ibaraki 305-0804, JAPAN kusakabe-t88d8@nilim.go.jp
Flood & Debris	B-FD-01	River Training Method for Steep Streams Developed through the Ages	Tadahiko Nakao	Foundation of River & Basin Integrated Communications	Nissei-Hanzoumon Bldg. 1-3 Koujimachi, Chiyoda-ku, Tokyo 102-8474, JAPAN nakao@river.or.jp
	B-FD-02	River Training Structures Making Use of Local Materials	Tadahiko Nakao	Foundation of River & Basin Integrated Communications	Nissei-Hanzoumon Bldg. 1-3 Koujimachi, Chiyoda-ku, Tokyo 102-8474, JAPAN nakao@river.or.jp

B-FD-03	Interactive Flood Runoff Calculation Manual		River Engineering Division, River and Port Department, Civil Engineering Research Institute of Hokkaido	Research Planning Office, Civil Engineering Research Institute of Hokkaido 1-3 Hiragishi, Toyohira-ku, Sapporo 062-8602, JAPAN gijutusoudan@ceri.go.jp (Osamu Tahata, Mr.: o-tahata@ceri.go.jp)
B-FD-04	A Simple Method for Predicting A Landslide (A Simple Method for Predicting the Failure Time of A Slope Using Reciprocal of Velocity)	Teruki Fukuzono	National Research Institute for Earth Science and Disaster Prevention	3-1, Tennodai, Tsukuba, Ibaraki 305-0006, JAPAN fukuzono@bosai.go.jp
B-FD-05	Methods for Setting Standard Rainfall for Mitigation of Sediment-Related Disaster	Satoshi Tsuchiya	The Japanese Society of Erosion Control Engineering	Sabo Kaikan 2-7-5 Hirakawa-cho, Chiyoda-ku, Tokyo 102-0093, JAPAN jimu@jsece.or.jp
B-FD-06	Technology Using Microwaves for Monitoring Deformation of Dangerous Slopes		Geology and Rock Mechanism Division, Agricultural Engineering Department, Civil Engineering Research Institute of Hokkaido	Research Planning Office, Civil Engineering Research Institute of Hokkaido 1-3 Hiragishi, Toyohira-ku, Sapporo 062-8602, JAPAN gijutusoudan@ceri.go.jp (Osamu Tahata, Mr.: o-tahata@ceri.go.jp)
B-FD-07	Identification of Slope Failure Area and Sediment Production Yields Using Field Surveys and Remote Sensing Data.		Water Environmental Engineering Division, River and Port Department, Civil Engineering Research Institute of Hokkaido	Research Planning Office, Civil Engineering Research Institute of Hokkaido 1-3 Hiragishi, Toyohira-ku, Sapporo 062-8602, JAPAN gijutusoudan@ceri.go.jp (Osamu Tahata, Mr.: o-tahata@ceri.go.jp)
B-FD-08	Real-time Prediction System for Landslide	Satoru Sadohara	Graduate School of Environment and Information Sciences, Yokohama National University	79-7 Tokiwadai, Hodogaya-ku, Yokohama 240-8501, JAPAN sato610@arc.ynu.ac.jp