

Preface

“The International Workshop on fire risk assessment and risk-based fire safety design method” was held on 3rd November 2006, in Kyoto, Japan. It was organized by Building Research Institute, Disaster Prevention Research Institute Kyoto University, and Center of Advanced Fire Safety Science and Technology for Building, Tokyo University of Science. About 70 participants including researcher, fire safety engineers, educators etc. from Australia, Austria, Canada, China, France, Germany, Greece, Japan, New Zealand, Sweden, Taiwan, the U.K., and the U.S. attended the workshop.

The purpose of the workshop is to exchange internationally experiences, ideas and the state of art on fire risk concept and assessment methods and their applications to fire design practices.

Today, performance-based fire safety design methods and codes have developed in many countries. In Japan, performance-based provisions were introduced in the Building Standard Law (BSL) in 2000. Fire safety design practices are rapidly shifting from complying with conventional prescriptive codes to using performance-based design methods. A concern is, however, ‘Have we sufficiently considered fire risk aspects in developing the P-B design methods or codes?’ It seems to be a common recognition among ISO/TC92/SCs and many others that a sound fire safety design method should be based on fire risk consideration.

The proceedings include all presentations at the workshop, several papers and points of discussions. We would like to thank all the participants who joined the presentation and discussions, and the staffs who supported the administrative work. Without their contribution, this workshop would have never been completed successfully.

Ichiro Hagiwara
Daisaku Nii
Hideki Yoshioka

Schedule of the workshop

9:00	Registration
9:20–	Opening remarks: Tanaka, T. (Kyoto Univ.)
9:30–10:45	Session 1: chaired by Naruse, T. (BRI)
	Hall, J. (NFPA, USA): Overview of Standards for Fire Risk Assessment
	Tsujimoto, M. (Tokyo Univ. of Science, Japan): Death risk by building fires in Japan and its usage
	Goransson, U. (Lund Univ., Sweden): Comparison of the ISO document with similar documents in use in Sweden or elsewhere in Europe
10:45–11:00	Coffee Break
11:00–12:40	Session 2: chaired by Naruse, T.
	Hui, M.C. (ARUP in Hong Kong, China) Overview of fire risk assessment projects by Arup in Americas, Australasia, East Asia and Europe regions
	Charters, D (BRE, UK): Overview of the fire risk assessment example under development for ISO and comparison of the ISO document with documents in development in the U.K.
	Benichou, N. (NRCC, Canada): The Use of Relative Risk-Based Assessment to Identify Cost-Effective Fire Safety Design Options for an Office Building
	Cook, G (Fire consultant, UK): Fire risk assessment of the chip-pan fire hazard in a large London hostel
12:40–14:00	Lunch break
14:00–15:15	Session 3: chaired by Harada, K. (Kyoto Univ.)
	Mehaffey, J. (Forintek, Canada): Selection of representative fire scenarios for undertaking fire risk assessment
	Tanaka, T. (Kyoto Univ., Japan) : A consideration on determination of design fire based on fire risk concept
	Lin, T. D. (National Cheng Kung Univ., Taiwan) Building Fire Risk, Structural Fire Tests, and Performance-Based Codes
15:15–15:30	Coffee break
15:30–16:45	Session 4: chaired by Harada, K.
	Sekizawa, A. (Univ. of Tokyo, Japan): Performance Requirement for Building Fire Safety from the Viewpoint of Firefighting and Rescue Activity
	Papaioannou, K. (Aristotle Univ. of Thessaloniki, Greece): Fire risk assesment in historic buildings
	Hagiwara, I (BRI, Japan): Interpretation of means of escape provisions from fire risk point of view
16:45–17:15	General discussion
19:00–	Workshop dinner (New Miyako Hotel)