

## Programme Day 1, 17th August 2017

08.00-08.45	Coffee and Registration	
08.45-09.00	Welcome to the Nordic Fire and Safety Days	
	Room: ACM15	
	Anne Dederichs	
09.15-10.00	Key Lecture	
	Room: ACM15	
	Furniture fire properties and their importance for domestic fire safety.	
	Dr. Jürgen Troitzsch, FEPS, Switzerland	
10.00-10.45	Panel Discussion	
	Room: ACM15	
	Session Chair: Björn Sundström	
	Furniture fire properties and their importance for domestic fire safety.	
	Dr. Jürgen Troitzsch, FEPS, Switzerland	
	Egil Sundet, Head of the Sector furniture, interior and design for the federation of	
	Norwegian Industry	
	Dr. David Santillo, Honorary Research Fellow at Greenpeace Research Laboratories,	
	Exeter University, UK	
	Dr. Anne Elise Steen-Hansen, Research manager at RISE Fire Research, Norway	
	Dr. Björn Karlsson, Professor at Iceland University and the Director General at Iceland	
	Construction Authority	





11.00-12.00	Parallel Session A		
	Fire Dynamics 1	Risk 1	Evacuation
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Ulf Wickström	Frank Markert	Aldis R. Larusdottir
11.00-11.15	Fire protection of extensive green roofs A. Elias, D. Håkansson Lund University and Brandskyddslaget AB	Modelling approach for the threat quantification of cascading failures <i>A. Helminen,</i> <i>T. Hakkarainen, VTT</i> <i>Technical Research Centre</i> <i>of Finland Ltd</i>	The effect of platform- and tunnel design on the evacuation performance of wheelchair users - A qualitative study <i>E-S. Karlsson, M.Kumm,</i> <i>A S. Dederichs, Research</i> <i>Institutes of Sweden,</i> <i>Niclas Ahnberg,</i> <i>Brandskyddslaget</i>
11.20-11.35	USCG Fire simulation of water mist suppression using an ignition source <i>E. A. Kolstad, Western</i> <i>Norway University of</i> <i>Applied Science,</i> <i>B. P. Husted, Lund</i> <i>University</i>	Developing a risk and capability assessments methodology for the Baltic Sea Region <i>B. Karlsson, University of</i> <i>Iceland</i>	Reaction and decision time of evacuees - A study regarding the influence of alcohol on the reaction and decision time <i>P. B. Rask, The Danish</i> <i>Institute of Fire and</i> <i>Security Technology,</i> <i>A. Dederich, Research</i> <i>Institutes of Sweden and</i> <i>Technical University of</i> <i>Denmark</i>
11.40-11.55	Development tool for ETICS façade fire testing A. Dragsted, M. Meinert, Danish Institute of Fire Technology, M.S. McLaggan, P. van Hees, Lund University	Fire safety decision making under a systems- theoretic safety paradigm <i>H. Bjelland, Multiconsult,</i> <i>O. Njå, University of</i> <i>Stavanger,</i> <i>A. W.Heskestad,</i> <i>Norwegian Railway</i> <i>Directorate G. S. Braut,</i> <i>Stavanger University</i> <i>Hospital</i>	Awareness of fire risk reduction among Cyprus international university (CIU) students A. F. Gyasi, Cyprus International University
12.00-13.00		Lunch & Exhibition	





13.00-14.00		Parallel Session B	
	Fire Dynamics 2	Transportation	Fire safety science without borders
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Frida V Lundström	Martyn S. McLaggan	Patrick van Hees
13.00-13.15	Desensitisation of optical flame detection in harsh external environments J. McNay, Micropack (Engineering) Ltd.	Ventilation in tunnels: a numerical comparison between different modelling approaches <i>P. Matteo, X. Deckers, Fire</i> <i>Engineered Solutions</i> <i>Ghent</i>	Fire safety science without borders <i>T. Gell, Brandforsk &amp;</i> <i>Swedish Fire Protection</i>
13.20-13.35	Heat release characteristics of ethanol- water mixtures <i>T. Hakkarainen, VTT</i> <i>Technical Research Centre</i> <i>of Finland Ltd</i>	Fire detection in engine compartments P. Karlsson, O. Willstrand, Research Institutes of Sweden	Fire safety's contribution to a sustainable society T. Gell, Brandforsk & Swedish Fire Protection Association, K. H. Almand, National Fire Protection Association
13.40-13.55	Fire-induced pressures in modern airtight apartment building S. Hostikka, R. K. Janardhan, U. Riaz, Aalto University, T. Sikanen, VTT Technical Research Centre of Finland Ltd.	Verifying fire safety in tall timber buildings F. Nystedt, J. Norén, Briab	Det store brannløftet E. Schiefloe, Research Council Norway
14.00-14.45		Coffee & Exhibition	





14.45-15.45	Parallel Session C		
	Fire Dynamics 3	Fire Safety Engineering 1	Brokerage Event 1: Carpark fires
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Tuula Hakkarainen	Michael Strömgren	Anne Dederichs
14.45-15.00	Smouldering fires in wood pellets: the effect of varying the airflow V. R. Valdés, NTNU, R. F. Mikalsen, A. Steen- Hansen, RISE Fire	Performance based design and compilation <i>M. Strömgren, Research</i> Institutes of Sweden	14.45-14.50 Presentation of the topic by Luisa Giuliani, Technical University of Denmark
	Research		
15.05-15.20	ResearchModelling and stochastic analyses of travelling firesR. K. Janardhan, S.Hostikka, Aalto UniversityPhotovoltaic installations on warehouse buildings - an experimental study of the propagation of fire J. Steemann Kristensen, DTU – Technical University of Denmark	<ul> <li>Wildland fires</li> <li>F.V.Lundström, J. Sjöström,</li> <li>Research Institutes of</li> <li>Sweden, A. Granström, Dept.</li> <li>of forest ecology and</li> <li>management- SLU</li> <li>A discussion on learning</li> <li>from fire investigations;</li> <li>concepts and methodologies</li> <li>A. Borg, PiD Solutions, O.</li> <li>Njå, University of Stavanger</li> </ul>	<ul> <li>14.50-15.00</li> <li>Presentation of funding possibilities Anne</li> <li>Dederichs,</li> <li>15.00-15.40</li> <li>Open project preparation</li> </ul>
15 45 16 00		Conformer Dhoto	
15.45-16.00		Conference Photo	
16.00-16.30		Coffee & Exhibition	
16.30-18.30	Social event		
20.00-03.00		After conference dinner	





## Programme Day 2, 18th August 2017

08.30-08.40	Welcome	
08.40-09.20	Key Lecture	
	Room: ACM15	
	Fire brigade intervention method – accounting for the actions of the fire service Ed Claridge, Principal Fire Engineer, Auckland, New Zealand	
09.25-10.10	Panel Discussion	
	Room: ACM15	
	Session Chair:	
	Stefan Särdqvist	
	Fire brigade intervention- accounting for the actions of the fire service	
	Ed Claridge, Principal Fire Engineer, Auckland, New Zealand	
	Rasmus Storgaard Petersen, CEO Emergency Service East, Denmark	
	Hans Kristian Madsen, Head of Department of fire at the Directorate for Civil	
	Protection and Emergency in Norway (DSB)	
	Mia Kumm, Licentiate of engineering and researcher at Research Institutes of	
	Sweden and Mälardalen University, Sweden	





10.15-11.30		Parallel Session D	
	Residential Fires 1	Fire safety engineering 3	Fire Dynamics 4
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Thomas Gell	Petter Gryten Almkov	Karlis Livkiss
10.15-10.30	Socioeconomic differences in residential fire mortality in Sweden: a case-control study A. Jonsson, Centre for Public Safety, Karlstad University, and The Swedish Civil Contingencies Agency	Learning points from real incidents – learning from what? <i>M. Bøhm, Metropolitan</i> <i>University College, O. Njå,</i> <i>University of Stavanger</i>	Measuring incident heat flux and adiabatic surface temperature with platse thermometers in ambient and high temperatures U. Wickström, Luleå University of Technology, J. Anderson, J. Sjöström, Research Institutes of Sweden
10.35-10.50	Fire fatalities in Norway K. Storesund, C. Sesseng, A. Steen-Hansen, RISE Fire Research	Integration of fire engineering tools and calculation methodologies <i>P. Tofilo, Main School of</i> <i>Fire Service SciRisk</i> <i>Engineering</i>	Simulation of smouldering combustion based on multi-layer cellular automata <i>N. Fernandez-Anez,</i> <i>K. Christensen, G. Rein,</i> <i>Imperial College London</i>
10.55-11.10	Has fire-related mortality in Sweden changed over time? <i>E. Lindahl, J. Hedberg,</i> <i>Lund University</i>	Learning fire and rescue work by experience- sharing A. Sadeghi, University of Stavanger	Aerosols from smoldering <i>E. Villacorta, Western</i> <i>Norway University of</i> <i>Applied Sciences</i> <i>N. Bluvshtein, Department</i> <i>of Earth and Planetary</i> <i>Sciences Weizmann</i> <i>Institute of Science</i>
11.15-11.30	Toxic emissions, human absorption pathways, smoke poisoning and longterm health effects due to combustion of plastics in modern buildings L. Schiøtt Sørensen, Danish Building Research Institute (SBi), Aalborg University	Objectifying performance based design in buildings by a probabilistic approach. X. Deckers, Fire Engineered Solutions Ghent	Reaction to fire of glass/ hemp/ furan composites <i>F. Markert, Danmarks</i> <i>Tekniske Universitet</i>
11.30-12.30		Lunch & Exhibition	





12.30-13.30		Parallel Session E	
	Management of rescue service 1	Risk 2	Structural Fire Safety 1
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Anne Elise Steen-Hansen	Ove Njå	Luisa Giuliani
12.30-12.45	Part time firemen and community resilience P. Almklov, M. Nilsen, G. Gjøsund, Studio Apertura, NTNU Social Research	Resilient Buildings C-Fort, <i>M. Kumm, Research</i> <i>Institutes of Sweden</i> Finns inte I lista och finns inte abstract	Risk analysis and performance-based structural fire expertise of a semi-buried railway station <i>E. Tonicello, Ingénierie et</i> <i>Sécurité Incendie,</i> <i>S. Deshanghere, Efectis</i>
12.50-13.05	Environmental impact of structure fires and fire service response <i>F. Amon, L. Vylund,</i> <i>Research Institutes of</i> <i>Sweden</i>	Firesafe - Study investigating cost effective measures for reducing the risk from fires on ro-ro passanger ships J. Wikman, M. Rahm, F. Evegren, Research Institutes of Sweden J. Leroux, A. Breuillard, Bureau Veritas, M. Kjellberg, L. Gustin, F. Efraimsson, Stena Rederi AB	Outlabs Experimental study on the mechanical properties of fire exposed concrete A. Zawadowska, L. Giuliani, K. D. Hertz, Technical University of Denmark
13.10-13.25		False alarm - An organizational study of the effects of false alarms G. Gjøsund, P. Almklov, NTNU, C. Sesseng, RISE Fire Research	Fire protection of wooden houses in several floors J. N. Olsen, ETA-Danmark A/S, H. S.Fishman, Rønslev
13.30-14.15		Coffee & Exhibition	





14.15-15.15		Parallel Session F	
	Management of rescue	Fire safety engineering 2	Structural Fire Safety 2
	service 2		
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Lars Schiøtt Sørensen	Topi Sikanen	Simo Hostikka
14.15-14.30	Security officers	99 years of standard fire -	Furnace setup for
	responding to residential	success of failure?	preliminary fire resistance
	fire alarms: modelling the	R. Jansson McNamee,	testing
	effect on survival and	Brandskyddslaget	P. Hejtmánek, V. Flídr,
	property damages		Faculty of Civil
	B. Sund, H. Jaldell,		Engineering, CTU Prague,
	Karlstad University		H. Najmanová, University
			Centre for Energy Efficient
			Buildings CTU Prague
14.35-14.50	Three different fire	A Swedish approach to	Investigation of eurocodes
	suppression approaches	define a standard for fire	design fires and national
	used by Fire and Rescue	safety design in BIM	deviations
	services	F. Nystedt, J. Norén, Briab	F. Clausen, L. Giuliani,
	S. Särdqvist, Swedish Civil		Technical University of
	Contingencies Agency		Denmark
14.55-15.10	An operationalization of	Nordic standard for	Material
	capabilities for fire and	review & control of fire	modeling of
	rescue operations	safety engineering	concrete under
	M. Runefors, Lund	F. Nystedt, J. Norén, M.	compression and
	University	Strömgren, Briab	high
	,	<u> </u>	temperatures
			A. F. Damkjær, L.
			Giuliani,
			K. D. Hertz,
			Technical
			University of
			Denmark





15.10-15.30		Coffee & Exhibition	
15.30-16.30		Parallel Session G	
	<b>Residential Fires 2</b>	Structural Fire Safety 3	Fire Dynamics 5
	Room: ACM15 1.001	Room: ACM15 1.008	Room: FKJ 12 0.06
	Session Chair:	Session Chair:	Session Chair:
	Björn Karlsson	Pierrick Mindykowski	Michael Försth
15.30-15.45	Residential fires in Denmark P. B. Gummesen, Technical University of Denmark, A. S. Dederichs, Technical University of Denmark and Research Institutes of Sweden	On analysing structures based solely on human safety J.Sandström, J. Thor, R. Jansson McNamee, O. Lagerqvist, U. Wickström, Luleå tekniska universitet, Brandskyddslaget AB,	USCG Fire simulation of water mist suppression using an ignition source <i>E. A. Kolstad, Western</i> <i>Norway University of</i> <i>Applied Science,</i> <i>B. P. Husted, Lund</i> <i>University</i>
		ProDevelopment AB Luleå, Sweden	
15.50-16.05	Residential fire solutions in the building sector <i>F. Shaukat,</i> <i>F. Markert, Technical</i> <i>University of Denmark</i>	Post-earthquake fire behavior of steel frames - Part I: Collapse Mechanism G. Risco, L. Giuliani, V. Zania, Technical University of Denmark	Validation of FDS on the SP retail store S. Ahmed, B. P. Husted, Lund University
16.10-16.25	Towards an evidence- based vision zero policy on residential fires - an update <i>R. Andersson, Karlstad University,</i> <i>A. Jonsson, Karlstad University and The</i> <i>Swedish Civil</i> <i>Contingencies Agency</i>	Post-earthquake fire behavior of steel frames - Part II: The effect of the insulation A. Wrobel, L. Giuliani, V. Zania, Technical University of Denmark	Validation of sub-grip scale particle model for cable fire spread <i>T. Sikanen, A. Matala, VTT</i> <i>Technical Research Centre</i> <i>of Finland Ltd, S. Hostikka,</i> <i>Aalto University</i>
16.30-16.45		Closing session	





16.45-17.40	Brokerage Event 2: Modern Building Fires	
	Room: ACM15	
	Session Chair:	
	Anders Bergqvist	
16.45-16.50	Presentation of the topic	
	by Lars Schiøtt Sørensen, Technical Universty of Denmark	
16.50-17.00	Presentation of funding possibilities	
	Thomas Gell	
17.00-17.40	Open project preparation	

