

## Workshop on Uncertainties in the Assessment of Natural Hazards (Excluding Earthquakes)

### Provisional Programme

Zoom Videoconference, 19-21 April 2022

19 April 2022					
Introductory Session		Panellists	Seoul	Amsterdam/ Paris	Washington/ Toronto
<b>Opening session</b>  Workshop Chair:  John Perdikaris (OPG, Canada)  55 min	<ul style="list-style-type: none"> <li>Introduction of the outline of the workshop that introduces the Chair on each session with the discussion on the priorities and challenges (15min)</li> <li>Overview that includes background, the purpose of the workshop and expected outcomes based on the draft TR (core-group) (15min)</li> <li>General sources and types of uncertainty (25min)</li> </ul>	John Perdikaris (OPG, Canada)	19:00-19:15	12:00-12:15	06:00-06:15
		Gernot Thuma (GRS, Germany)	19:15-19:30	12:15-12:30	06:15-06:30
		Yann Richet (IRSN, France)	19:30-19:55	12:30-12:55	06:30-06:55
<b>Coffee Break (20 min)</b>			19:55-20:15	12:55-13:15	06:55-07:15
<b>Session 1</b>  Chair:  Gernot Thuma (GRS, Germany)	<b>Topics: Extreme temperatures, heat sink effect, lightning and snow and statistical methods (30 min for each presentation)</b>  1. Sources of uncertainties in snowfall assessment connected to independent core cooling requirements  2. Sources of uncertainties in lightning occurrence and parameters	Lars Bennemo (SSM, Sweden)	20:15-20:45	13:15-13:45	07:15-07:45
		Antti Mäkelä (FMI, Finland)	20:45-21:15	13:45-14:15	07:45-08:15

Rapporteur: Taehee Kim (NEA)	<p>3. Climate Change related uncertainties and their impact on IDFs</p> <p>4. (for Session 2) Sources of uncertainties highlighted by flooding events in Germany</p> <p><b>Coffee break (20 min)</b></p> <p>5. Panel discussion – 50 min</p> <p>6. Chair wrap-up (key messages) – 10 min</p> <p><i>*one item for session 1 “sources of uncertainties in extremely high temperatures in the Netherlands” would be on Day2</i></p>	<p>Catalin Obreja (Environment and Climate Change, Canada)</p> <p>Gernot Thuma (GRS, Germany)</p>	<p>21:15-21:45</p> <p>21:45-22:15</p> <p>22:15-22:35</p> <p>22:35-23:25</p> <p>23:25-23:35</p>	<p>14:15-14:45</p> <p>14:45-15:15</p> <p>15:15-15:35</p> <p>15:35-16:25</p> <p>16:25-16:35</p>	<p>08:15-08:45</p> <p>08:45-09:15</p> <p>09:15-09:35</p> <p>09:35-10:25</p> <p>10:25-10:35</p>
<b>20 April 2022</b>					
<b>Day 1 Overview (5 min)</b>	<b>Day 1 Overview</b>  (for session 1) Sources of uncertainties in extremely high temperatures in the Netherlands (30 min)	<p>John Perdikaris (OPG, Canada)</p> <p>Peter Siegmund (KNMI, Netherlands)</p>	<p><b>19:00-19:05</b></p> <p>19:05–19:35</p>	<p><b>12:00-12:05</b></p> <p>12:05–12:35</p>	<p><b>06:00-06:05</b></p> <p>06:05–06:35</p>
<b>Session 2</b>  Chair : Minkyu Kim (KAERI, Korea)  Rapporteur : Vincent Rebour (IRSN, France)	<p><b>Topic: Site flooding</b></p> <p>1. WGEV member's presentation (30 min)</p> <p>2. Sources of uncertainties from the French experience on coastal and riverine flooding</p> <p><b>Coffee break (20 min)</b></p> <p>3. Sources of uncertainty in probabilistic hazards assessment related to flooding.</p> <p>4. Uncertainty in flood risk modelling</p> <p>5. Developing an Assessment Method for the Uncertainty of the Tsunami</p> <p><b>Coffee break (20 min)</b></p>	<p>John Nakoski (NRC, USA)</p> <p>Claire-Marie Duluc (IRSN, France)</p> <p>Joseph Kanney (NRC, USA)</p> <p>John Perdikaris (OPG, Canada)</p> <p>Sato Taichi (NRA, Japan)</p>	<p>19:35-20:05</p> <p>20:05-20:35</p> <p>20:35-20:55</p> <p>20:55-21:25</p> <p>21:25-21:55</p> <p>21:55-22:25</p> <p>22:25-22:45</p>	<p>12:35-13:05</p> <p>13:05-13:35</p> <p>13:35-13:55</p> <p>13:55-14:25</p> <p>14:25-14:55</p> <p>14:55-15:25</p> <p>15:25-15:45</p>	<p>06:35-07:05</p> <p>07:05-07:35</p> <p>07:35-07:55</p> <p>07:55-08:25</p> <p>08:25-08:55</p> <p>08:55-09:25</p> <p>09:25-09:45</p>

	6. Panel discussion (50 min) 7. <b>Chair wrap-up (10min)</b>  <i>*one item for session 2 “sources of uncertainties highlighted by flooding event in Germany” would be on Day1</i>		22:45-23:35 23:35-23:45	15:45-16:35 16:35-16:45	09:45-10:35 10:35-10:45
<b>21 April 2022</b>					
<b>Day 2 Overview (5 min)</b>		John Perdikaris (OPG, Canada)	19:00-19:05	12:00-12:05	06:00-06:05
<b>Session 3</b>	<b>Topic: High winds</b>				
Chair: John Nakoski (NRC, USA)	1. WGEV member’s presentation (20 min)	Vincent Rebour (IRSN, France)	19:05-19:25	12:05-12:25	06:05-06:25
Rapporteur: Gernot Thuma (GRS, Germany)	2. Identifying deterministic phenomenological based sources of uncertainty in the US related to high winds (30 min)	Marc Levitan (NIST, USA)	19:25-19:55	12:25-12:55	06:25-06:55
	3. Probabilistic high wind hazard assessment focused on the sources of uncertainties to be addressed (30 min)	Minkyu Kim (KAERI, Korea)	19:55-20:25	12:55-13:25	06:55-07:25
	<b>Coffee break (20 min)</b>		20:25-20:45	13:25-13:45	07:25-07:45
	4. Panel discussion (50 min)		20:45-21:35	13:45-14:35	07:45-08:35
	5. Chair wrap-up (10 min)		21:35-21:45	14:35-14:45	08:35-08:45
	<b>Coffee break (40 min)</b>		21:45-22:25	14:45-15:25	08:45-09:25
<b>Session 4</b>	<b>Wrap-up session</b>				
Chair: John Perdikaris (OPG, Canada)	• Rapporteurs’ reports (summary) + key messages from Chairs (each session/ 20 min)	Rapporteurs/ Session Chairs	22:25-23:25	15:25-16:25	09:25-10:25
	• Findings, conclusions and recommendations for further work (20 min)	John Perdikaris (OPG, Canada)	23:25-23:45	16:25-16:45	10:25-11 :45
	• Closing				