



## Risk Task Group – Meeting Report

July 10, 2018

**Present:** Francisco Joglar (Chair), Brian Ashe, Russell Bainbridge, Kevin Frank, Vladimír Mózér, Todd Ossmann, Stephane Poole, Ai Sekizawa, Armin Wolski, and Chris Jelenewicz (Staff).

**The following was discussed:**

1. **Schedule** – Francisco presented a draft schedule for document completion. See attached schedule. The goal is to have a 1<sup>st</sup> draft completed by June 1.

**Action Item** – Task Group members were asked to take the lead for at least one section and send their request to Francisco.

2. **Flowchart** – Vladimir updated chart to include sensitivity analysis. It was agreed that there will be a separate section on sensitivity.

**Action Item** – Francisco will update the schedule to include a section on sensitivity and include in table of contents.

3. **Hazard Matrix** – Armin updated the Hazard Matrix based on comments from the last meeting. This matrix will become a roadmap for the rest of the Hazard Chapter. The matrix shown in the Annex includes updates made during the meeting.

**Action Item** – Francisco will insert the revised matrix into the draft document

It was agreed that there is a need to empathize that the matrix is not conclusive but is used as an example.

Items related to cyber-attacks will be placed in precursors/equipment

4. **Next meeting** – CJ will schedule the next meeting (4 weeks) via a Doodle Poll (August).

**End of Report**

### Annex – Updated Hazard Matrix

		Precursors	Ignition	Propagation (Fuels/Secondary/ Intervening Combustibles)
<b>Hazard Categories (Human or Configuration Factors)</b>	<b>Human</b>	Maintenance, Housekeeping practices, <b>Level of training,</b>	Incendiary, Hot work, Smoking, Unintentional,	Storage and use practices, <b>Difficult access for first responders</b>
	<b>Equipment</b>	Tank/pipe rupture and leakage, <b>Structural/Built in vulnerabilities, Cyber/Internet-based activities</b>	Cooking, Electrical equipment, motors, HVAC, Internal combustion engines, Hot objects	Combustibles (upholstered furniture, mattresses, bedding, clothing, wood-based items), Plastic appliance housings, Room linings, Combustible cladding materials, <b>Inadequate fire safety systems</b>
	<b>Processes</b>	Spills or unintended discharges, <b>Process logic</b>	Chemicals capable of spontaneous heating, Explosions, <b>Process interlocks</b>	Flammable or combustible process fluids, Chemicals in a reaction process, Combustible dusts or solids
	<b>Environment</b>	Seismic, Flooding, Drought,	Lightning, static electricity, Wildfire or other exterior exposure fire	<b>High winds,</b> Surrounding vegetation, <b>Neighbouring properties/facilities</b>