



Risk Task Group – Meeting Report

June 29, 2017

Present: Francisco Joglar (Chair), Russ Bainbridge, David Charters, Al Condello, Håkan Frantzich, Kevin Frank, Vladimír Mózer, Rob Plonski, Armin Wolski, and Chris Jelenewicz (Staff).

The following was discussed:

1. **General fire risk assessment process** – There was a high-level discussion about the process that will be outlined in the new version of the guide.

Between ignition and the consequence there are barriers that prevent the consequence from occurring. The guide will focus on estimating the frequency, the barriers that prevent the consequence from occurring and the consequence itself.

At this time, the current definitions that are in the current guide (i.e., risk analysis and risk assessment etc.) will not be changed.

Every essential element in the guide will focus on a risk calculation and be based on the relevant model.

The risk assessment analysis will include the following steps:

- Build your team!
 - Define project scope and goals
 - Define risk metric and thresholds
 - Identify and characterize fire scenarios
 - Estimate/Calculate fire risk
 - Screening analysis/Detailed analysis
 - Conduct frequency analysis
 - Conduct consequence analysis
 - Conduct uncertainty or sensitivity analysis
 - Documentation
2. **Flowchart** – The Task Group discussed the flowchart for the document. The flowchart from the current document is provided in the Appendix of this report. The Task Group also reviewed a flowchart that was suggested by Vladimír that follows the process used by ISO. This flowchart is provided in the Appendix of this report. It was agreed that the flowchart provided by Vladimír will be used as the basis for the new flowchart, but elements from the original SFPE guide will be included.

The 'Design Specifications' section of the flowchart will include all of the inputs needed to complete the risk analysis process. It defines what is needed to develop scenarios and eventually frame the scenario.

It was noted that the process needs to include different levels of risk approaches. For example, some forms of risk analysis have a deterministic component. It was agreed that the 'objectives' section of the flowchart will include the scope of the analysis and will include defining the level of the risk approach.

It was agreed that a new section on 'scenarios' will be provided in the flowchart. It will be located between 'hazards identification' and 'probability/consequences.' This section will assist in defining how many scenarios are needed and how the engineer should characterize the scenarios. This section will define the barriers between frequency and the consequence. If a checklist is used in an analysis, it will be defined in the scenarios section. It was also agreed that the document should clarify that the scenarios will include occupant/egress scenarios as well as the fire scenarios.

It was agreed that a new section on acceptance criteria will be added to the flowchart. This will be at the same level as objective/scope and design specifications.

It was agreed that Vladimir's flowchart will be modified as follows:

Objective/Scope – Acceptance Criteria – Design Specifications

Hazard Identification

Scenarios

Frequency Analysis – Consequence Analysis

Risk Estimation

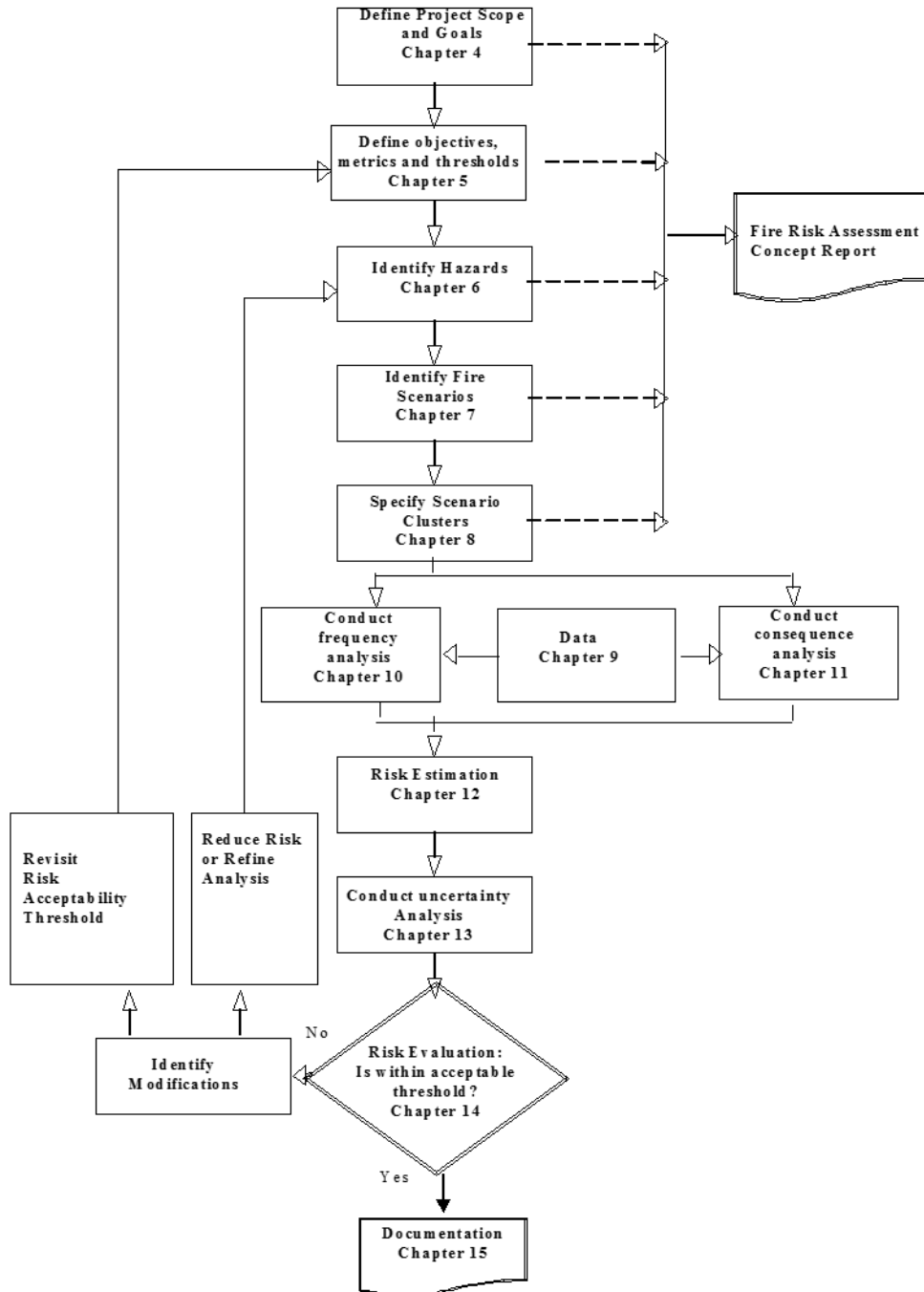
Risk Evaluation

3. **Moving Forward** – At the next meeting the task group will discuss the objective/scope and the design specification sections of the document. The other sections of the flowchart will be discussed at future meetings.
4. **Action Items Before Next Meeting**
 - A. Francisco will work with Vladimir to update the flowchart.
 - B. The Task Group will review the updated flowchart and provide comments
5. **Next Meeting** – CJ will scheduled for the next meeting (4 to 5 weeks) via a Doodle Poll.

End of Report

Appendix

Flow Chart from Current SFPE Guide



Vladimir Flow Chart

