



### ASAMPSA\_E TECHNICAL MEETINGS

"Clarify the content of all deliverables and the distribution of work"

Vienna University

September 8-12, 2014





### 08 September - Day 1 - WP21

9:00 - 18:00

Discussions on D21.1: summary report of already published guidance for risk assessment related to each type of external event (WP21: hazard characterization)

#### 09:00 - 10:00 Status and work still to be done for D21.1

Discussions on D21. 2: report proposing an exhaustive list of hazards, and their correlations to be considered in an extended PSA. Sub lists of issues to be examined in detail by WP21 and WP22 and strategic reasoning.

#### 10:00 - 11:00 Status and work still to be done for D21.2

Discussions on D21. 3: External hazards characterization - ASAMPSA\_E guidance - WP21 - Technical report to be sent for external review.

#### 11:00 - 12:00 Common structure of guidance (to be applied for each external hazards).

- It will proposed before the meeting and will be discussed
- Example:
  - Hazards database,
  - o Existing analysis strategy (deterministic, probabilistic, simulations, history analysis ...),
  - Examples of successful practices.

#### 13:00 - Lunch break

#### 14:00 - 16:00 Seism

- Identification of Partners that will contribute to the guidance document
- Technical presentation (partners are welcome to present the methodology they use)
- Discussion on existing competences in ASAMPSA\_E and need to contact other experts.

### 16:00 - 18:00 Extreme weather and flooding events

- Identification of Partners that will contribute to the guidance document
- Technical presentation (partners are welcome to present the methodology they use)
- Discussion on existing competences in ASAMPSA E and need to contact other experts.





### 09 September - Day 2 - WP21-WP10-WP22

9:00 - 18:00

Discussions on D21. 3: External hazards characterization - ASAMPSA\_E guidance - WP21 - Technical report to be sent for external review. CONTINUED

09:00 - 11:00 Biological infestation, Man-made hazards (external fire, explosion, aircraft crash ...), lightning

- Identification of Partners that will contribute to the guidance document,
- Technical presentation (partners are welcome to present the methodology they use),
- Discussion of existing competences in ASAMPSA\_E and need to contact other experts.
- WP10 Status of the End-Users survey (D10.2) and D10.3 (high amplitude events).
  - 11:00 13:00 Discussion on the final version of D10.2 and D10.3
- 13:00 Lunch break
- 14:00 Opening of WP 22 part of TM, final approval of agenda
- 14:01 Final discussion on the Summary report of already existing guidance on the implementation of External Hazards in extended Level 1 PSA D22.1
  - Presentation of the report
  - Overview of important findings; usefulness for the next deliverables
  - Open discussion and final agreement (finalizing the report)
  - At the end: coffee break, ca. 15:30
- 16:00 Discussion on the Guidance document (implementation of external hazards in extended L1 PSA) D22.2/3

#### 16:00 - Introduction

- Reference to D22.2 and D22.3 according to the DoW
- Presentation of the outline of the report to be produced, and of ideas about the scope for the different sections
- Discussion on the scope

#### 16:30 - Discussion on the general sections of the document

- Sec. 1 Key definitions reference to a common ASAMPSA\_E list to be defined
- Sec. 2 List of external hazards agreement on the total list, and on prioritized ones tentatively Seismic, Geological, Flooding, Extreme weather, Biological infestation, Man-made





(ref., e.g., IAEA-TECDOC-1341)

- Sec. 3 Screening of events discussion on principles, starting with the prioritized hazards
- Sec. 4 Methodology to determine frequency, magnitude and uncertainties of external hazards discussion on principles, starting with the prioritized hazards
- Sec. 5 As Sec. 4, but for *combinations* of external hazards
- Sec. 6 Plant response analysis discussion on principles
- Partners leading the work with different sections, based on their stated skills

Ca. 18:00: End of Day, Adjourn of Meeting





### 10 September - Day 3 - WP22

9:00 - 18:00

9:00 - Discussion on the Guidance document (implementation of external hazards in extended L1 PSA) - D22.2/3 - CONTINUED

## 9:00 - Discussion on the principles for taking the effects of the external events into L1 PSA – Sec. 7 of the document

For each of the prioritized external hazards (listed as separate points on the agenda below), the following issues shall be discussed – to facilitate our understanding of the event, and to prepare the ground for formulating principles on how to model the hazards in L1 PSA. The list of prioritized hazards is tentative and may be modified according to the preceding discussions.

- How to determine the status of the equipment depending on amplitude and duration of the external event
- Characterization of the transient, depending on the amplitude of the external hazard
- HRA
- Integration of hazard analysis
- Fragility or failure probability
- System function analysis
- Completeness of L1 PSAUncertainty analysis
- How to address combinations of correlated hazards
- How to address multi-unit issues
- Aspects of a graded approach, depending on the analysis case
- Partners leading the work with different sections, based on their stated skills

9:01 - Seismic hazards

10:00 – Geological hazards

In between: coffee break

11:30 - Flooding

12:30 - Lunch break

13:30 – Extreme weather

14:30 - Biological infestation





• In between: coffee break

### 16:00 - Man-made hazards

• External fire, aircraft crash, explosion outside of plant

### 17:00 - Summary

• Agreement on the work plan for D22.2/3

Ca. 18:00: End of Day, Adjourn of Meeting





### 11 September - Day 4 -WP30

- 9:00 Opening of WP 30 part of TM, final approval of agenda
- 9:01 Final discussion about Bibliography report D30.1
  - Adoption of report for issuing by the TPL
- 9:45 Final discussion of Fukushima lessons learnt report D30.2
  - Discussion of main insights, conclusions and recommendations
  - Discussion of final changes to the text / conclusions of the report
  - Adoption of report for issuing by the TPL
  - (in between: coffee break)
- 12:00 Lunch break
- 13:00 Discussion on Selection of Initiating Events for Extended PSA D30.3
  - Presentations by Partners on Screening Criteria, Methodology of IE Selection, Good Practices etc. (max. 60 min)
  - Discussion on the methodology and screening criteria
  - Decision about main statements and recommendation of D30.3
  - Final outline of D30.3 and work plan for finalizing the report by December 2014
  - In between (coffee break, ca. 14:30)
- 15:30 Discussion on the Relationship of DiD and extended PSA D30.4
  - Presentations by Partners on the relationship between DiD and PSA (max. 60 Minutes)
  - Discussion on uses of PSA for DiD assessment
  - Decision about main statements and recommendations of D30.4
  - Final outline and work plan for finalization of the report in early 2015
- Ca. 17:30: End of Day, Adjourn of Meeting





### 12 September - Day 5 - WP30

### 9:00 - Continuation of WP 30 meeting

- 9:00 Discussion on Risk Metrics and extended PSA
  - Presentation by Partners on Risk Metrics for extended PSAs and their use in Decision Making (max. 60 min)
  - Discussion on appropriate risk metrics for specific uses, decision making approaches
  - Decision about main statements and recommendation of D30.5
  - Final outline of D30.5 and work plan for finalizing the deliverable by mid 2015
  - In between: coffee break

#### 12:00 - Lunch break

13:00 - Discussion about the content of final ASAMPSA\_E guidance D30.6/30.7

- Collection of results of D30.2 to D30.5
- Additional work needed for decision making approach, other issues
- Decision about main contents and issues covered in D30.7
- Work plan for D30.7

Ca. 15:00: End of Day, Closure of Meeting