

ASAMPSA_E FINAL END-USERS WORKSHOP



“Reviewing and discussing the ASAMPSA_E guidance reports for the development and use of extended PSA for NPPs”

September 12th-14th, 2016

The workshop is hosted by Vienna University.

Department of Geodynamics and Sedimentology
Althanstraße 14, A-1090 Vienna, Austria

The preparation is coordinated by
IRSN (France), ICN (Romania), JSI (Slovenia), TUS (Bulgaria), EDF (France), SSTC (Ukraine)

The workshop is open to the organizations having expertise in PSA developments and applications (or in hazards assessment) and that contribute to the on-going survey/review of the reports produced by the ASAMPSA_E group.

Most of these reports are in preliminary version and will be modified and improved.

Practical Information and reports are available on
http://asamposa.eu/asamposa_e-2nd-end-users-workshop/

For questions and to contact the project: asamposa@irsn.fr

Reports submitted to the review

General issues for PSA

- *Lessons of the Fukushima Dai-ichi accident for PSA* ([report access](#))
- *Risk metric for extended PSA* ([report access](#))
- *Link between extended PSA and defence-in-depth concept* ([report access](#), [support report](#))
- *Guidance for decision making based on extended PSA* ([report access](#))

Selecting hazards for PSA

- *List of external hazards to be considered in ASAMPSA_E* ([report access](#))
- *Criteria to select initiating events to be considered in an extended PSA* ([report access](#))

Developing PSA

- *Guidance document on practices to model and implement EARTHQUAKE hazards in extended PSA* ([report 1 access](#), [report 2 access](#))
- *Guidance document on practices to model and implement FLOODING hazards in extended PSA* ([report access](#))
- *Guidance document on practices to model and implement EXTREME WEATHER hazards in extended PSA* ([report access](#))
- *Guidance document on practices to model and implement LIGHTNING hazards in extended PSA* ([report access](#))
- *Guidance document on practices to model and implement BIOLOGICAL hazards in extended PSA* ([report access](#))
- *Guidance document on practices to model and implement MAN-MADE HAZARDS AND AIRCRAFT CRASH in extended PSA* ([report access](#))
- *Implementation of external events modeling in extended L2 PSA* ([report access](#))
- *Optimization of SAMG strategy by L2 PSA* ([report access](#))
- *Complement of existing ASAMPSA2 guidance for shutdown states of reactors, spent fuel pool and recent R&D results* ([report access](#)).

Other reports (not submitted to the review)

- *Summary report on the impact and experience feedback of the previous ASAMPSA2 project*
- *Synthesis of the initial survey related to PSAs End-Users needs* ([report access](#))
- *Summary report of already published guidance on L2 PSA for external hazards, shutdown states, spent fuel storage* ([report access](#))
- *Bibliography - Existing Guidance for External Hazard Modelling* ([report access](#))
- *Summary report of already existing guidance on the implementation of External Hazards in extended Level 1 PSA* ([report access](#))
- *Bibliography on regulatory requirements on the implementation of defense in depth for nuclear power plants* ([report access](#))
- *External events with high amplitude that have concerned NPPs in operation (in Europe or other countries)*
- *ASAMPSA2 guidance* ([report 1](#), [report 2](#), [report 3](#))

MONDAY - 12 September - Day 1

SESSION 1 - INTRODUCTION

- 09h30-9h40 Welcome of participants by Vienna University
- 09h40 9h50 Objectives of the workshop and overview of the ASAMPSA_E guidance content - E. Raimond (IRSN)
- 09h50-10h00 Organization of the workshop - overview of the ASAMPSA_E questionnaire and responses Y.Guigueno (IRSN)
- 10h00-10h15 Information from EURATOM FP - R. Passalacqua (EC)

SESSION 2 - SELECTING HAZARDS FOR PSAs

- 10h15-10h45 List of external hazards to be considered in ASAMPSA_E ([report D21.2](#))
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')
- 10h45-11h00 Break
- 11h00-12h00 Methodology for Selecting Initiating Events and Hazards for Consideration in an Extended PSA ([report D30.3](#))
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')

12h00-14h00 Lunch

SESSION 3 - INTRODUCTION OF HAZARDS IN PSAs (1/2)

Earthquake

- 14h00-15h00 [Report 1](#) - seismic event modelling for PSA
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')
- 15h00-16h00 [Report 2](#) - implementation of seismic event impact in L1 PSA
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')
- 16h00-16h15 Break
- 16h15-17h15 Flooding [report](#)
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')

17h15 End of day 1

TUESDAY 13 September - Day 2

SESSION 3 - INTRODUCTION OF HAZARDS IN PSAs (2/2)

08h00- 9h00 Extreme weather [report](#)

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

9h00-10h00 Biological hazards [report](#)

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

10h00-10h15 Break

10h15-11h15 Lightning [report](#)

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

11h15-12h15 Man made hazards & aircraft crash [report](#)

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

12h15-13h30 Lunch

SESSION 4 - SPECIFIC ISSUES RELATED TO LEVEL 2 PSAs

13h30-14h30 External Events in L2 PSA ([D40.4 report](#))

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

14h30-15h30 Guidance on the verification and improvement of SAM strategies with L2 PSA ([D40.5](#))

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

15h30-15h45 Break

15h45-16h45 Complement of existing ASAMPSA2 guidance for shutdown states of reactors, Spent Fuel Pool and recent R&D results ([D40.6](#))

- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
- Discussion on the recommendations/conclusions of the report (20')
- Decision on how to achieve the report (15')
- Identification of follow-up activities (10')

SESSION 5 - GENERAL ISSUES FOR PSAs (1/2)

- 16h45-17h35 **Lessons of the Fukushima Dai-ichi accident for PSA ([D30.2](#))**
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
- 17h35 End of day 2

WEDNESDAY - 14 September - Day 3

SESSION 5 - GENERAL ISSUES FOR PSAs (2/2)

- 8h00-9h00 **Risk Metrics and Measures for an Extended PSA ([report D30.5](#))**
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
 - Identification of follow-up activities (10')
- 9h00-9h50 **The PSA and Defence in Depth concept ([report D30.4](#), [support report](#))**
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')
- 9h50-10h10 **Break**
- 10h10-11h00 **Risk informed decision making (RIDM) and extended PSA ([report D30.6](#))**
- Synthesis of the review (questionnaire answers, feedback from reviewers, proposals for the guidance report improvement) (15')
 - Discussion on the recommendations/conclusions of the report (20')
 - Decision on how to achieve the report (15')

SESSION 6 - FOLLOW-UP ACTIVITIES

- 11h00-12h00 **Follow-up activities**
- Synthesis of the answers to the questionnaire (on general evaluation and on follow-up activities) (15')
 - Synthesis of the discussions during the workshop on follow-up activities (15')
 - Discussion (30')

SESSION 7 - CONCLUSIONS OF THE WORKSHOP

- 12h00-12h15 **Conclusions of the workshop and acknowledgments (E. Raimond, IRSN)**
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WEDNESDAY - 14 September - Day 3 (additional post-workshop session)

ADDITIONAL POST-WORKSHOP SESSION*

- 14h00-16h00 **Optional discussions or presentations**
- Additional presentations
 - Discussions on follow-up activities, new projects, ...

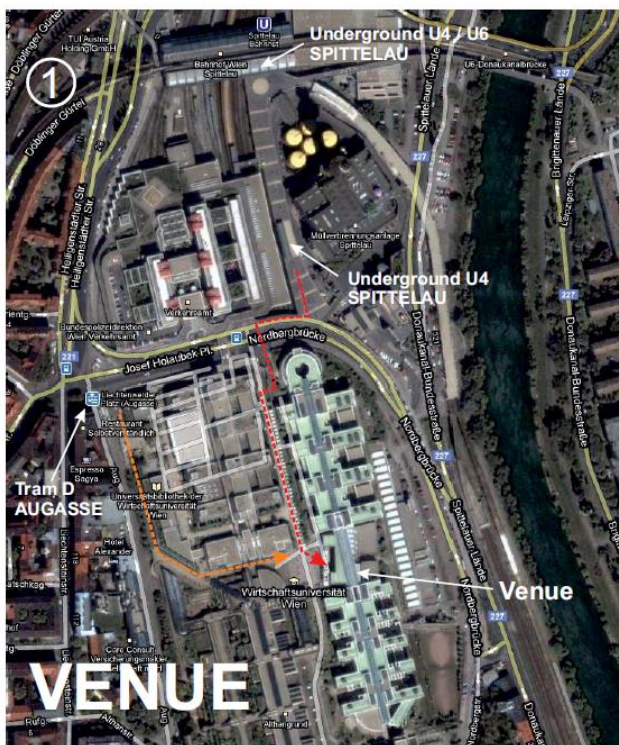
*Interest and topics of this "post workshop session" will be defined later. Proposals are welcome.

- 16h00 End of day 3

VENUE

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University of Vienna, Geozentrum
Althanstraße 14, A-1090 Vienna, Austria

Geozentrum, Auditorium (Hörsaal) 6
Splinter Meetings in Room No. 2B204
(Eberhard Clar-Saal)



VENUE

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