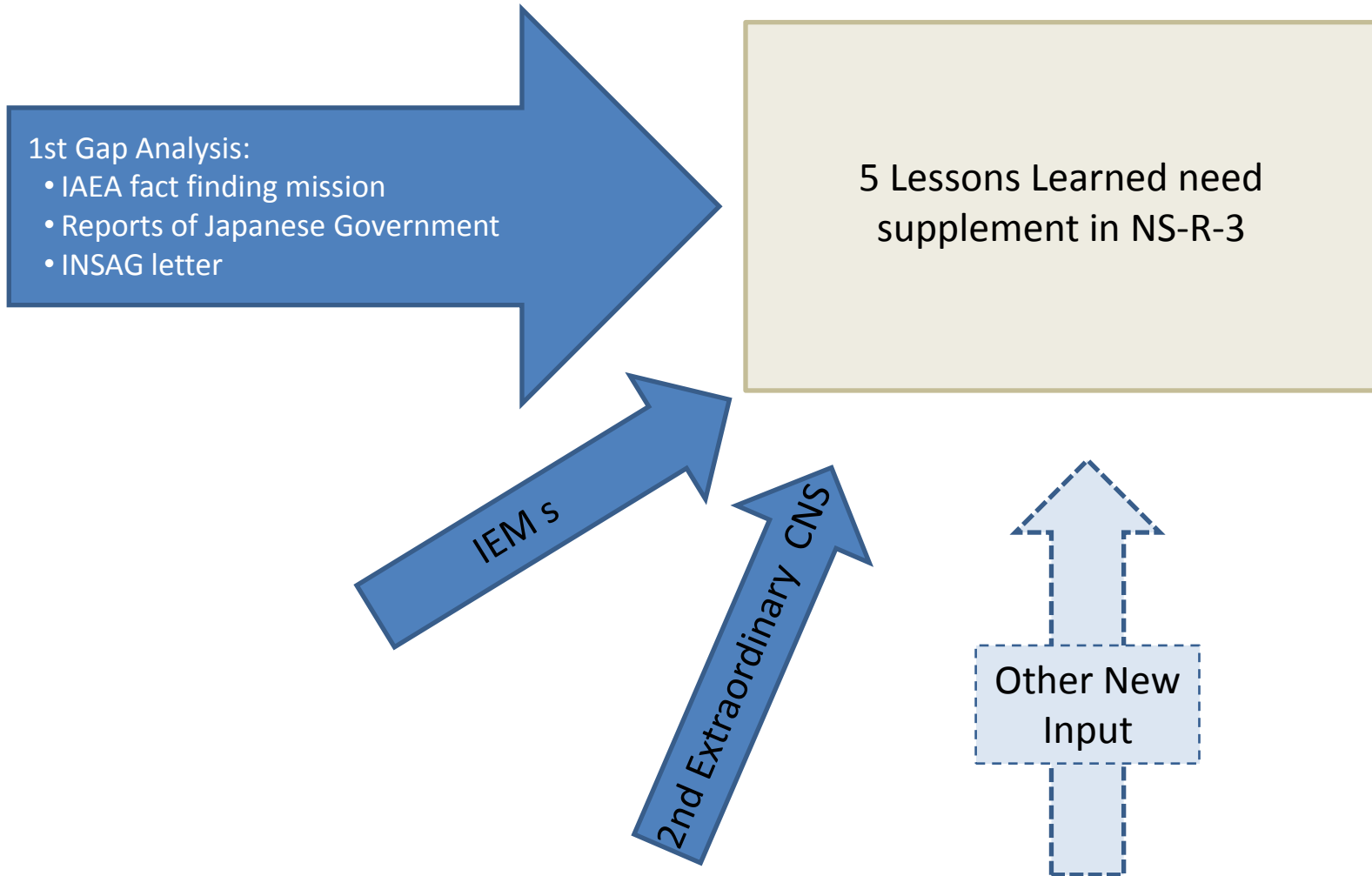


Result of Gap Analysis for NS-R-3



Received Comments for NS-R-3

- France 5 comments
- Japan 5 comments + 4 clarifications
- USA 4 comments
- Finland 3 comments + 1 proposal of new requirement
- Canada 6 comments
- ENISS 7 comments
- ENSI 1 comment
- Germany 6 comments + general notes

Gap Analysis for NS-R-3

- No gaps have been identified in relation to Fukushima Lessons Learned
- The proposed changes are aimed to :
 - Reinforce the need to periodically assess the external hazards and adequacy of design basis against these hazards
 - Reinforce site suitability conditions observed during site selection
 - Reinforce requirements for external hazards definition that facilitate derivation of adequate design basis and beyond design basis
 - Reinforce the need of independent review of the site evaluation
 - Reinforce the need to consideration of the impact of multiple units
 - Reinforce the need for proper consideration of the site features that provide defense in depth against flooding including tsunamis given the uncertainties associated with this hazard.

DS462 – Proposal for LL 8.1

Lesson learned	Current text	Conclusion of NUSSC WG
8.1	3.55. If the hazards for the nuclear installation are unacceptable and no practicable solution is available, the site shall be deemed unsuitable	New Paragraph after Para 2.5: x.xx Site characteristics shall be periodically evaluated* based on the updated information, knowledge and methodologies and safety implications shall be assessed. Modify paragraph 3.55: If the hazards for the nuclear installation are unacceptable or no practicable solution is available for protection of the nuclear installation with sufficient safety margins, the site shall be deemed unsuitable or no longer suitable. *ref. to GSR Part 4, 5.10

DS462 – Proposal for LL 9.1

Lesson learned	Current text	Conclusion of NUSSC WG
9.1		New Paragraph after para 2.8: 2.xx Independent review shall be carried out for the site evaluation report and all hazards analyses that provide input to design and to safety evaluation for the nuclear installations. Already covered by 6.7 of NS-R-3

DS462 – Proposal for LL 10.1

Lesson learned	Current text	Conclusion of NUSSC WG
10.1		New para after para 2.13 x.xx. For assessing the feasibility of the implementation of the emergency plans, <u>all nuclear installations</u> to be installed on the site shall be considered.

DS462 – Proposal for LL 10.1

Lesson learned	Current text	Conclusion of NUSSC WG
10.1	3.51. The region shall be investigated for installations (including installations within the site boundary) in which flammable, explosive, asphyxiant, toxic, corrosive or radioactive materials are stored, processed, transported and otherwise dealt with that, if released under normal or accident conditions, could jeopardize the safety of the installation. This investigation shall	Modify existing para 3.51 3.51. The region shall be investigated for installations (including installations within the site boundary <u>such as colocated NPP units</u>) in which flammable, explosive, asphyxiant, toxic, corrosive or radioactive materials are stored, processed, transported and otherwise dealt with that, if released under normal or accident conditions, could jeopardize the safety of the installation. This investigation shall also include installations that may give rise to missiles of any type that could affect the safety of the nuclear installation. The potential effects of electromagnetic interference, eddy currents in the ground and the clogging of air or water inlets by debris shall also be evaluated. If the effects of such phenomena and occurrences would produce an unacceptable hazard and if no practicable solution is available, the site shall be deemed unsuitable.

DS462 – Proposal for LL 10.1 & 11.1

Lesson learned	Current text	Conclusion of NUSSC WG
10.1 & 11.1	3.21. The hazards for the site due to flooding shall be derived from the model.	Modify existing para 3.21: 3.21. The hazards for the site due to flooding shall be derived based on suitable models. To move to 2.7: 2.7. The hazards associated with external events that are to be considered in the design of the nuclear installation and for its safety assessment shall be determined. For an external event (or a combination of events) the parameters and the values of those parameters that are used to characterize the hazards should be chosen so that they can be used easily in the design of the installation and for its safety assessment.

DS462 – Proposal for LL 12.1

Lesson learned	Current text	Conclusion of NUSSC WG
12.1		2.xx Characterization of the frequency and severity of the external hazards shall be used to: - derive the design basis hazard level for the nuclear installation; - <u>Evaluate uncertainties in relation to the design basis hazard level; and</u> - <u>Provide input for assessment of the safety margins in the design and operation.</u>