**IAEA NES on Fission-Fusion Synergies**

**3.11.3 design safety and safety analysis**

This subsection will provide a high-level overview of key safety approaches for the design and safety analysis of fission facilities based on the safety standards. These may include a review of aspects such as safety functions, DiD, general design requirements, probabilistic and deterministic safety analysis.

It will then explore at the high-level key safety aspects of fusion power plants. For example, fusion devices characteristics that contribute to safety as well as conditions that could lead to radioactive release as well as the radioactive inventory and source term.

Main commonalities and differences between fission and fusion will be identified at a very high level as well as the implications on safety approaches that are traditionally used for fission.