

Risk-Informed Decision Making and Stakeholders

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Nuclear Safety Improvement and Risk-Informed Framework



Traditional "Deterministic" Approach

- Design-basis accidents
- Defense in depth

Risk- Informed Approach

- Combination of traditional and risk-based approaches through a deliberative process

Risk-Based Approach

- Thousands of accident sequences
- Realistic

The Deliberation (NUREG-2150)

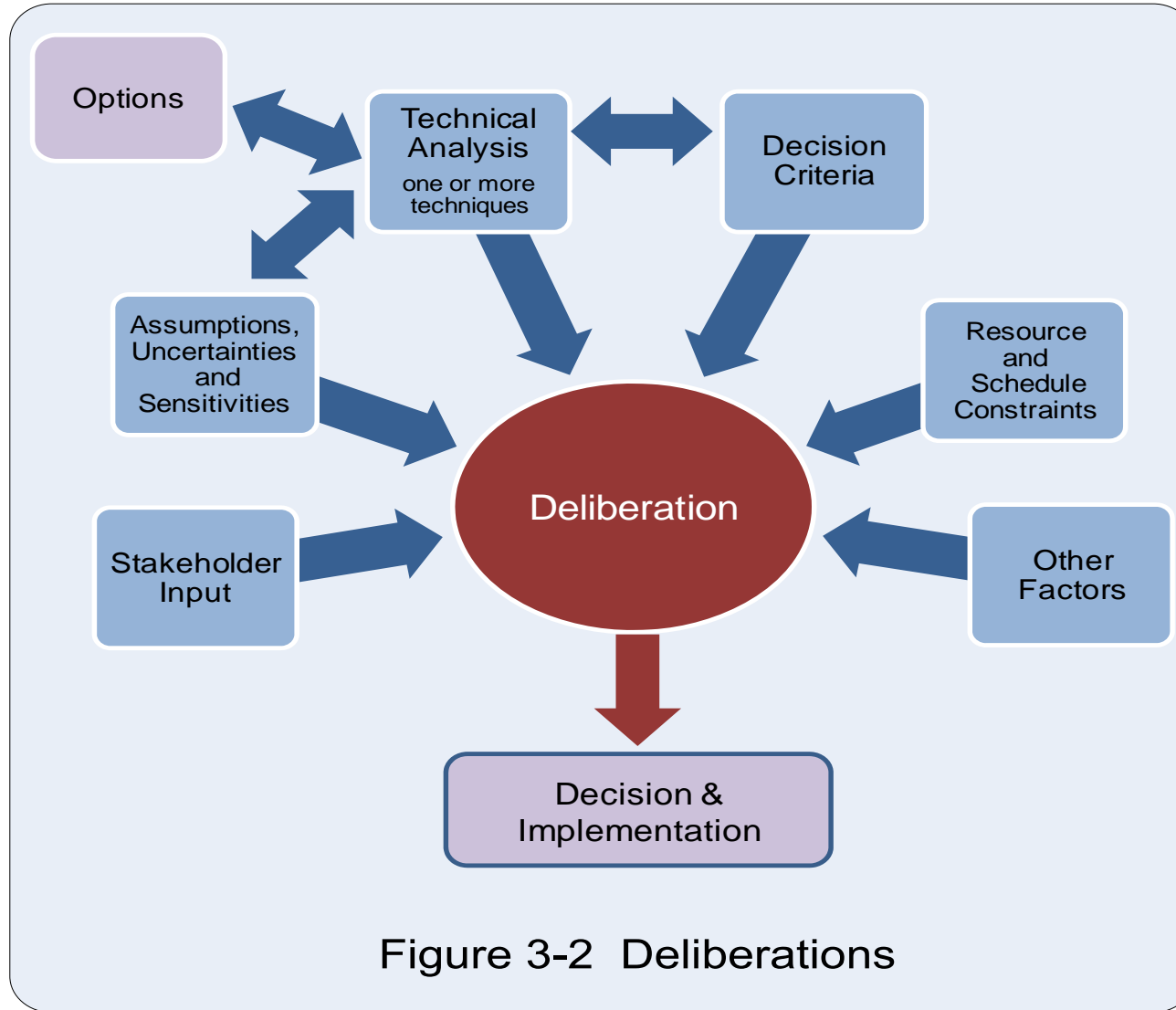


Figure 3-2 Deliberations

A Detailed Picture (INSAG 25)

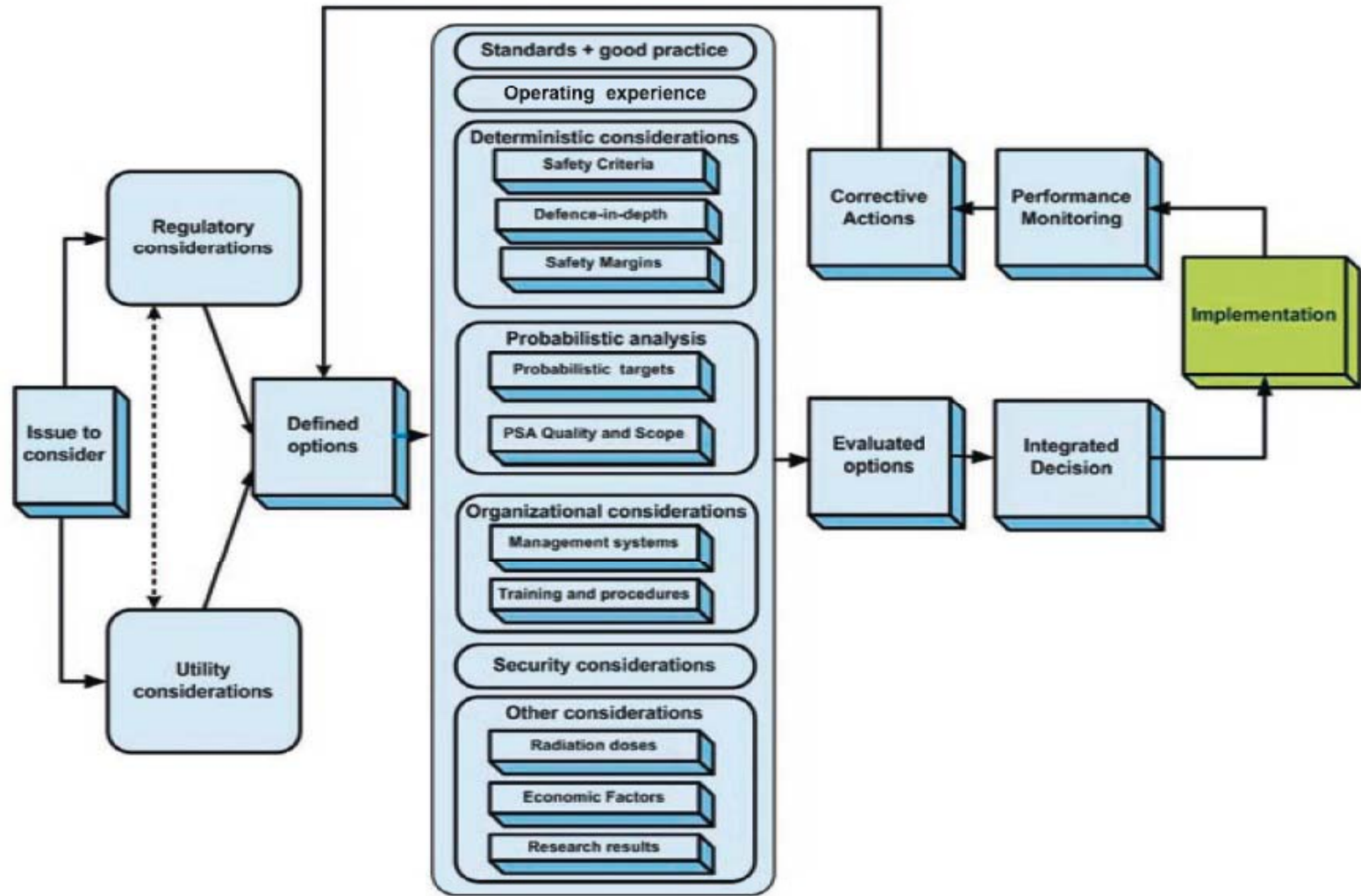


FIG. 1. Key elements of the integrated risk informed decision making process.

Administrative Procedure Act

- **This Act is the fundamental law governing the processes of Federal administrative agencies.**
- **It requires that affected persons be given adequate notice of proposed rules and an opportunity to comment on the proposed rules.**
- **The Act gives interested persons the right to petition an agency for the issuance, amendment, or repeal of a rule. It also provides standards for judicial review of agency actions.**

NRC Values: Openness

- **The NRC views nuclear regulation as the public's business and, as such, believes it should be transacted as openly and candidly as possible to maintain and enhance the public's confidence.**
- **Ensuring appropriate openness explicitly recognizes that the public must be informed about, and have a reasonable opportunity to participate meaningfully in, the NRC's regulatory processes.**
- **Stakeholders will have many opportunities to participate in the regulatory process before issuance of a license, construction permit, early site permit, design certification, or combined license.**

NRC Values: Effectiveness

- **Use state-of-the-art technologies and risk insights to improve the effectiveness and realism of NRC actions, with a goal of continuous improvement.**
- **Cooperate with Federal agencies, States, and Tribal authorities and international counterparts to gain insights and effectively resolve issues to enable the safe and beneficial use of radioactive materials.**
- **Work with stakeholders to minimize regulatory or jurisdictional overlap.**

Moving Forward

- **Establishing RIDM requires cooperation among affected stakeholders.**
- **Guidance regarding the subjective combination of risk insights and defense-in-depth considerations is needed.**
- **The establishment of probabilistic safety goals is an essential first step, as they answer the question “how safe is safe enough.”**
- **PRA results used in RIDM must always be consistent with the probabilistic safety goals.**