Political support;  
Public acceptance;  
Human resource availability;  
Environmental impact;  
Regional and international partnerships.

BRIDE is a multi-attribute utility methodology and can be used by a member state to compare options for RRSNF management, combining the noneconomic factors with a comparative cost estimate to determine the optimum strategy. BRIDE is structured such that the strengths and potential weaknesses of each scenario, along with measures that can remediate weaknesses, are identified during the evaluation.

Once a preferred option is identified by using BRIDE, FERREX is used to develop a detailed cost estimate of the preferred strategy. These tools are expected to be used by decision-makers within the research reactor organization, funding organizations, or in the government organizations responsible for the RRSNF management.

Both FERREX and BRIDE were tested and simulated by the project participants, and adjustments were made as needed. Fig. 2 shows a simplified flowchart of the relationship between BRIDE and FERREX.

The key to obtaining a useful output from the BRIDE/BAS-CET tools is the use of several experts from multiple organizations outside the immediate research reactor facility and a facilitator to ensure that the rationale behind the scoring of the scenarios is discussed among the decision-makers and recorded in the BRIDE report. Fig. 3 shows an example of the BRIDE scoring summary output.

**Conclusion**

In response to a lack of understanding of the available RRSNF management options, IAEA completed a project to help identify the available RRSNF management options and created a set of decision-support tools to assist member states in deciding among several options. The emphasis is on ensuring that member states understand their RRSNF management responsibilities, and for the information generated by the project to enable the member states to more effectively determine the appropriate RRSNF management option for their unique situation.

A publication summarizing the results of the project is expected to be published in 2020, and the decision-support tools will be available online when the publication is released. Future work will include facilitation of BRIDE and FERREX workshops in member states with their evaluation and decision teams.

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**References**


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