

IAEA's EMRAS* I-131 Working Group

Generic Final Report Layout

1. Background and Objectives

- brief discussion of previous work in the area
- need for the present study
- specific objectives

2. Scenario Description

- summary of scenario description, providing the key information needed to understand what follows
- input data used to drive the models
- endpoints of the calculations
- full scenario description in Appendix A

3. Observations (for scenarios based on experimental data)

- experimental procedures
- experimental data corresponding to the calculational endpoints
- uncertainties in the observations

4. Model Descriptions

- participants and affiliations
- brief discussion of relevant pathways and processes
- modelling approaches taken by the participants (enough detail to understand the results)
- methods of uncertainty analysis
- full model descriptions in Appendix B

5. Results and Discussion

- presentation of predictions and their associated uncertainties
- comparison of predictions with observations, taking uncertainties into account (for scenarios based on experimental data)
- comparison of predictions of different models (for hypothetical scenarios)
- reasons for mispredictions, and for differences between the predictions of different models
- which models perform best and why
- performance of simple versus complex models (if relevant)
- which modelling approaches show the most promise

6. Summary and Conclusions

- brief summary of the report and the main conclusions

Appendix A – Scenario Description

Appendix B – Model Descriptions

Generic Model Descriptions

1. Introduction

- model name
- purpose of the model (research, assessment or scoping; conservative or realistic)
- type of model (steady-state or dynamic; analytical or numerical; compartment or process-oriented)
- biological/environmental compartments considered
- transport processes considered
- endpoints
- references

2. Key Assumptions

3. Modeling Approaches (conceptual and mathematical)

- how transfers between compartments are modelled
- how concentrations in compartments are calculated
- temporal and spatial discretization of the model
- input data required

4. Parameter Values

- values of the parameters used in the model
- spatial and temporal averaging

5. Uncertainties

- approach to estimating uncertainties in the model predictions

6. Application of the model to the scenario

- how the data given in the scenario description was used to drive the model
- what assumptions were made to match the model to the conditions of the scenario