

**The IAEA's Programme on
Environmental Modelling for Radiation Safety
(EMRAS II)**

**EMRAS II
Approaches for Assessing Emergency Situations
Working Group 8
Environmental Sensitivity**

MINUTES

**of the First Meeting held at IAEA Headquarters, Vienna
19–23 January 2009**

IAEA Scientific Secretary	Working Group Leader
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Working Group Attendance

During the First Technical Meeting (TM) on Environmental Modelling for Radiation Safety (EMRAS II), 10 participants joined the meetings and discussions of Working Group 8 (WG 8) "Environmental Sensitivity". During the meeting Mr J. Brittain (Norway) acted as interim WG Leader and Mr V. Berkovskyy as the IAEA scientific secretary. Mr B. Tracy (Canada) agreed to act as future WG Leader for at least the first year of the project.

Among the participants a core group from Austria, Belgium, Canada, Finland, France, Germany and Norway participated in drawing up objectives, tasks and a timetable for the activities of WG 8. Colleagues at other institutes and in other countries will be contacted with regard to possible participation.

Objectives and Tasks

The objective of WG 8 is to explore the concept of environmental sensitivity in rural and semi-natural environments within the framework of assessments after an emergency situation.

The main tasks of WG 8 are:

- formulate the concept of environmental sensitivity;
- compile a list of sensitivity factors;
- design scenarios; and
- carry out modelling exercises.

Formulation of the concept of environmental sensitivity

This will entail a search in the literature as well as contacting scientists involved in earlier projects that have addressed the question of environmental sensitivity. This task will result in a short report.

Listing of sensitivity factors

This will involve a literature review, including sourcing TRS-364 as well as published data. The sensitivity factors will be subsequently grouped and linked to the focus environments (agricultural, alpine and Arctic).

Scenario design and model exercises

The exercises will involve constructing two types of scenarios, artificial (e.g. PWR, input from EMRAS II WG 9 “Urban Areas”) scenarios and Chernobyl scenarios. We envisage the following end-points for four types of environments:

- milk (alpine);
- mushrooms, fish reindeer/caribou (arctic);
- plant and animal products (agricultural); and
- mushrooms, berries (temperate forest).

Among the potential models are: RODOS-FDMT or SCK model, ASTRAL, STRATEGY, CHERPAC for the agricultural environment; ECOSYS or RODOS-FDMT and STRATEGY for alpine environments and STRATEGY, MOIRA, and models from Finland, Sweden and Canada for arctic environments.

Timetable	
Task	Deadline
Review of the concept of environmental sensitivity	
Literature review	June 2009
Draft concept document	September 2009
List of environmental sensitivity factors	
Initial list	June 2009
Final list	2011
Scenarios	
Design	End 2009
Modelling exercises	
Model results completion	End 2010
Analysis of model results	June 2011
Final report	
Preparation of final report	End 2011

Next meeting

No final decision was made regarding the next meeting. It is possible that most tasks can be undertaken without the necessity of a meeting before the next plenary meeting of EMRAS II in January 2010.

List of Participants	
Name / Email	Organization / Country
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