

OBJECTIVES

Revise the IAEA Technical Reports Series No. 364, "Handbook of parameter values for the prediction of radionuclide transfer in temperate environments", published in collaboration with the IUR in 1994

The aims of the programme which needs to be addressed include :

- to critically review data quality and analysis
- to provide critical missing data and inform about key processes
- to extend information to other processes and climatic zones
- to consider dynamic modelling approaches

Chairperson : Pascal Santucci, Institute of Radiological Protection and Nuclear Safety (IRSN, France), head of the Laboratory of environmental modelling

IAEA scientific secretary : Gabriele Voigt, director of the Agency's Laboratories Seibersdorf (IAEA/NAAL)

PARTICIPANTS

The participants critically depend on what level of support they have from their organisations (regarding both travel and labor resources)

The types of radioecological expertise which is needed include : agricultural (atmosphere to plants, soil to plant, plant to animal) under various climate conditions (e.g. temperate, Mediterranean, tropical) ; semi-natural (atmosphere to plants, soil to fungi, plants and animals) under various climate conditions (e.g. temperate, arctic, boreal) ; aquatic freshwater only

According to initial replies and registrations, several tens of people were interested in participating. Active participation at the first IAEA/EMRAS plenary was around 20 people, 15 at the interim Spring meeting

WORK PLAN

September 2003, EMRAS plenary : identification of key participants, volunteers by domain for centralising efforts, and key data owners ; agreement on work and milestones ; start critical analysis of TRS 364

June 2004, WG meeting, Aix-en-Provence : continuation of critical analysis ; revision of volunteering

November 2004, EMRAS plenary : first draft on the critical analysis of TRS 364, synthesis on new available data, draft of computerised database, finalise identification of responsible experts

April/May 2005, WG meeting, Cadarache, with all interested participants

End 2005, EMRAS plenary : final documents on the TRS critical analysis and on data availability, draft of TRS concerning already included parameters, draft on new parameters/ processes to be included, draft CD-rom with new data

April/May 2006, WG meeting, Cadarache, with all interested participants

End 2006, EMRAS plenary : draft of overall new TRS, draft 2 of CD-rom with source data

2007 : finalisation and edition

Revision of TRS 364 in practice

Material :

- almost 90% of the TRS 364 references have been recovered (about 200)
- about 400 new references of interest have been found (later than 1992), including reviews and syntheses ; the grey literature should not be discarded (institutional reports) if valuable
- some databases : IUR on soil-to-plant transfers, IAEA CRP on tropical systems, EU RadFlux (multi-compartments), national databases (NRPB, IRSN) on Kds, soil-to-plant TFs, animals and food processing

Revision of TRS 364 in practice (cont.)

Expected responsibilities (currently) :

- Elisabeth Leclerc-Cessac, ANDRA, with Ian Barraclough (Enviros) on the use of chemical analogues
- Gerhard Pröhl, GSF, on plant interception
- Elisabeth Leclerc-Cessac, ANDRA, on plant translocation
- Miquel Vidal, Univ. Barcelona, on soil Kds
- François Van Dorpe and Franck Jourdain, CEA, on soil resuspension (2005)
- Laurent Garcia-Sanchez, IRSN, on wash-off
- Philippe Calmon, IRSN, on forests
- Philippe Ciffroy, EdF, on river systems (interacting with the Watershed WG)
- Yong-Ho Choi, KAERI, and Shigeo Uchida, NIRS, on Asian food chains (interaction with IAEA CRP on tropical systems?)
- there are still missing fields: soil/plant TF, animal TF,...

Collaboration with IUR : The revision is now a joint action IAEA/IUR

- TRS 364 was issued in collaboration with IUR
- most of the involved participants belong to IUR
- some source data managed and compiled through IUR (databases)
- there are IUR working groups of interest for the revision (radioecology of rice, radioecology and waste (special radionuclides),...)
- an agreement between IAEA and IUR is under way
- this WG is therefore also an IUR active task group

Week agenda

- finalise the TRS critical analysis
- discuss contributions so that to start the new version and be clear about the overall organisation