# Status of the work November 2006

## Theme 1 - Radioactive Release Assessment

Working Group 4 - Model validation for radionuclide transport in the aquatic system "Watershed-River" and in estuaries

# Completed exercises

- $^3H$ in Loire River

- $^{90}Sr$ and $^{137}Cs$ in Dnieper-Bug estuary

- $^{90}Sr$ and $^{137}Cs$ remobilisation in the Prypiat floodplain

- $^{90}Sr$, $^{137}Cs$ and $^{239,240}Pu$ in Techa River

- Self-cleaning capacity of Huelva Estuary ($^{226}Ra$ contamination)

# Work performed this week

★ Presentation and discussion of the results of the
  - Huelva scenario
  - Techa river

★ Improvement of TRS chapter

★ Planning duties for:
  - Final report preparation (final draft ready in Spring 2007)
  - Strategies for dissemination of results (including participation to IAEA conference)

# Main activities performed during the project

- ❖ Assessment of predictive models for the behaviour of radionuclides in the fresh water environment through
  - validation
  - blind tests
  - model intercomparison
- ❖ according to the priorities:
  - extreme events
  - important radionuclides other than Cs and Sr
  - radionuclide remobilisation
  - radionuclides in coastal areas

# Lesson learnt

Appropriate use of models
accounting for

model uncertainty

value of multi-model approach

data and information availability

# Non addressed issues

- Modelling radionuclide migration to biota
- Application of entire Decision Support Systems to complex scenario (e.g., evaluation of countermeasure effectiveness-including dose evaluations)

# Preliminary ideas

- CDSS intercomparison
- Biota in Techa River
- Biota in Dniper-Bug estuary
- Radionuclides in Loire River (Co Ag)