Application of the ICRP RAP approach

Responsibilities of the ICRP Committees

Main Commission

- Committee 1: Radiation effects
- Committee 2: Doses from radiation exposure
- Committee 3: Protection in medicine
- Committee 4: Application of Commissions Recommendations
- Committee 5: Protection of Environment

The role of C4 in the issue of Protection of the Environment

- Committee 4 is concerned with providing advice on the application of the recommended system of protection
- The draft RAP report is at present in web consultation
 - C4 believes that work is needed in parallel to understand and articulate how RAP tool can be integrated into the practical application of the Commission's recommendations
 - Therefore a C4 Working Party on Releases to the Environment (including one Member from C5) was created at the ICRP meeting in October 2007

Common approach for protection of human and biota

Planned situations, emergency situations and existing exposure Environmental radionuclide concentration(s) Reference Man Reference Animals and **Plants Derived Consideration** Dose limits, constraints Levels Decision-making regarding public health and environment for the same environmental situation

Terms of Reference of the WP

Inter alia to:

Investigate the tools developed by Committee 5 for protection of environment in the context of the ICRP system of protection for man by looking at exposure scenarios where man is protected, and seeing what the predicted impact is on flora and fauna, and then comparing to the bands of protection suggested by Committee 5.

To facilitate the work the IAEA promised to support the Working Party

The WP is to report to C4 in September 2008

Potential scenarios

The ICRP 103 recognises three exposure situations:

- Planned exposure situations
- Existing exposure situations
- Emergency exposure situations

Planned exposure situation

- Everyday situations involving the planned operation of sources including
 - decommissioning
 - disposal of radioactive waste
 - rehabilitation of the previously occupied land
- Practices in operation are planned exposure situations

Existing exposure situation

- A situation that already exists when a decision on control has to be taken including
 - natural background radiation
 - residues from past practices that were operated outside the Commission's recommendations
 - long term contamination resulting from an accident

Emergency exposure situation

- An unexpected situation that occurs
 - during the operation of a practice
 - from a malicious act

requiring urgent action

- Emergency exposure situations include consideration of
 - emergency preparedness
 - emergency response

Discussions with EMRAS

- At the EMRAS Biota WG meeting in November 2007 it was decided to propose co-operation PROTECT/IAEA EMRAS/ICRP
 - To start with the "easy" exposure situation, planned exposure
 - "Hypothetical new build scenario" was referred to

