

Chair: Mike Thorne (MCT)

Minutes: Paul Kennedy (PK)

Present:

Mike Gaunt – Rolls-Royce (MG)

David Webbe-Wood – Food Standards Agency (DWW)

Rachel Smith – HPA (RS)

Fiona Clyne – CEFAS (FC)

Ian Robertson – SEPA (IR)

John Titley – EA (JGT)

A – Introductions and Actions from Last Meeting

- **DWW to take the problem of NGO Member to the Steering Group**
This was taken to NDAWG Steering Group by PK
- **MCT to contact Peter Roche to ask him if he would be happy to remain a member of this group, even if as corresponding member only**
Pete Roche suggested passing paper and documents to Ian Fairlie for peer review.
Action 2008/01 MCT to pass on documents to Ian Fairlie for review after meeting.
(Note: Subsequent to the meeting Ian Fairlie agreed to review the paper.)
- **All to have drafts of their sections of the paper ready by end January/beginning February 2008.**
All submitted their relevant sections to Chair and Secretary prior to the meeting. The only sections lacking from this draft were the critical review of processes (to be discussed at the meeting) and the recommendations (again to be discussed at the meeting).
- **JGT to liaise with SEPA with regard to relevant information about the use of Habits Data**
This was completed through the inclusion of IR in the Habits Subgroup.
- **PK to trawl for suitable date in March 2008 for next meeting**
Completed

B – Progress with Habits Paper to Date and Comments on drafts of sections

All Sections were drafted in advance of the meeting and compiled with additional material by MCT. It was proposed that the index and format remain the same up until Section 4, where it was proposed that a new section be drafted on the uses of habits data. Section 4 in the original draft of the paper distributed for the meeting will become Section 5; existing Section 5 material will be distributed to new Section 5 and Section 6; Section 6 and Section 7 will not be altered in numbering.

The new section 4 will deal with how the data is used by the various parties, including the "top two" method, where it is assumed that the two most radiologically significant pathways are assumed to apply at high consumption rates, whereas all others considered are taken to apply at median rates.

Action 2008/02 – MCT to Draft New Section 4 on Uses of the Habits Data and restructure the overall report.

Action 2008/03 – All Section Authors are responsible for further drafting of their sections of the paper by Easter Weekend 2008.

MCT announced that the project which would mean his standing down chair of the Subgroup, has been delayed. This should mean that he can continue with this task until the final paper is completed. MCT's feelings about the completion is that the work ought to be finished by the Autumn NDAWG Meeting.

Action 2008/04 – MCT to produce written report back to NDAWG meeting of 02/04/2008

One thing to note is that there were gaps in many of the sections with regard to the use of the data in Scotland.

Action 2008/05 – IR to provide information in practice in Scotland where gaps still exist.

- [1] Introduction (MCT)

This was agreed by all with minor formatting changes and a more positive statement of scope suggested for Section 1.3.

- [2.1] International Guidance (RS)

It was felt that there might be reference to IAEA Document in the section. It was suggested that High Level Principles be included in this section and to note that the time span for review of Habits Data is not tied to five years, as the Sellafield reviews are undertaken annually for inter-tidal occupancy and seafood consumption pathways and this rule evokes the time when EA reviewed site permits every five years – this is not the case today.

- [2.2 – 2.5] UK Legislation and Regulations, Purpose of Prospective Assessment, Organisations Involved in Preparing and Reviewing Prospective Assessments, Reporting of Prospective Assessments and Habits Data (JGT)

2.4 paragraph 1 – As well as NRPB Report W-63, there is also "Initial Assessment Methodology" developed by Thorne et al. This is a very conservative method. Although not officially sanctioned by EA as yet, the group is aware of Non-Licensed operators and SEPA using this method.

2.4 2nd paragraph in the section: the reference to the way in which FSA uses the data will require editing.

Action 2008/06 – DWW to edit this paragraph.

- [3] Types of Habits Data (DWW/RS)

3.2.4 With regard to Occupancy at sewage treatment works. For the Nuclear Licensed Sector, there is data for Harwell, Cardiff and Amersham, which are the main sites that discharge liquid waste via a sewage works. This paragraph was not completed.

Action 2008/07 – JGT to complete section on Sewers.

3.2.5 This is the first report, which recognises "exploratory mounding" of soil for consideration in its conclusions.

- [4.1-4.2] Current UK Agencies' Approach to Dose Assessment: Overall Approach and Assessments Where Integrated Site Habits Data are Available (JGT)

- [4.3] Current UK Agencies' Approach to Dose Assessment (DWW/RS)

It was felt that that there were gaps in information on habits relating to direct radiation or shine. MG commented that although it is HSE who will commission work

in this area, it is usually up to the operator to submit the assessment to HSE on this area.

Action 2008/08 - on MG and Patrick Stephen to draft a few sentences on data relating to this pathway.

- [5] Other Approaches (MCT/DWW/AII)

It was noted that the assessment for Article 37 (of Euratom) ought to be applicable Europe-wide. JGT noted that the National Guidance for this in Germany, according to his recollection, differs quite significantly from that used in UK. MCT noted that in many parts of the world, such as USA, the statute usually defines what is required and this can be prescriptive. There were questions raised as to the added value of this part. MCT and DWW suggested that there may be other approaches used outside UK, from which best practice could be learned.

Action 2008/09 – MCT, FC, JGT to obtain information on other countries' methods; FC to approach John Hunt, formerly of CEFAS to obtain clarification, based upon his experience.

With regard to approaches used by industry, JGT is aware of Dose per Unit Release Factors used in generic assessments.

Action 2008/10 – Action JCT to obtain further information on industry uses of habits data.

MCT Proposed that the new section for this will probably comprise two very short paragraphs 6.1 and 6.2.

- [6] Critical Review of Approaches (MCT)

The Approaches were split into five types: Screening + Generic; Screening + Profile; Screening + Adjusted Profile; Individual; Individual +.

Theses were scored against the following criteria – Transparency; Homogeneity (as it applies in ICRP recommendations); Realism; Robustness; Sustainability; Presentation and Defensibility; Future proofing.

This was rated 1-5, where 5= best and 1=worst. The categories were ranked according to perceived priorities and the ratings were repeated with weightings against each of the criteria. Please see Table 1 Below.

Table 1: Scores Obtained Based Upon Options and Criteria

	Generic top2	Profile	Adjusted Profile	Individual	Individual Plus	Weighting	original
Transparency	5	5	3	1.5	1	0.1	0.1
Homogeneity	1	5	5	2	2	0.05	0.05
Realism	1.5	4	3	5	3	0.2	0.25
Robustness	3	5	5	5	4	0.1	0.1
Sustainability	5	3	3	3	4	0.1	0.1
Defensibility	3	4	3	5	3	0.15	0.15
Future	5	2	4	2	4	0.3	0.25
Transparency	0.5	0.5	0.3	0.15	0.1		
Homogeneity	0.05	0.25	0.25	0.1	0.1		
Realism	0.3	0.8	0.6	1	0.6		
Robustness	0.3	0.5	0.5	0.5	0.4		
Sustainability	0.5	0.3	0.3	0.3	0.4		
Defensibility	0.45	0.6	0.45	0.75	0.45		
Future	1.5	0.6	1.2	0.6	1.2		
	3.6	3.55	3.6	3.4	3.25		

When the weighted scores were added up, it was agreed that for optimisation purposes, Screening + Profile was the preferred option, but in terms of future proofing, it maybe more useful to adjust the straight profile to take into account pathways, which may not be captured by the profile method, with particular emphasis on pathways which may not be immediately relevant, but could become important in the future.

It was suggested by RS and JGT that guidelines are drawn up in the paper for when and how adjustments can be made.

Action 2008/11 – All to produce guidance on adjustments to the profile method.

- [7] Recommended Approaches and Implementation (MCT)
The highest scores in the evaluation were for the “screening + profile”. It was recommended that as part of the report, guidance be produced on adjustments to the profile method.

C – Summary of Actions Arising from this Meeting

Action 2008/01 MCT to pass on documents to Ian Fairlie for review after meeting. Completed after the meeting

Action 2008/02 – MCT to Draft New Section 4 on Uses of the Habits Data.

Action 2008/03 – All Section Authors are responsible for further drafting of their sections of the paper by Easter 2008.

Action 2008/04 – MCT to produce written report back to NDAWG meeting of 02/04/2008

Action 2008/05 – IR to provide information in practice in Scotland where gaps still exist.

Action 2008/06 – DWW to edit 2nd paragraph Section 4.2.

Action 2008/07 – JGT to complete section on Sewers.

Action 2008/08 – MG and Patrick Stephen to draft a few sentences on data relating to this pathway.

Action 2008/09 – MCT, FC, JGT to obtain information on other countries' methods; FC to approach John Hunt, formerly of CEFAS to obtain information, based upon his experience.

Action 2008/10 – JCT to obtain further information on industry uses of habits data.

Action 2008/11 – All to produce guidance on adjustments to the profile method.

D – AoB & Date and Time of Next Meeting

There was no AoB raised at the meeting.

The next meeting will be planned between NDAWG 13 in April 2008 and NDAWG 14 in November 2008.