

**ENVIRONMENT DIRECTORATE
JOINT MEETING OF THE CHEMICALS COMMITTEE AND THE WORKING PARTY ON
CHEMICALS, PESTICIDES AND BIOTECHNOLOGY**

Cancels & replaces the same document of 18 May 2010

Task Force on Hazard Assessment

SUMMARY RECORD

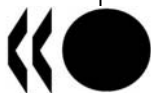
Third Meeting of the (Q)SAR Application Toolbox Management Group

**20-21 April 2010, OECD Conference Centre
2 rue André Pascal, 75016 Paris**

**Mr. Terry Schultz
Tel: +33 (0)1 45 24 14 81; Fax: + 33 (0)1 44 30 61 80; E-mail: Terry.Schultz@oecd.org**

JT03285504

**Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format**



**DRAFT SUMMARY RECORD: THE THIRD MEETING
OF THE (Q)SAR APPLICATION TOOLBOX MANAGEMENT GROUP**

1. The (Q)SAR Application Toolbox Management Group met at OECD Headquarters in Paris on 20 and 21 April 2010. The agenda of the meeting is outlined in Annex 1 and the list of participants is in Annex 2. Due to the closure of the European airspace, a number of delegates participated by telephone. The meeting was chaired by the OECD Secretariat.

2. The draft agenda was adopted with amendments: two topics were added under agenda item 12: report on the project to brand the Toolbox and setting up a public discussion forum for users of the Toolbox.

Year 2 Work in Phase 2 of the Toolbox

3. The Management Group took note of the progress reports by the Secretariat and Contractors on their work in year 2 of Phase 2 development of the OECD (Q)SAR Application Toolbox. The Management Group welcomed the work done by the Secretariat and Contractors.

Developmental toxicity workshop

4. The Management Group endorsed the proposed plans by Lhasa Limited for the scientific workshop on developmental toxicity. It was noted that the goal of the workshop was to identify ways of forming categories for developmental toxicity where effects are life stage dependent. The Netherlands informed the meeting that they are currently gathering a database with experimental test results on developmental toxicity. Germany indicated its interest in participating in this workshop. Denmark recommended consulting the meeting schedule for the development of the extended 1-generation reproductive toxicity guideline to avoid meeting conflicts.

Revision of the protein-binding profiler

5. The Management Group endorsed the progress, further plans for the revision of the protein-binding profiler, and the expert consultation on this effect scheduled for October 2010 as presented by Liverpool John Moores University. It was noted that the concept of incorporating protein-binding potency into the Toolbox needs to be further developed.

Report on the evaluation of external QSAR models for the Toolbox

6. Liverpool John Moores University presented their evaluation of seven QSAR models and made recommendations concerning their inclusion into the Toolbox. The Management Group recommended that the evaluation format be further discussed and agreed that a written round of comments should be organised.

7. The Secretariat agreed to contact Christoph Helma to discuss the possibilities to link the LAZAR system to the Toolbox and more specifically the carcinogenicity model developed with LAZAR.

Report on additional databases for the Toolbox

8. The Management Group appreciated the report on progress on identifying and evaluating new databases for the Toolbox. It was noted that most of these new databases are currently mapped to the Toolbox and appear in the beta-version currently undergoing testing.

Report on web page acknowledging donations to the Toolbox

9. The Management Group endorsed the proposal to publish as a web page acknowledging donations to the Toolbox. This page will reflect version 1.1 of the Toolbox and will be up dated upon the release of version 2.0.

Report on profiling strategies for aquatic toxicity

10. The Management Group in principle endorsed the report on strategies for grouping chemicals for a single target chemical for data gap filling for acute aquatic toxicity endpoints. It was noted that when the data gap is filled by read across or trend analysis from a limited number of tested chemicals the issue of endpoint data quality is more critical. This point will be added to the final version.

11. It was further noted by the Management Group that such guidance is of benefit and it was recommended that guidance documents for other endpoints be developed. The Secretariat will prepare a proposal on developing additional guidance on using profilers within the Toolbox.

Report on the preparations for the adverse outcome pathway workshop

12. The Management Group noted the report on planning for the adverse outcome pathway workshop hosted by USEPA December 8 – 10, 2010. The Management Group requested to be kept informed of the Steering Groups decisions by postings on the OECD clearspace site.

Other Projects Related to Version 2.0 of the Toolbox**Report on Effectopedia**

13. The Management Group noted the presentation by the Secretariat on behalf of the International QSAR Foundation on their project for development of web-based platform for gathering information on toxicological pathways. The Management Group recognised that the work fits the long term needs of the Toolbox, and the system may be of benefit for the development of version 3 of the Toolbox. The Management Group recommended that the system is made public as soon as possible.

5-Alpha-reductase and developmental toxicity: An example of an Adverse Outcome Pathway

14. The Management Group noted the presentation by Damiano Portinari (Lhasa Limited) on their work on 5-alpha-reductase and aromatase inhibition and their impact on developmental toxicity. The Management Group recognised that the work fits the long term needs of the Toolbox, and the report may be of benefit for the workshops on developmental toxicity and adverse outcome pathways.

Respiratory uncoupling: An example of an Adverse Outcome Pathway

15. The Management Group noted the work by the Secretariat's on the weak acid respiratory uncoupling pathway. The Management Group agreed that this work could form the basis for the development of a profiler for weak acid uncouplers within the Toolbox once a pKa model is available in the Toolbox.

Preparation for the Management Group meeting in fall 2010

16. It was agreed that the Management Group will meet again in October 2010. The Secretariat will again try to schedule a joint meeting of the Management Group with SIAM. The next scheduled SIAM meeting is on 19-22 October 2010 in Oxford, United Kingdom. The Secretariat will announce as soon as possible the possibility of such a joint meeting.

Any Other Business

17. The Management Group endorsed the proposal by the Secretariat to set up a public community web site for discussion of Toolbox related issues. The Management Group recommended that a set of disclaimers be developed for the site. BIAC indicated its interest in participating in the moderation of the site.

18. The Management Group noted the report by ECHA on the project for branding the Toolbox. The Management Group will be consulted in May to choose between two concepts.

Beta-testing of Version 2.0 of the Toolbox.

19. The Management Group participated in a 1.5 days of training and testing of the beta-version of Toolbox 2.0. Training included demonstrations of the new functionalities by the Laboratory of Mathematical Chemistry. Testing included a series of exercises lead by the Secretariat and the Laboratory of Mathematical Chemistry designed to fill data gaps for different chemicals and different endpoints. The Management Group appreciated the work by the Laboratory of Mathematical Chemistry. They noted in particular the new profilers, new databases, and stability of version 2.0.

20. The Management Group was invited to provide written comments about the beta-version of Toolbox 2.0 on the OECD clearspace site by May 25, 2010.

**MEETING OF THE (Q)SAR APPLICATION TOOLBOX
MANAGEMENT GROUP**

And

BETA TEST EVENT OF VERSION 2.0 OF THE TOOLBOX

**To be held at the Room 7, OECD Conference Center, Paris, France
20-21 April 2010**

DRAFT AGENDA (14 April 2010)

The meeting starts at 08h30 on Tuesday, 20 April and closes at 17h00 on Wednesday, 21 April 2010.

MEETING OF THE (Q)SAR APPLICATION TOOLBOX MANAGEMENT GROUP

Tuesday, 20 April 2010

08h30 1 Opening and the adoption of the agenda (10min)

The meeting will be opened by the OECD Secretariat. The Secretariat will explain the purpose of the meeting and housekeeping items. The Secretariat will also confirm that the participants have all meeting documents. The meeting participants will briefly introduce themselves to the meeting (Tour de Table). The Management Group will be asked to approve the agenda, and discuss changes in meeting papers and scheduling of the agenda items if necessary.

Updates from the Contractors on Projects in WP3 & WP4

08h40 2 Report on the plans for developmental toxicity workshop (10min)

The contractors will provide a report on the plans for the workshop on developmental toxicity. The Management Group will be invited to take note of the report and comment as appropriate.

08h50 3 Report on the progress on the revision of the protein-binding profiler (10min)

The contractors will provide a report on their progress on revision of the protein-binding profiler. The Management Group will be invited to take note of the report and comment as appropriate.

09h00 4 Report on the progress on evaluating external QSAR models for the Toolbox (10min)

The contractors will provide a report on their progress on evaluating external QSARs for the Toolbox. The Management Group will be invited to take note of the report and comment as appropriate.

09h10 5 Report on additional databases for the Toolbox (10min)

The contractors will provide a report on their progress on identifying and evaluating new databases for the Toolbox. The Management Group will be invited to take note of the report and comment as appropriate.

Reports and Proposals from the OECD Secretariat

09h20 6 Report on Web page (15min)

The OECD Secretariat will provide a report on the development of the web page acknowledging donations to the Toolbox. The Management Group will be invited discuss this proposal.

09h35 7 Report on Profile Strategies (15min)

The OECD Secretariat will provide a report on profiling strategies for aquatic toxicity. The Management Group will be invited to endorse the report, amended as appropriate and to take discuss follow-up activities.

09h50 8 Report on AOP workshop (15min)

The OECD Secretariat will provide a report on the AOP workshop. The Management Group will be invited to take note of the progress of this activity and comment as appropriate.

10h05 *Coffee Break (25min)*

10h30 9 Report on Effectopedia (10min)

The OECD Secretariat will provide a report on the development of a web-based platform for collecting information for AOP (Effectopedia). The Management Group will be invited to take note of the progress of this activity and comment as appropriate.

10h40 9 5-Alpha-reductase and developmental toxicity: An example of an Adverse Outcome Pathway (20min)

The contractors will provide an example of development and use of an Adverse Outcome Pathway. The Management Group will be invited to take note of this activity and comment as appropriate.

11h00 10 Respiratory uncoupling: An example of an Adverse Outcome Pathway (20min)

The OECD Secretariat will provide an example of development and use of an Adverse Outcome Pathway. The Management Group will be invited to take note of this activity and comment as appropriate.

11h20 11 Preparation for the Management Group meeting in fall 2010 (20min)

The Management Group will be asked to consider the second week in October (Tuesday 12 – Thursday 14) for the expert consultation on protein binding and the next meeting of the Management Group. The Management Group will be invited to propose possible agenda items for that meeting.

11h40 12 Any Other Business (20min)

The Management Group will consider any other issues raised by members.

12h00 *Meeting Adjourns*

BETA TEST EVENT OF VERSION 2.0 OF THE TOOLBOX**Tuesday, 20 April 2010****14h00 1 Start of Beta-Test Event (5 min)**

The meeting will be opened by the OECD Secretariat. The Secretariat will explain the purpose and organization of the meeting.

14h05 2 Overview of OECD Toolbox, version 2.0 (55 min)

Summary presentation of new functionalities, profilers, databases, categorization and data gap filling tools, reporting.

15h00 3 Introduction of the system with two simple examples (60 min)

16h00 *Coffee break* (30 min)

16h30 4 Demonstration of basic functionalities: example Hexanal (CAS 66251) (60 min)

- Options:
 - Donators
 - Units
 - 2D and 2.5D modes
 - Conversion of data scales
- Input:
 - single chemical or list of chemicals
 - QA of chemical IDs
 - QA info for assigned structure (SMILES)
- Profiling:
 - About and boundaries
 - Current status of the profilers – classification of profilers
 - Coding of new knowledge (DNA binding) and ToxTree profiles
 - Use of extended fragments for coding reason
 - Export of all profile or specific categories of a selected profile
- Extracting data:
 - Currently available data sources (information could be obtained by “About”),
 - Building data matrix
- Forming categories:
 - use of empirical and mechanistic categorizations
 - categorization phases

17h30 Adjourn for the Day

Wednesday, 21 April 2010

08h30 5 Demonstration of basic functionalities: example Hexanal (Contd.) (120 min)

- Data gap filling
 - Prediction of non-binary endpoints:
 - IGC50
 - Save model
 - Analyze the model domain and application of the derived models
 - Predict endpoints for chemicals in the domain
 - Export of predicted data
 - Mortality of fish using all available fish data (LC50, 96h)
 - Make predictions by ECOSAR
 - Danish EPA
 - Screen external inventories (EINECS) by using derived models
 - Save
 - model
 - QMRF – not yet ready as XML file
- Automated Reporting (edit reporting) – from the cell in the data matrix

10h30 *Coffee Break* (30 min)

11h00 6 Demonstration of enhanced functionalities and analysis – Part I (120 min)

- Dynamic conversion of parameter units
- “Sufficiency” of the QSAR accuracy and variation of experimental error
- Saving models and model applicability domains
- Using derived models for predictions in and out of the model domain

13h00 *Lunch* (60 min)

14h00 7 Demonstration of enhanced functionalities and analysis – Part II: Example: Hexanal (CAS 66251) (90 min)

- Import/export
 - Vertical and horizontal import using excel files
 - Import of data having different data scales
 - Conversion of scales – example for skin sensitization
- Import/export from/to external systems:
 - Export of data to IUCLID5 – via XML
 - Importing data from IUCLID5 – via XML
 - Exporting data to IUCLID5 – via WebServices
 - Importing data from IUCLID5 – via WebServices
 - Importing data from CATALOG – via XML
- Predictions by external QSAR models

15h30 *Coffee Break* (30 min)

16h00 8 Demonstration of enhanced functionalities and analysis – Part III: Example: Furfural (CAS 98011) (50 min)

- Predicting categorical endpoints:
 - In vitro genotoxicity AMES.
 - Data filtering
 - Acceptance modes
 - Skin sensitization
- Reporting

16h50 9 Submitting feedback (10 min)

The OECD Secretariat will outline the procedure and timeline for providing feedback on the beta version.

17h00 Meeting Adjourns

Annex 2 : Participants List for (Q)SAR Application Toolbox Management Group (20-21 April 2010)

Canada

Dr. Sunil Kulkarni (by phone)
*Scientific Evaluator, Risk Assessment
Risk Assessment Bureau
Health Canada*

Denmark/Danemark

Mr. Henrik TYLE (by phone)
*Chief Adviser
Chemicals Division
Danish Environmental Protection Agency*

France

M. Enrico MOMBELLI
INERIS

Germany/Allemagne

Dr. Matthias HERZLER (by phone)
*Chemicals Safety
Federal Institute for Risk Assessment (BfR)*

Ms. Frauke Stock
*Chemicals section
Federal Environment Agency (Umweltbundesamt)*

Italy/Italie

Mr. Romualdo BENIGNI (by phone)
*Experimental and Computational Carcinogenesis
Istituto Superiore di Sanita*

Japan/Japon

Mr. Kazuo HASUNUMA (by phone)
*Assistant Fellow
Research Center for Environmental Risk
National Institute for Environmental Studies*

Mr. Jun YAMADA (by phone)
*Technical Adviser
Safety Assessment Division
National Institute of Technology and Evaluation*

Netherlands/Pays-Bas

Dr. Emiel Rorije

SEC

RIVM-National Institute for Public Health and the Environment

Poland/Pologne

Mr. Jacek CIESLA (by phone)

*Expert of the Ministry of Health, Chief Specialist, IT
Manager*

Dept for Risk Assessment

Bureau for Chemical Substances and Preparations

Spain/Espagne

Dr. Juan José IZQUIERDO

Conseiller

Environment Department

INIA

Sweden/Suède

Dr. Jörgen HENRIKSSON (by phone)

Senior Scientific Officer

Swedish Chemicals Agency (KEMI)

United Kingdom/Royaume-Uni

Dr. Peter HOWDEN (by phone)

Chemical Regulations Directorate

Health and Safety Executive

EU/UE

Dr. Tatiana NETZEVA (by phone)

Senior Scientific Officer

Unit C2 - Registration

European Chemicals Agency -ECHA

Mr. Andrew WORTH (by phone)

Scientific Officer

Institute for Health & Consumer Protection

European Commission

Doris HIRMANN (by phone)

Scientific Officer

Unit for Scientific IT Tools

European Chemicals Agency

Mrs. Rositsa Serafimova (by phone)

JRC ISPRA

European Commission

Business and Industry Advisory Committee (BIAC)/Comité consultatif économique et industriel (BIAC)

Mr. Katsutoshi Kinoshita (by phone)
MITSUI CHEMICAL, INC.

Ms. Grace Tier (by phone)
DuPont

International Council on Animal Protection in OECD Programmes

Alexander TROPSHA (by phone)
Director
Laboratory for Molecular Modeling

OECD/OCDE

M. Bob DIDERICH
Principal Administrator, ENV/EHS

Mr. Terry SCHULTZ
Administrator, (Q)SARs, ENV/EHS

Professor Ovanes Mekenyan (by phone)
Laboratory of Mathematical Chemistry (LMC),
Burgas University, Bulgaria

Dr. Sabcho Dimitrov (by phone)
Laboratory of Mathematical Chemistry (LMC)
Burgas University, Bulgaria

Mr. Todor Pavlov (by phone)
Laboratory of Mathematical Chemistry (LMC),
Burgas University, Bulgaria

Steven Enoch (by phone)
Post-Doctoral Research Fellow
Liverpool John Moores University, UK

David Watson
Chief Executive Officer
Lhasa Limited, UK

Dr. Philip Judson
Scientific Advisor
Lhasa Limited, UK

Dr. Damiano PORTINARI
Research scientist
Lhasa Limited, UK

Mr. Kees VAN LEEUWEN
TNO Quality of Life, NL

Ms. Tialda BOUWMAN
TNO Quality of Life, NL