ERLIN EXPO

An advanced tool for higher tiers environmental and human health exposure assessment of chemicals

Key features

- It includes a comprehensive library of **environmental multimedia** and **PBPK models** (integrating environmental and human exposure assessment);
- Models can be combined in a flexible way to build **complex scenarios** involving several pollution sources and targets;
- A **wide range of chemical substances** (metals, organics) can be modelled;
- It combines **external exposure** and **internal exposure** for different human populations;
- It allows performing **uncertainty/sensitivity analysis** (from screening to global variance-based approaches), and **deterministic** and **probabilistic simulations**;
- It offers a full package of **on-line training** material.

MERLIN-Expo documentation is compliant with the standard of chemical exposure models

A standard documentation of chemical exposure models has been proposed in a new CEN (European Committee for Standardization) workshop agreement (CWA 16938).

Documentation of exposure models can be a mixture of general considerations, lengthy verbal descriptions of processes, and justifications of the mathematics. The aim of this CWA was to make model description more **transparent, comprehensive and unambiguous**.

The CWA establishes terms and definitions for exposure models and their elements, and guidelines for a tiered presentation of the information and proposes a structure for communicating the documentation to different users.

This document is **applicable to the documentation of a wide range of exposure models** (quantitative and non quantitative), including environmental models describing the chemical fate in different media, environmental models describing the chain of chemicals from the environment to humans, and human exposure models.

All MERLIN-Expo models were documented according to this standard (**CWA 16938**), which is available on the market and can be purchased online, on National Standardization Bodies websites.

Free download, tutorials, documentation at

http://merlin-expo.eu/

Free e-learning course available on the OpenTEA platform (www.opentea.eu):

http://www.opentea.eu/en/e-learning/courses-The-Future-of-Environmental-and-Human-Health-Exposure-Modelling-of-Chemicals.10/

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