EASE

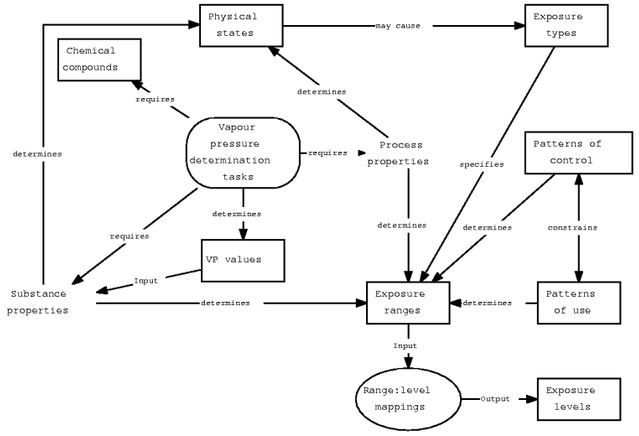
Estimation of substance exposure for new industrial processes

Description:

- **A knowledge based system to support occupational hygienists**
  - **When a new industrial process is developed,occupational hygienists must assess how toxic the substance is and how likely workers are to be exposed to it.**
  - **EASE supports the latter task.**
- **Key factors include:**
  - **Pattern of control: e.g. closed system.**
  - **Whether a closed system is ever breached e.g. for cleaning.**

Technical approach:

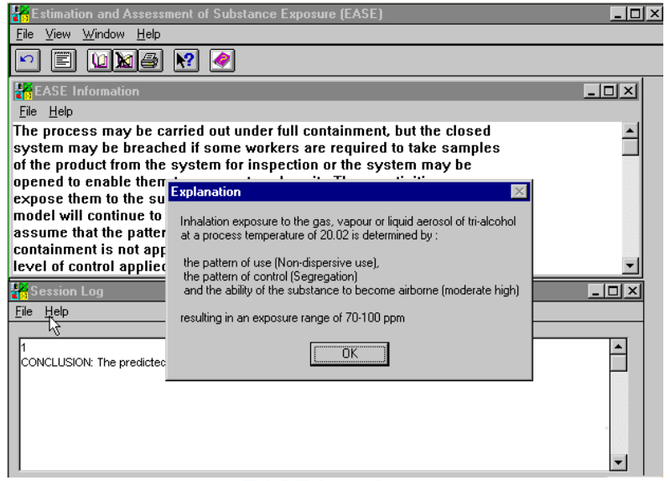
- **Initial prototype developed by UK Health & Safety Laboratories.**
- **AIAI and HSL staff collaborated in developing new system:**
  - **HSL staff trained in AI techniques.**
  - **Used the CommonKADS methodology for modelling knowledge.**
  - **Used CLIPS and wxCLIPS (AIAI product) for software.**
  - ***Success through technology transfer and knowledge modelling.***



CommonKADS "model schema"

Benefits:

- **Highlights potentially dangerous situations that may be neglected.**
- **Easier method of enforcing health & safety guidelines.**
- **Easier to update than paper manuals.**
- **Has been taken up by regulatory agencies around Europe.**



EASE Interface

Acknowledgement for photograph: http://www.southwalesinfocus.com/

AIAI and the Health & Safety Laboratory
http://www.aiai.ed.ac.uk/project/ease/