



CEMAS – A CEFIC Sponsored Database for Chemical Exposure Management and Assessment

CEFIC LRI project – collaborative project team:

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CEMAS: CEFIC Exposure Management and Assessment System

- Summary – a brief overview
- Why do we need another database?
 - Product stewardship and responsible care
 - Regulatory risk assessment
- Who do we hope will use CEMAS?
 - From COSHH essentials to *eRisk*
- What does the database contain?
- Plans for the future...



Why Another Exposure Database?

- Drivers for CEMAS – CEFIC involvement
- Shortages and gaps in data where it should be available:
 - “Responsible Care, ... committed to continual improvement in all aspects of health, safety...”
 - Risk assessment requirements -
 - Within the existing substances programme
 - Where is the exposure data to support this process – on its own, or for modelling?
 - Chemical Agents Directive (CAD)
 - EU Chemicals White Paper



Aims of the CEMAS project...

- Seeks to provide a PC based guidance tool for SME users of chemicals that:
 - gathers exposure data and contextual information for structured decision-making on exposure (inh & derm)
 - Provides for the appropriate analysis of exposure data – summary stats & IRAS's SPEED
 - provides practical assessment of the suitability of exposure controls and advise when exposure monitoring may be required
 - is consistent with prevailing regulatory expectations
 - provides opportunities to target Product Stewardship
 - assists CEFIC sectors/groups measure performance
 - is aligned with the principles of Responsible Care
 - is available free



Approach and stages, with consultation

- Previous knowledge, literature and experience of EDB and epi research
- Existing EDB and ongoing efforts towards data standards
- Stakeholder consultation
- Initial design prototype and testing
- Limited pilot test
- Revision and refinement



Why would SMEs use CEMAS?

- Currently for dermal and inhalation data
- We have decided to provide a decision aid to advise when monitoring may be appropriate
- ... and to generally encourage monitoring
- Based upon the UK COSHH Essentials scheme (www.coshh-essentials.org.uk)
- We use the term *eRISK*



eRISK...

- Uses information about:
 - Physical and chemical properties of substance
 - Risk phrases assigned to product
 - Quantity used.
- We ask about control measures and feedback if better controls needed
- Suggest monitoring
- All data stored in database

CEMAS Main Switchboard

CEMAS
CEFIC Exposure Management and Analysis System

Company: Red Ant Chemicals

Edit Company Details

Premises Details

E-Risk

Exposure Survey Admin

Exposure Survey Schema

Definitions

Project Contacts

Pre-Prototype
Post June

Exit CEMAS



Industry, process, job, tasks

We collect information about:

- Industry (standardised and CEFIC sectors)
- Workplaces
- Jobs (standardised and local names)
- Processes
- Tasks
- Controls
- Exposure survey, data and context

CEFIC CEMAS Database Pre-Prototype 1.1 - [Basic Survey Information]

File Edit View Insert Format Records Tools Window Help

Survey Planning - Premises: Red Ant Forth Organics Plant

Survey ID: 24 Added Updated

Survey Title: Solvents Monitoring:PaintShop Paint Mix Areas,Check and Repair Workdeck and Wax Booth

General Description | Sampling and Analysis Strategy

Start Date: 24 February 1993 End: 25 February 1993 Survey Completed?

Survey Authority: Mr A Friend

Survey Reason: Compliance testing

Describe Survey Aims and Objectives: A survey was carried out to assess compliance with the occupational exposure limit for xylene used in the plant.

Surveyor: Institute of Occupational Medicine Analyst: Institute of Occupational Medicine

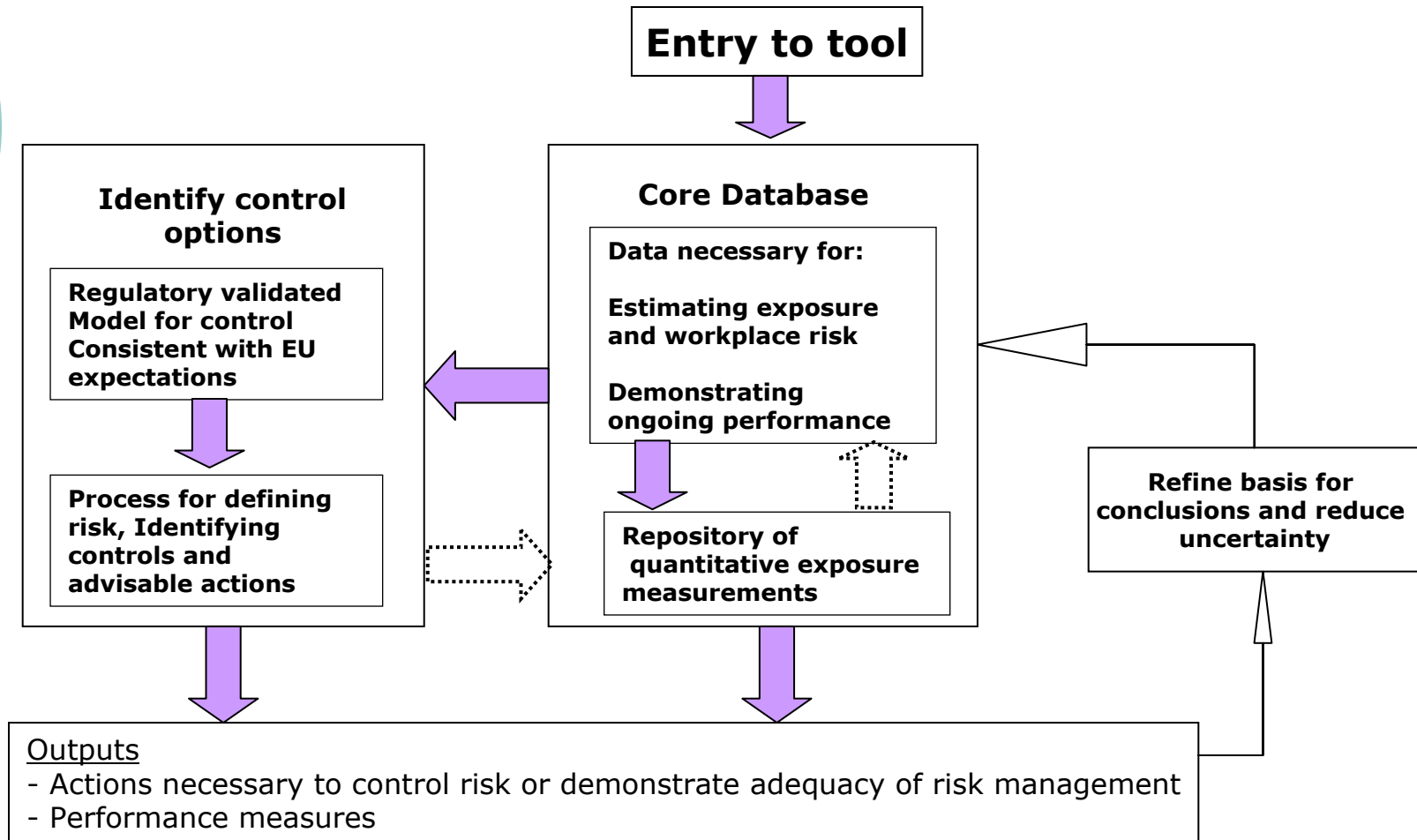
Survey Report File: S:\24HourTemp\QUALITY CONTROL MANUAL.doc

Sample-Sets and Results

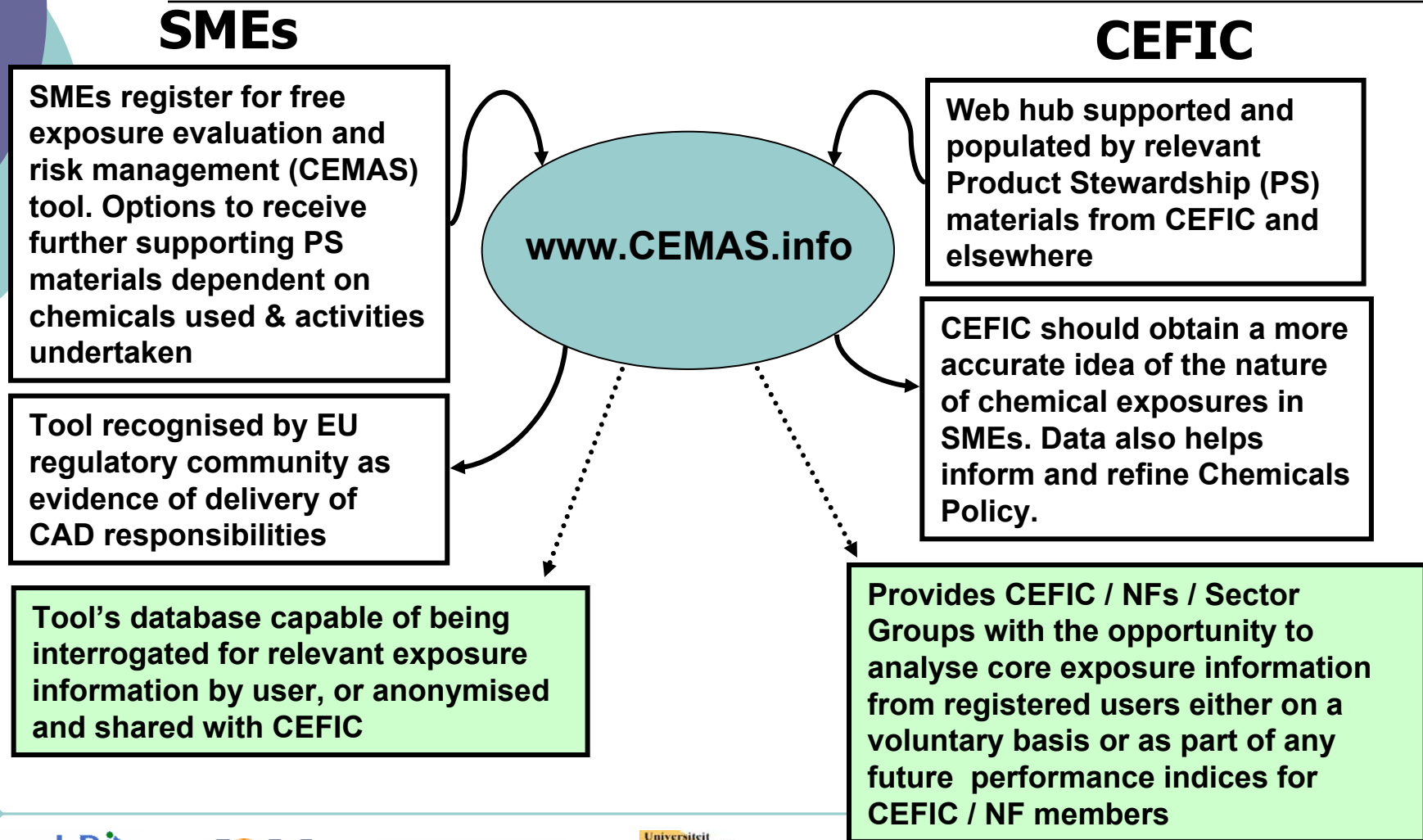
1 of 6 Surveys at these premises

First Previous Next Last New

Key elements of CEMAS operation



Plans for interaction of CEMAS with Users

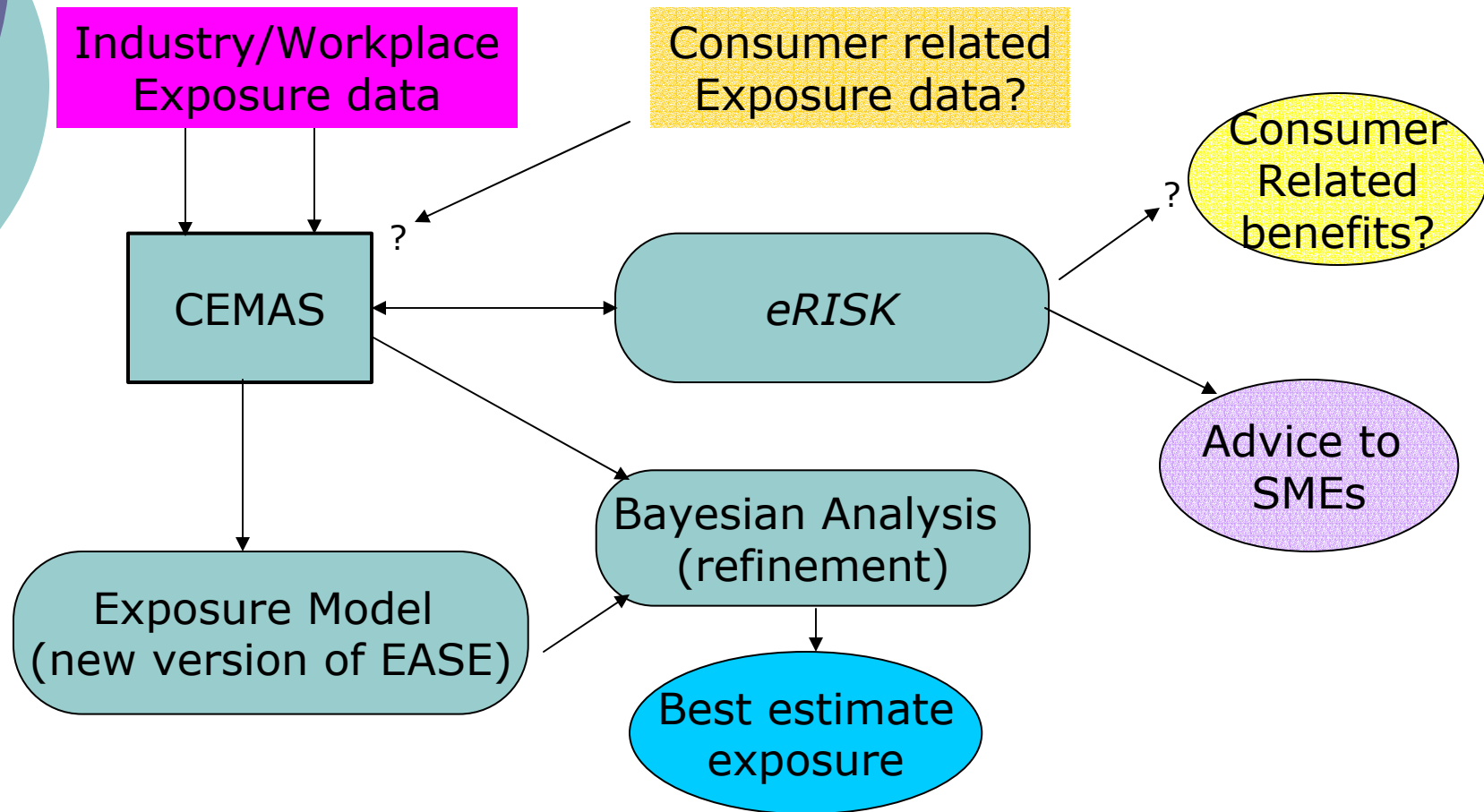




Plans to progress CEMAS

- Phase II - next version of the database and stakeholder trials
 - Currently using version for other exposure studies at IOM – continuing refinement
 - Update structures and interface, checking and validation, layering, reports, SPEED and summary stats
 - 10 companies from two CEFIC sector groups to undertake fairly intensive usability trials
 - Continuing development of EDB standards
- Phase III - Final production of free product and it's promotion will be the subject of a separate RfP –

CEMAS in context - vision of the future...





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