



# REACH & ARBO-RI&E chemische stoffen

**Doublures?  
Toegevoegde waarde?  
Einde vd chemische Arbeidshygiene?**

**Theo Scheffers**

**Royal Haskoning, Chemicals Management Group**

# Agenda



Royal Haskoning (1)



REACH (4)

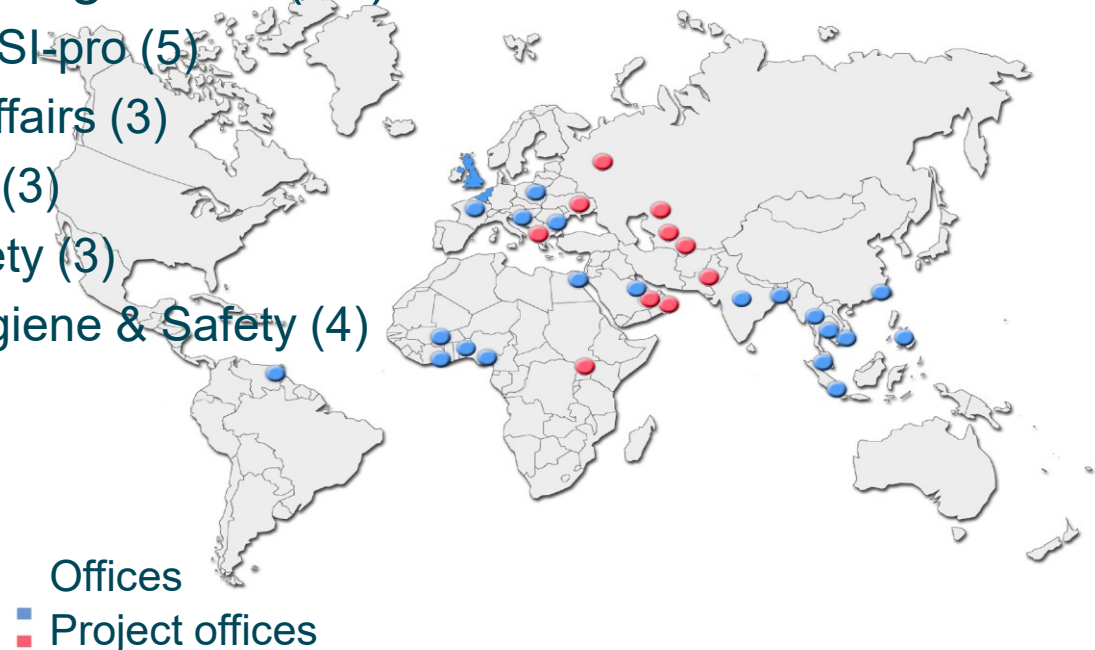


IH Exposure Scenarios (6)



# Royal Haskoning: Profile

- established in 1881
- independent and professional
- a worldwide network of knowledge, offices and clients
- 3,000 professionals (architects & engineers)
- Environment (150)
- Chemicals Management (20)
  - Database EaSI-pro (5)
  - Regulatory Affairs (3)
  - Environment (3)
  - External Safety (3)
  - Industrial Hygiene & Safety (4)



# Agenda



Royal Haskoning (1)



REACH (4)



IH Exposure Scenarios (6)





# The aim of REACH

- EU chemical industry must:
  - manage chemicals risks and
  - produce and provide users in the supply chain adequate “Instruction leaflets” for all (30.000) chemicals produced or imported over 1 ton/year.
- Restriction & authorization (POP, WBP, CRM, PBT, vBvP)

The core of REACH:

- Exposure Scenarios
- Risk Characterization



# EU treaty & Quality of life



Product safety VI.95




Environmental Compartments:  
Workers protection: XI 137  
Community health XIII.152  
Environment XIX.174 ev



## EU wetgeving per produkt & per compartiment

			Produkten VI.95
			<b>Machines (geluid, trillingen, ergonomie etc.)</b>
			<b>Biocides, Voedsel, Geneesmiddelen</b>
Compartimenten	Milieu XIX.174 ev	Volksgezondheid XIII.152	<b>Chemische stoffen (REACH)/ Arbeidplaats XI 137</b>



- 
- Ja
    - Vanaf 2010:  
SDS stoffen (GHS) + Exposure Scenarios
  - Nee:
    - Tot 2019,
    - Voor < 10 t/y stoffen
    - Legio Uitzonderingen (Polymeren, intermediates, Naturals, R&D, unintentionals [KBR&Rotten], food, cosmetics, biocides etc.)
    - OEL=DNEL + wetenschappelijke weging
    - Combinaties



# Agenda



Introduction Royal Haskoning (1)



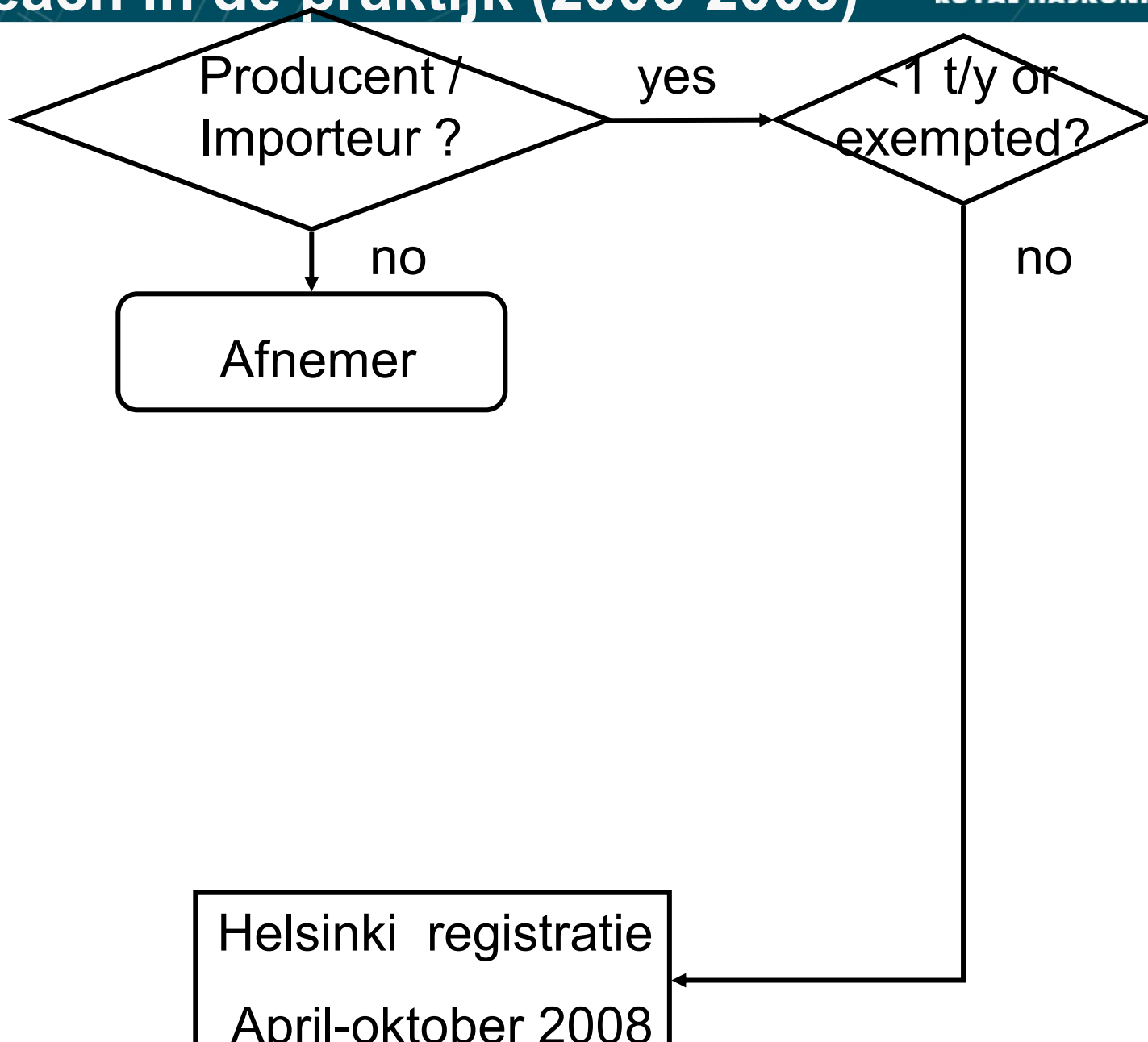
REACH (4)



IH Exposure Scenarios (6)

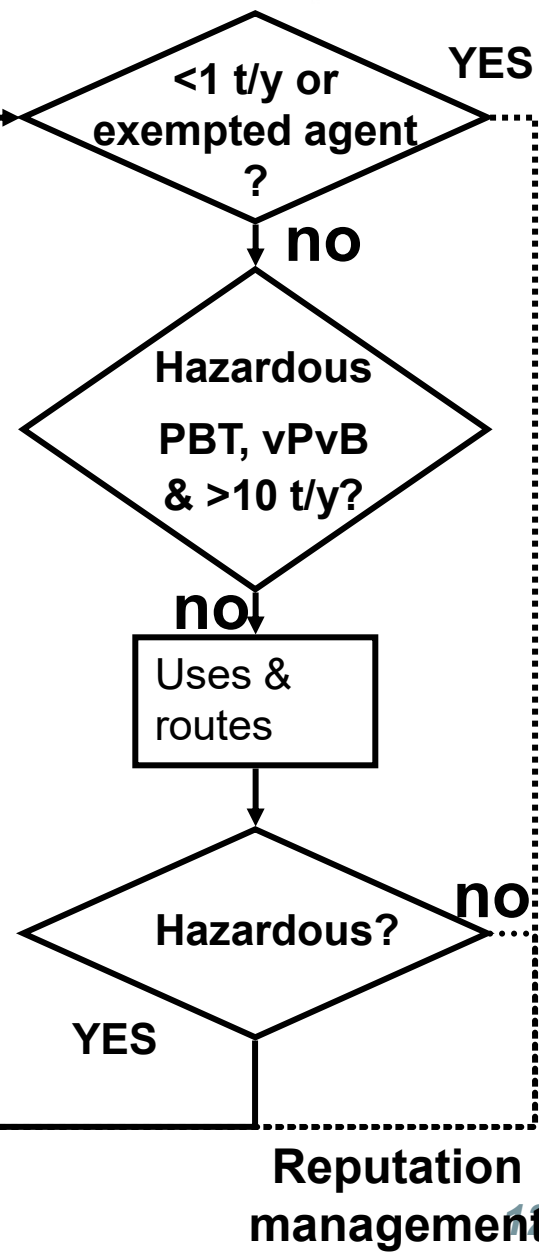


# Reach in de praktijk (2006-2008)



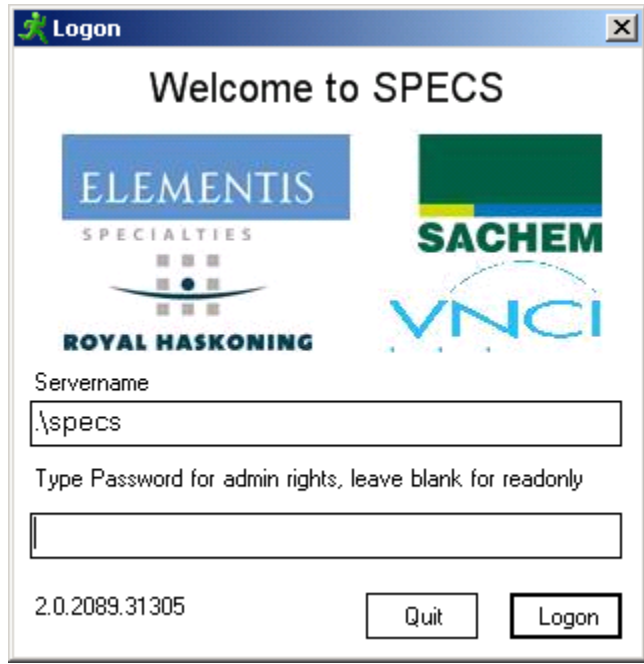
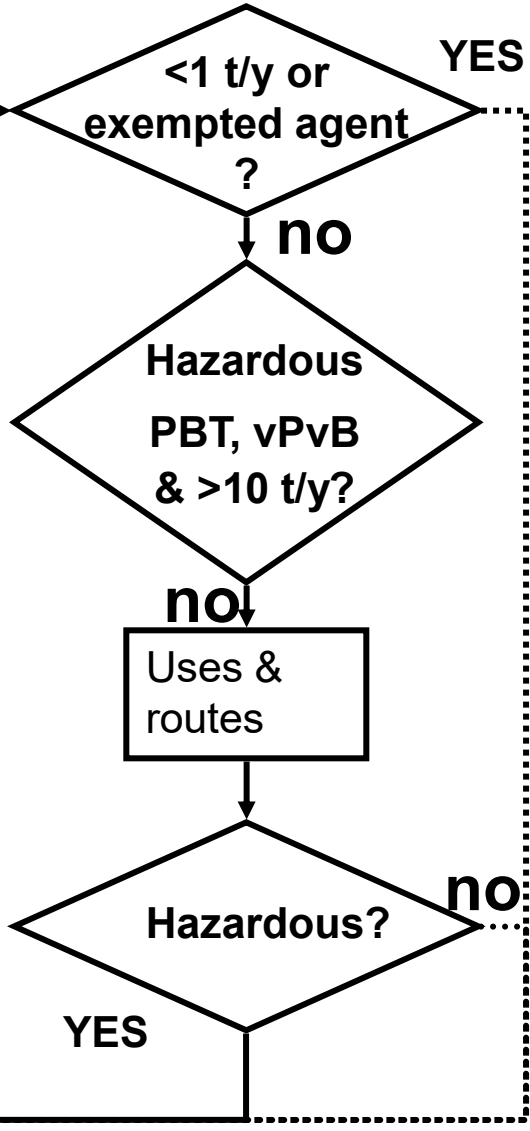
# Reach in de praktijk (2006-2008)

Producent & Importeur check



# Non exposure scenario agents

list of M/I substances



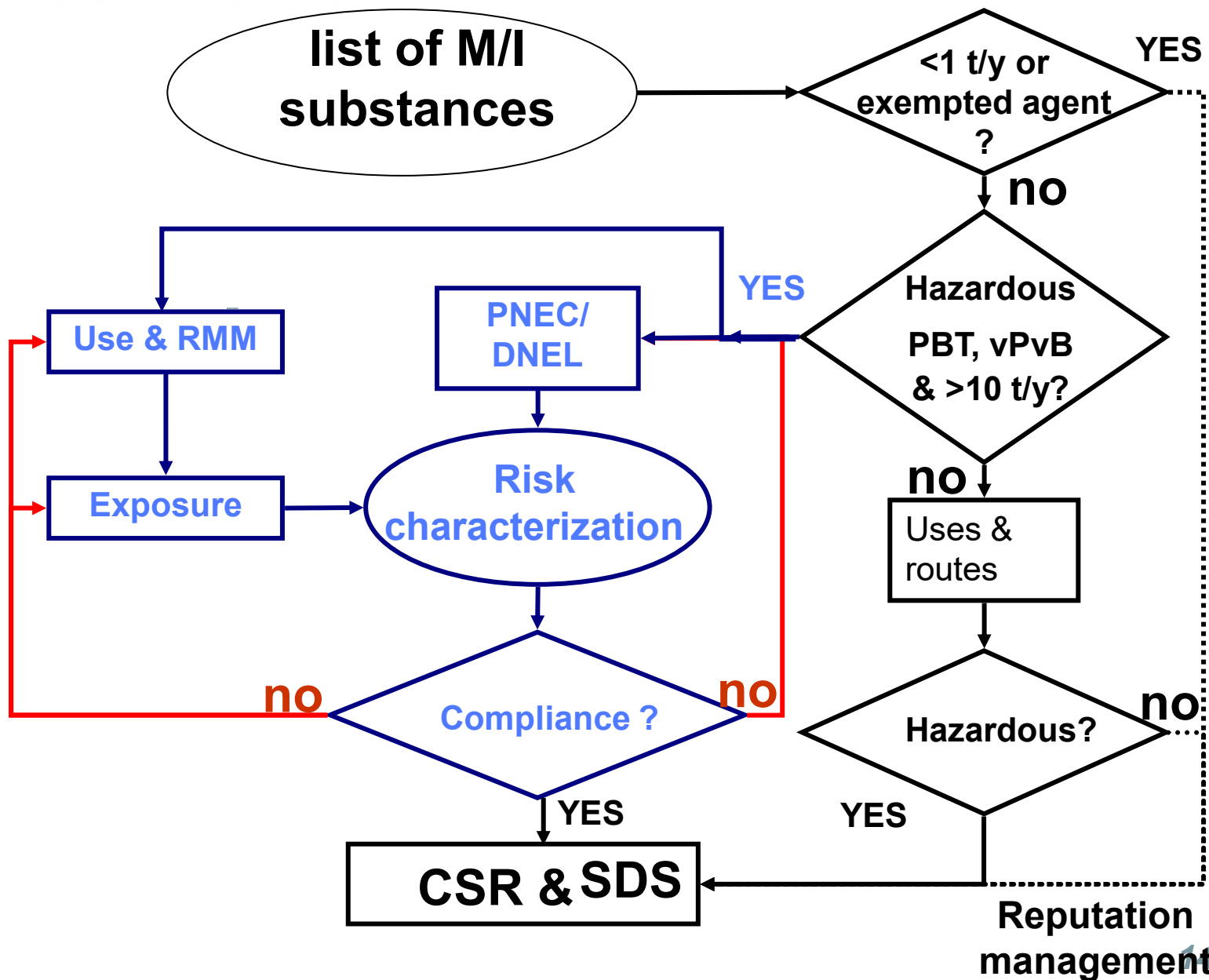
SDS

Reputation management



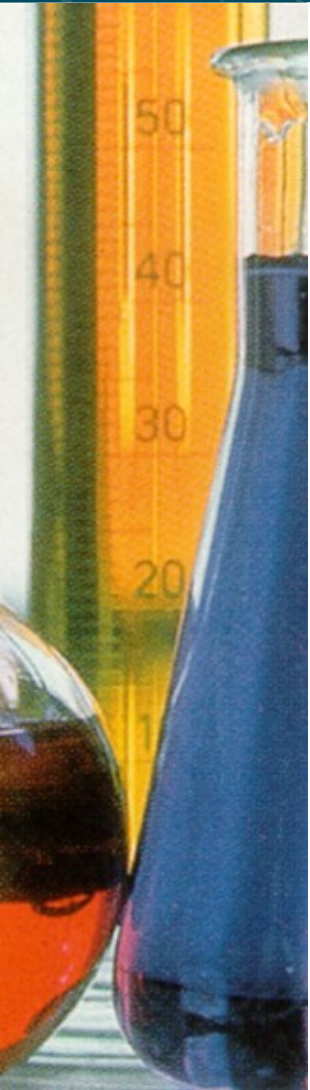


# Exposure scenarios & Risk Characterisation





- The manufacturer/importer's description of:
  - manufacturing and intended use downstream
  - the life-cycle
  - Control of exposure of humans & environment



- By substance
- By a categories of substances (similarities)
- By a product (eg paint)

# Exposure Assessment can include:

- 
- Worker protection legislation based info (RI&E)
  - Exposure databases (100.000 NL measurements)
  - Health Hazard Surveys
  - Exposure based occupational cohort studies.
  - Ease/Coshh based “one substance” modelling:
    - Eusis (REACH version)
    - Ecetoc Tiered Risk Assessment
    - CEMAS
    - Stoffenmanager.eu
  - TRGS440 ordering of substances in categories or products
    - DOHSBase Compare



Non “good industrial hygiene practice” based Exposure Scenarios:

- Real time exposure data inferior to simple conservative modelling
- Hazard overestimation (DNEL assessment factors)

Risk Characterization ->100% non-compliance

- A Bureaucratic exercise
- Invalid for worker protection

Reason to follow REACH Exposure Scenarios developments carefully



# Thank you !

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Offices

■ Project offices



thinking in  
all dimensions