

The REPID methodology

Industrial Environmental Informatics
Chalmers University of Technology

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Chalmers University of Technology

Chalmers basic facts:

- Founded 1829 by the will of William Chalmers
- Annual turnover:
ca 200 Million Euro, of which:
 - 30% first degree and master programmes
 - 70% research including doctoral programmes

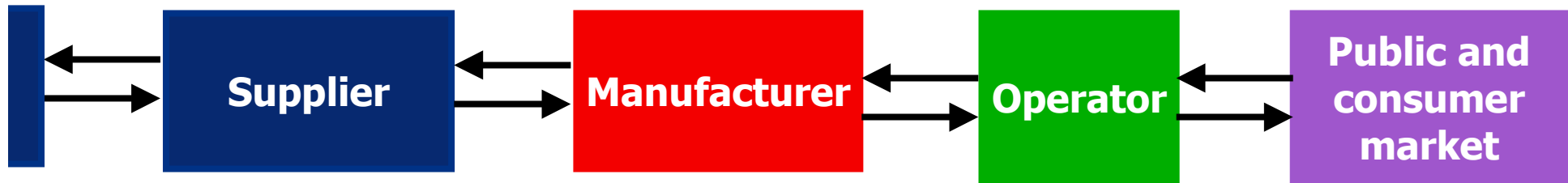


Industrial Environmental Informatics - IMI

- New industry-applied research department at Chalmers University of Technology (est. 2001).
- Develops and maintains information management for industrial environmental applications.
- Based on results from joint academic and industrial research since 1993.
- Currently 8 personnel.
- Is neutral maintainer of REPID results for industrial use and commercial exploitation.

The REPID methodology

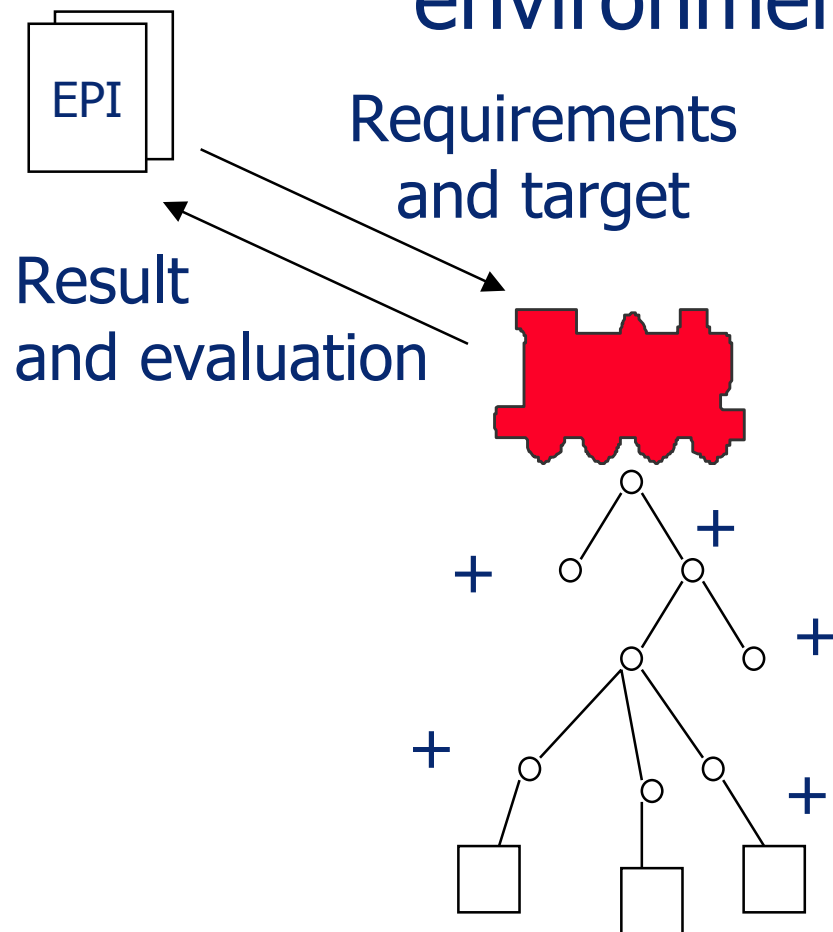
The REPID methodology: Environmental communication and measurement throughout the supply chain



Environmental communication:

- Communication of environmental requirements and performance.
- Is based on Environmental Performance Indicators (EPIs).
- Is technically facilitated by a standardised communication format for data exchange.

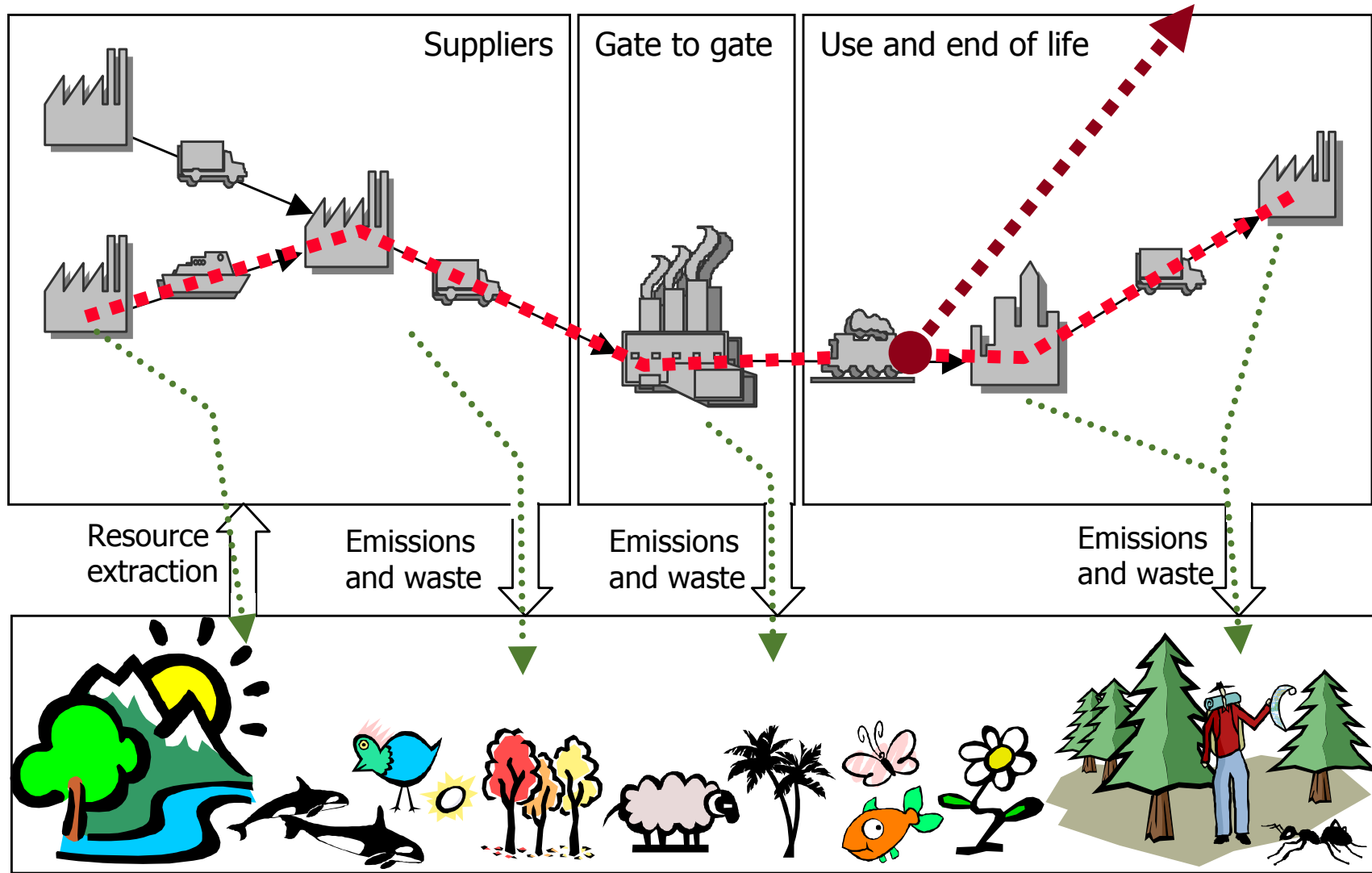
The REPID methodology: Quantitative measurement of environmental performance



- Measurement of environmental performance are based on:
 - A common material list.
 - Well-defined and common material properties.
 - Calculation rules for each EPI (rules for the aggregation).

EPI from a life cycle perspective:

96,5% mtrl. recycling rate

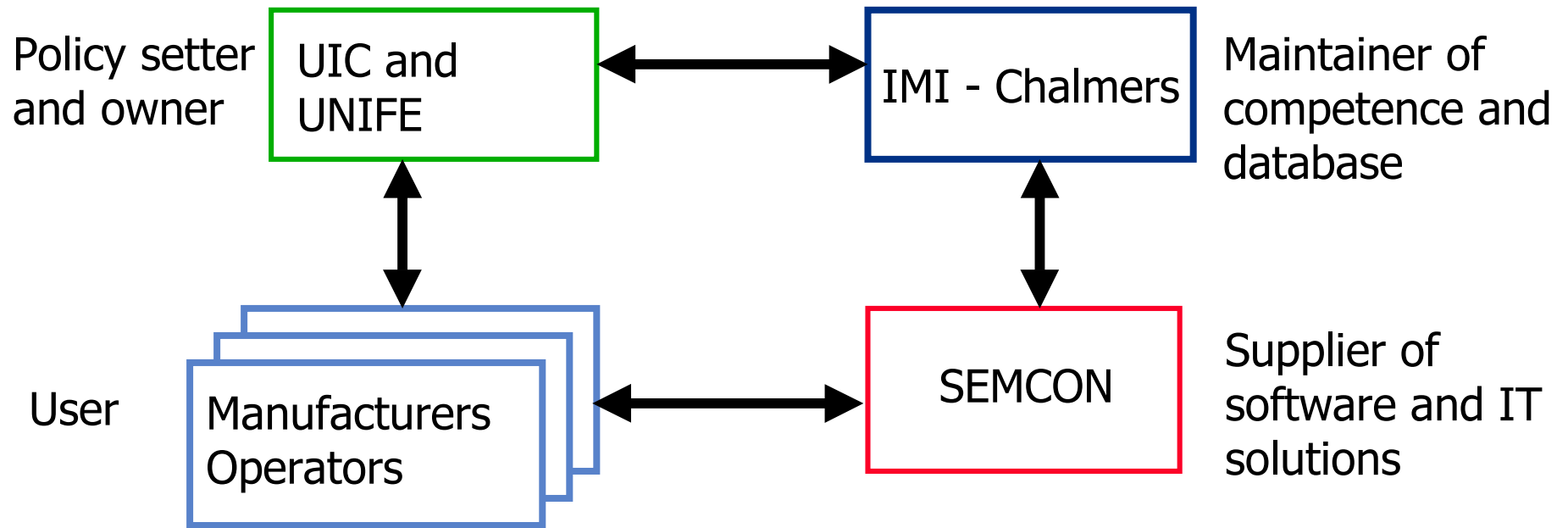


Practical issues about Environmental Performance Indicators (EPIs)

- The EPIs are defined:
 - in accordance with ISO 14031 – Environmental Performance Evaluation
 - based on environmental policy of rail operator and manufacturer
- The environmental policy of operators and manufacturers will be represented by UIC and UNIFE
- The REPID-selection of EPIs is a result from both the RAVEL and PROSPER projects.
- There currently are 21 EPIs (of which some are still under discussion).

The REPID methodology support system

Support system, the REPID business model



The REPID methodology – Summary

- Maintainer of competence and database:
 - Industrial Environmental Informatics (IMI) at Chalmers University of Technology.
 - Commercial supplier is Semcon.
- The REPID methodology:
 - EPI for communication and measurement.
- The REPID methodology support system:
 - The roles of organisations in a business model.