Aiding Integral Disaster Risk Assessment and Management (AIDRAM)

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5) Organizational unit: Departement Maschinenbau und Verfahrenstechnik, direkt, Institut für Energietechnik, direkt, Kroger, Wolfgang, kroeger@mavt.ethz.ch, LZ=03292

6) Project leader(s):
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7) ETH researcher(s): no entry

8) External researcher(s): no entry

9) Funding source(s):
- ETH internal grant

10) Partner organizations: no entry

11) Short Summary: Use of GIS for risk mapping and risk cadastre; comprehensive modeling solutions for assessment and management of chemical and nuclear accidents; assessment of accidents with airborne and waterborne releases ; vulnerability assessment and management for critical infrastructures

12) Keywords: Risk Analysis, Transport Technology

13) Project description:

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Aiding Integral Disaster Risk Assessment and Management (AIDRAM)

Integrated Risk Management and Vulnerability Assessment, develops and provides a comprehensive methodology and implement an adequate DSS (Decision Support System) for the assessment of risks of accidents at regional levels, under the generic title of risk cadaster and vulnerability management. It aims to design and implement products, dedicated to integrated risk assessment and safety management with application to major (mainly chemical) accidents, adapt and integrate advanced models to estimate a) the air dispersion for complex terrain, b) the impact to the aquatic environment e.g. rivers and lakes, and to the soil environment, and c) optimize emergency preparedness and management in case of potential (severe) accidents. For more information on specific projects see:

* "DRM-Tools"
* Quantitative Vulnerability Assessment (QVA) for Critical Infrastructures

Risk Assessment Transportation of Dangerous Goods: A Case Study, addresses the use of models, methodology and demonstrates their feasibility through a case study related to risk assessment transportation of dangerous goods within the Swiss railway system (SBB).

14) Popular description:

The goal of AIDRAM is to develop and provide an advanced methodology for hazard identification, vulnerability assessment and risk management as well as specific tools, to assist partners in the early stages of related activities. The application of these methods and tools help to foster inter alia a local safety culture. Two distinct research areas are considered.

15) Graphics: no entry

16) Publications: no entry

17) Links to important web pages: no entry

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