

"Risk'oMeter" Concept

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- 5) **Organizational unit:** Departement Maschinenbau und Verfahrenstechnik, direkt, Institut für Energietechnik, direkt, Kroger, Wolfgang, kroeger@mavt.ethz.ch, LZ=03292
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- 7) **ETH researcher(s):** no entry
- 8) **External researcher(s):** no entry
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 - Industry
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- 11) **Short Summary:** The concept of Risk'oMeter, is an artifact enabling measuring, estimating, and representing risks in real time while making use of the GIS (Geographical Information System) technology.
- 12) **Keywords:** Engineering Sciences, Technology

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13) Project description:

The concept of Risk'oMeter, is an artifact enabling measuring, estimating, and representing risks in real time while making use of the GIS (Geographical Information System) technology. A Decision Support System associated has been designed and implemented making an adequate representation for the transportation of dangerous goods, either by rail, or road infrastructures on-line risks. The question is: Can one conceive ways and means that would meaningfully help the driver of a planned risk-sensitive cargo to better identify and perceive the risks incumbent in his/her mission to come? What the driver needs to understand the risk is to feel it and, if possible, see it – to believe it, or, in other words, experience any available live flavor of it, in advance. What can be done, is to offer a simple, yet useful soft machine, that would be able to show a train (or road trailer) driver how the risk levels bump up and down as he/she pulls vehicle's commands along the route.

The result is a model and an associated knowledge processing computer code, known as the 'Risk'oMeter'. The code offers also a 'fly-by' facility, allowing the user to drive, on any route of his/her choice across the (Swiss) territory, by fully integrating a GIS database and knowledge processing facility. The machine takes the driver/flyer through the (simplified) 3-D perspective of the expected landscape, while the 'headset' displays the essential risk-related parameters as one goes (Fig. 1). A count-bar on the headset Risk Scale keeps the driver informed on his/her risk-relating performance. The latter is placed on record by a 'Black Box'-like facility, to be subject to scrutiny and interpretation further on.

The Risk'oMeter project is under active consideration for further development and applications with European industrial partners, and Japanese research institutions on projects related to sociotechnology e.g. intelligent transportation systems.

14) Popular description:

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15) Graphics: no entry

16) Publications: no entry

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17) Links to important web pages: no entry