

How can we analyse legal aspects of risk in trust management?

Tobias Mahler
Norwegian Research Center for Computers and Law
University of Oslo
ENFORCE project

Agenda

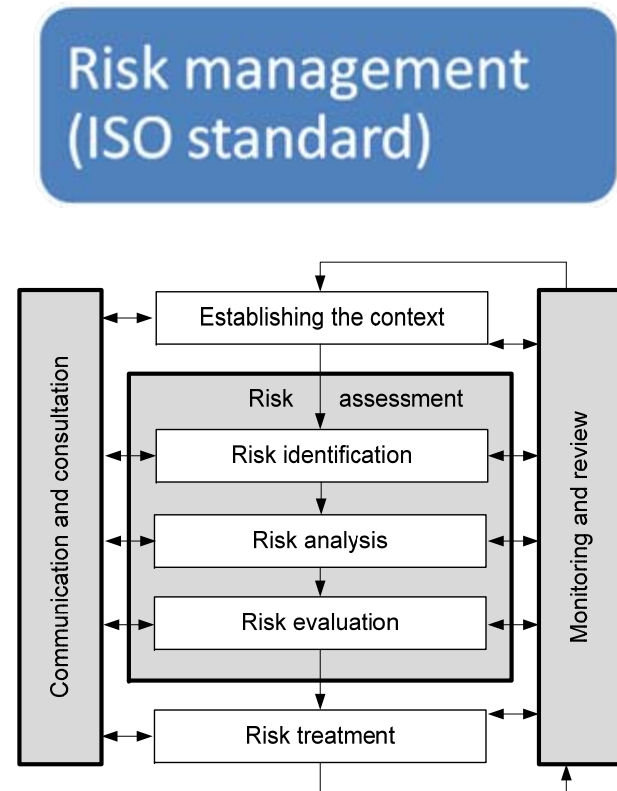
Trust

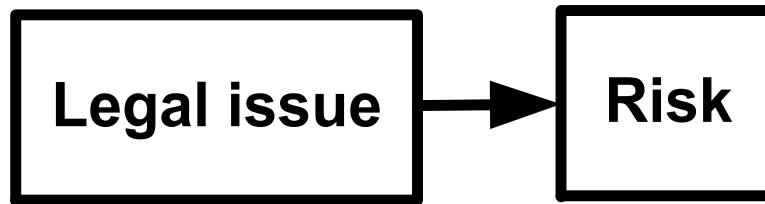
Legal risk management

Modelling risk in a legal context

Case study

Legal risk management





Legal issue



A set of facts



Assessed under a set of legal norms

Risk



Risk is the effect of uncertainty on objectives (ISO)

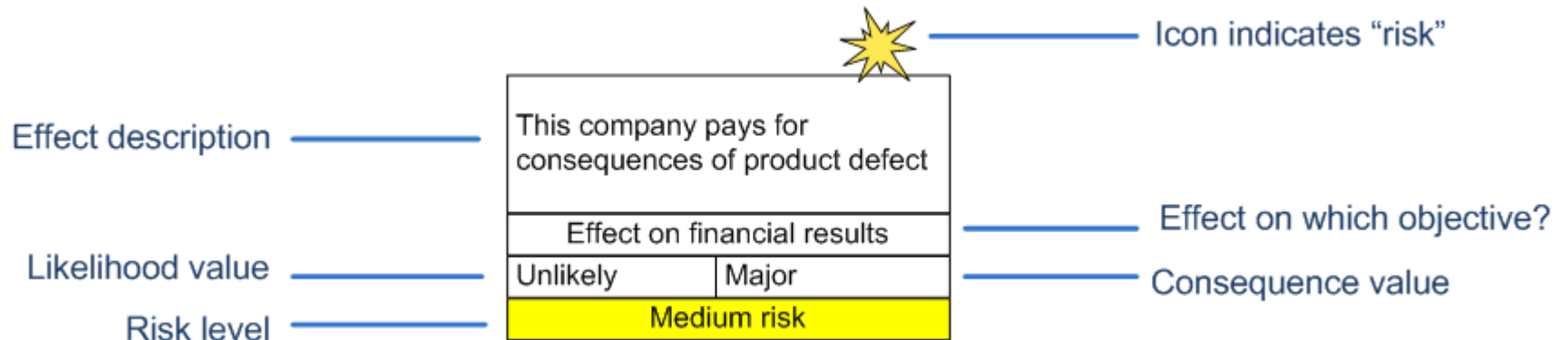
Uncertainty

- Likelihood estimate
- How model legal uncertainty?

Consequence value

Risk level: high or low risk?

Modelling risk



Why would this company decide to pay?



1) There *may be* a product defect (likelihood: probability/frequency)



2) There *may be* an obligation to pay (legal uncertainty?)

Legal uncertainty



Legal assessment of “facts”: No causality, reasoning!

- If this happens, must we pay for it and how much?

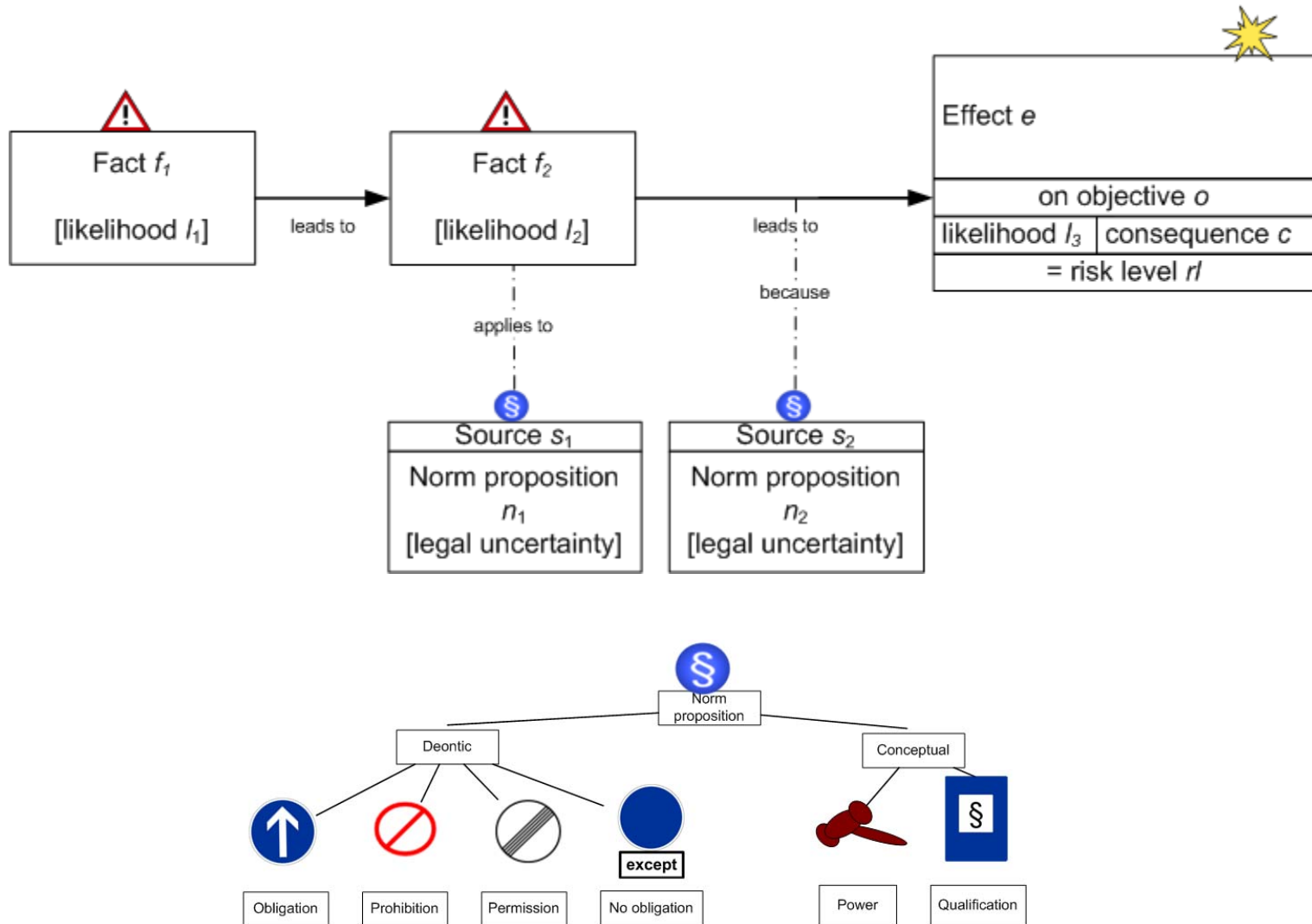
Likelihood?

- Norms have no truth value and can't be likely or unlikely
- Norm proposition can be likely
 - Descriptive statement about norm
 - You are *probably* obligated to pay.
 - Likelihood of the proposition being affirmed by competent lawyers
- *Limitation*
 - Does not state for what *reason* is this uncertain. Incomplete information?

Lawyers' **alternative strategies** to communicate legal uncertainty

- Open legal questions
- Describe *reason* for uncertainty; mention aspects on which the result of the legal assessment depends

Modelling legal issue and risk



Case study results

- **Case study**

- Large industrial contract, long-term commercial relationship; trust?
- Risk assessment from one contractor's perspective
- Collaboration between lawyers, managers and engineers

- **Evaluation**



- Lawyers were able to prioritize better, based on understanding of *factual uncertainty* 😊



- Graphical modelling of *norm propositions* increased understanding by non-lawyers 😊
- Modelling of legal uncertainty: inconclusive
- Time consuming! OK for selected large scale contracts

A word of thanks

- To the audience, for your attention
- To the ENFORCE project members, for extremely helpful discussions and advice