



IRIS



VCE

Vienna Consulting Engineers

UN Spider Köln 13. October 2010

IRIS

**Integrated European Industrial Risk
Reduction System
Large Demonstration in Hungary 2011**

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Basic Figures:

Start date:	1 October 2008
End date:	31 March 2012
Duration:	42 months
Budget:	13 000 000 €
EC contribution:	8 500 000 €



August 1st 1976 – August 1st 2007

- | How to predict ?
- | How to avoid ?



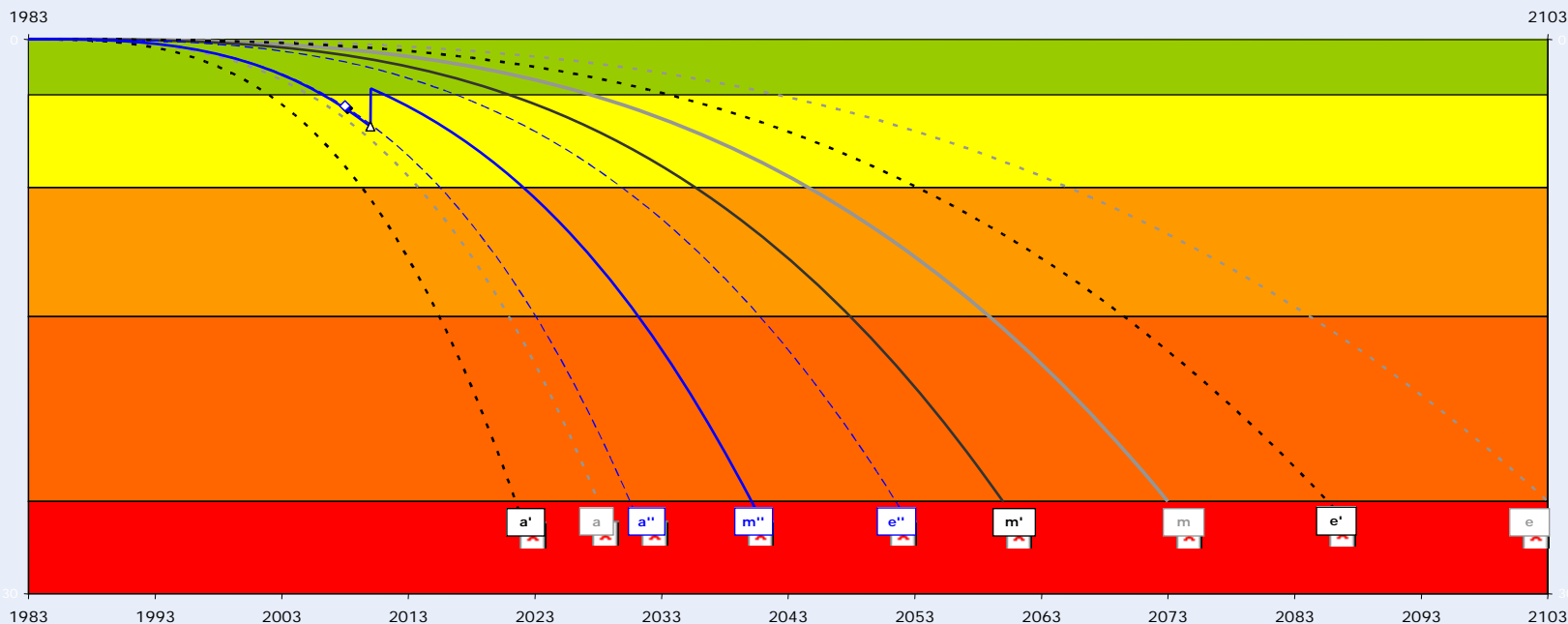
Vienna, Reichsbrücke (built 1936)



I-35 Bridge Minnesota (built 1967)

Bridge Object 1618-150
Global Lifeline (Safety Level regarding ULS)

Enhanced Model incl. Maintenance Intervention => Range of Life Expectancy 48 / 58 / 68

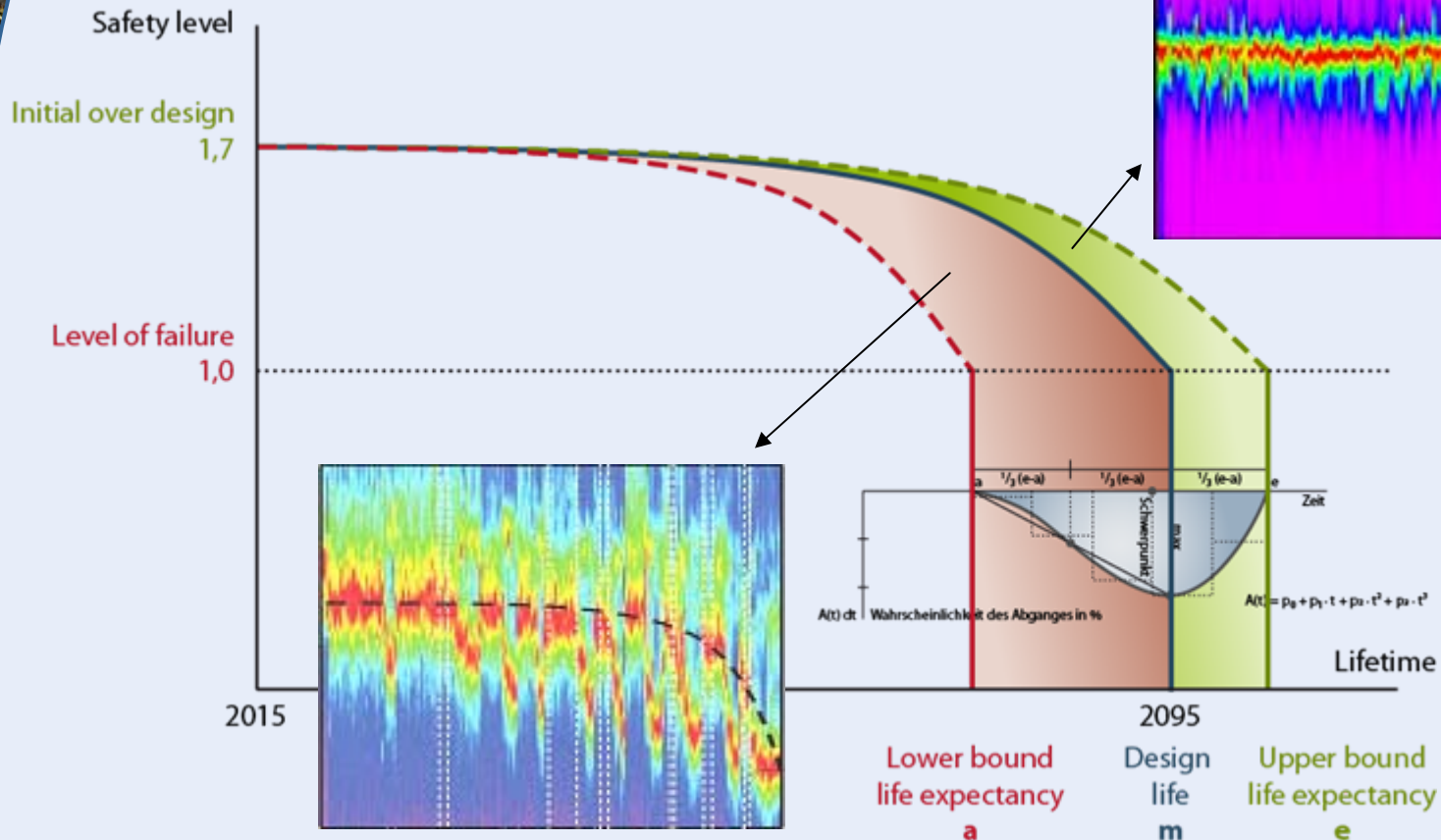


a ... lower bound life expectancy
m ... average life expectancy
e ... upper bound life expectancy

a' ... adapted lower bound life expectancy
m' ... adapted average life expectancy
e' ... adapted upper bound life expectancy

a'' ... enhanced prognosis lower bound life expectancy
m'' ... enhanced prognosis average life expectancy
e'' ... enhanced prognosis upper bound life expectancy

Expected (analytical) lifeline of EXISTING structure ... validated with BRIMOS & bridge inspection





Nuclear Containment



Toxic Chemicals – Pipe Reactor

Platform
19.5m



Tailing Ponds





We offer:

| **Decision Support**

| **Management tools**

| **Prediction tools**



We **need**:

- | **Information,**
- | **actual and historic**
- | **Integration into ongoing activities**

IRIS Safety Culture

