

Risk, Resilience and the Risk Engineering Body Of knowledge

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Theme: - Risk engineering and engineering innovation.

Abstract:

The related concepts of Risk and Resilience are aspects of the risk engineering body of knowledge that require further discussion.

This presentation contributes to the discussion and goes some way to contextualise these concepts so that they can be presented as part of the risk engineering body of knowledge. What is "Risk", what is "Resilience" and how do they relate to problem solving and other terms used in the profession.

"Risk" is defined by many but the definition of "Resilience" is still being debated. The relationship can be considered in simple linear terms but the whole concept of "risk and 'resilience'" is applied by engineers in a complex environment where linear thinking is inadequate.

This paper presents an argument that the relationship is not part of a linear or circular problem solving process. It illustrates that the concepts are related but interact at a complex range of points of consideration and presents a set of familiar terms that are part of the problem solving process.

It is intended that this presentation challenges us to re-think these concepts.

Key Words

Risk, Resilience, Reliability, Vulnerability, Contingency, Loss, Failure, Consequence, Prevention, Knowledge, Problems, Solutions.