

Case Studies.

Different alternatives

1) Analysis of fault tolerant technology.

The Case Study should cover the following:

- Technology overview
- Historical perspective
- Main principles and technical details
- Example of implementation
- *State-of-the-art*
- Summary

2) Accident/incident analysis:

The Case Study should cover the following:

- Overview
- Identify root cause and discuss contributing factors
- Explain the chain of events
- Which processes and methods (with emphasis to the computer-related items) were not adequate or faulty. Where the mistakes were made?
- What lessons have been learned? Has there been any recommendations or changes in procedures?
- How similar events can be avoided in the future (systematic methods)
- Draw „fault tree” or „event tree”. Max. 1 page.
- Is there a possibility to determine SIL? How?
- Summary

3) Analysis of a safety-critical system:

The Case Study should cover the following:

- Overview
- Use cases
- Risk in different modes of deployment. Which risk reduction techniques are in use?
- An overview of implementation techniques (how and why?)
- How has fault tolerance and reliability been addressed?
- Which safety methods have been implemented?
- How the system has been validated and verified?
- Has there been any standards followed or certificates obtained?
- Summary