

## Discussion

- What are the needs and key problems from the end user point of view?
- Where do we want to be after 1, 2, 5 years? What could be realistic goals? Which steps are needed to reach the goals?
- Other related matters (e.g. outside of the PSA context) to be taken into account
- How would you like to contribute to a joint mission?
- Planning of the WGRISK-activity
  - seminar 2011
  - development of a generic example

## WGRISK DICREL task conclusions 2009

### Method Development

- Develop a taxonomy of hardware and software failure modes of digital components for common use
- Develop guidelines regarding level of detail in system analysis and screening of components, failure modes and dependencies
- Develop approaches for assessing the impact of failure modes of digital components
- Develop methods for estimating the effect of fault-tolerant and fail-safe features of a digital system on the reliability of the system's components
- Develop methods for analyzing software reliability
- Evaluate the need and approaches for addressing dynamic interactions
- Investigate alternative reliability analysis methods for digital systems
- Develop methods for modelling of CCF between components (including software) in a DIC-system
- Develop approach for defining reliability requirements for DIC-systems
- Address human-system interfaces unique to digital systems and associated human reliability analysis

### Data Collection and Analysis

- Collect hardware failure data, including common cause failures, that can be used for PRA purposes
- Use operating experience for identifying software failure modes to be included in reliability models

### Quality Assurance

- Develop guidelines for quality assurance of a reliability analysis of a DIC-system

### International Cooperation

- Sharing approaches, methods, probabilistic data, results, and insights gained from relevant projects
- Performing benchmark studies of existing reliability analyses of DIC-systems