Criteria for selecting scenarios

Scenarios for the purpose of the method should take into consideration the following characteristics:

- **Failure of barriers** I.e. accident scenarios involve failures in several safety barriers.
- **Feasibility** I.e. scenarios must be physically possible in the process in question.
- **Acceptance** I.e. scenarios must be accepted as possible by the participants in the analysis.
- **Hazard potential** I.e. the scenarios should have a potential to cause major accidents or installation damage. Environmental pollution should be evaluated.
- **Operator involvement and stress** I.e. the scenarios must involve control room operators and cause stress. Consider situation when one of the CCR operators is missing, and/or a peak work load.
- **Real situations** It is an advantage if the scenarios are based on situations that have occurred on installations in the North Sea as far as possible. This implies that one cannot argue that the scenarios are *"unrealistic"*, *"impossible"* or *"cannot happen here"*. Also, real scenarios illustrate relevant time constraints in handling the situation.
- **Different scenarios** I.e. the scenarios should not be too similar, so that different aspects of the control room may be addressed.
- **Width and depth** I.e. at least one "width scenario" and one "depth scenario" should be carried out. Width means involvement of several persons, parties and other factors where multiple conditions are analysed over time all the way to an emergency situation. Depth means covering special functions isolated, i.e. not involving emergency team and external groups.
- **Human error** Human error should be vital for the outcome of the scenario. It should be of great importance whether the operators make errors or executes the correct actions. The scenario should "provoke" the participants in such a way that they don't feel comfortable with the selected solutions. In this way focus is always on making improvements.
- **Specificity** The chosen scenario must be specific for the installation in question. This is to ensure that one exposes weak points on the control room in question.
- **Complexity** To make sure the operators are stressed the chosen scenarios should be sufficiently complex. Simultaneously operations/incidents, extensive communication and fallacy of multiple safety barriers are key words.
- **Emergency preparedness** At least one scenario should be pursued to emergency preparedness, where the crisis team and the emergency organisation take control of the situation, se figure 5.4 below.