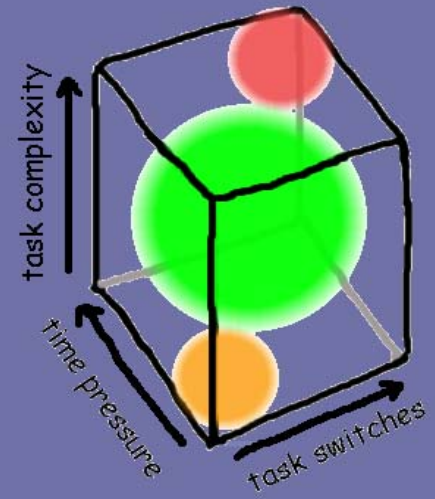


Critical Scenario Analysis

Workshop results group 3

TNO Human Factors



Situation Awareness Bottlenecks (task and context)

- Loss of visibility on a plant. No high workload due to lack of options, just restoring normality. High level of information processing and time pressure. No task switching problems.
- Loss of power in a prison. Failure of back-up system. High level of task set switching and very high time pressure due to rioting and starting fires. No procedures for failure of the safety system.
- Demister fire. No alarm in control room, fire spotted by operator. No disturbance assessment, goal was stopping the fire.
- Release to air

Disturbance Assessment Bottlenecks (task and context)

Decision Making Bottlenecks (task and context)

- Loss of power on a ship. Problematic in the Channel with busy traffic. Procedures are available but hard to apply due to time pressure.

Direction and Control Bottlenecks (task and context)

- Air Traffic Control. Loss of separation (between planes). Operator not using special prescribed language. Avoiding action.

Combined Bottlenecks (task and context)

- Suicide attempt, control of runaway train. Pressure to keep things going. Problems mainly with Disturbance Assessment (did the driver miss or ignore the red light) and Decision-Making (turn all lights to red, turn next signal to red).
- Fire and explosion at airport. One single or two different events? Situation awareness problems. Complex Decision-Making due to large amount of information and possible consequences of actions. Time pressure. Evacuate? Interagency. Many tasks to do: prioritize, task switching.
- New process/new job. High demand due to complexity/novelty of tasks.