Project title: Visualization of Scenarios for Decision Support.

About Thales Nederland: Thales Nederland is the Dutch branch of the international Thales Group. The company has about 2,000 employees working at branches in Hengelo (HQ), Huizen, Houten, Delft, Enschede and Eindhoven. Thales Nederland specializes in designing and producing professional electronics for areas such as national security and public transportation.

Background area: The Delft branch (Thales Research & Technology Delft) hosts research activities in the areas of Multi-Agent Technology, AI Fusion, Decision Support, Autonomous Systems and Human Factors. In particular, the area of Decision Support focuses on the topic of Scenario-Based Reasoning, which is an approach that supports decision making in complex and uncertain situations by organizing the uncertain information in the form of “scenarios”. Potential application domains for Scenario-Based Reasoning include crisis / emergency management, crowd management and intelligence analysis.

The assignment: As part of the research activity in the area of Decision Support, a demonstrator for Scenario-Based Reasoning is being developed. The assignment includes (i) researching existing visualization techniques / tools that could be used to visualize scenarios, (ii) implementing a suitable visualization that represents scenarios and the main features of the Scenario-Based Reasoning approach in the demonstrator, and (iii) contributing to the research into the reasoning processes and technologies involved in the Scenario-Based Reasoning approach.

Required experience: Programming in Java (Swing/JavaFX): must-have. Experience with visualization techniques / software: nice-to-have. Previous experience with Decision Support techniques / tools is not required.

Study area: Computer Science (Bachelors / Masters level).

Assignment location: Thales Research & Technology Delft.

Proposed starting date: As soon as possible, or determined in agreement with the student.

Project duration: 6-9 months.

Contact person / Project supervisor: Claudine Conrado.

If you want to apply for this assignment, please send an email to claudine.conrado@d-cis.nl with your attached CV, stating the motivation for your application.