In the research program ‘Command in NCW’ we analyze and test command concepts for coalition-based operations in a network-centric mission environment. The program studies in an operational context with operators from different nations how well networked information is being processed and used to achieve the mission in a joint operation.

In an experiment at the Netherlands Air Operations Centre with two Dutch, two Swedish air defense command teams perform a simulated Air-Navy joint operation, in a hierarchical and a devoluted level of authority condition. In the devoluted authority condition horizontal synchronization initiatives (with the naval component) are required for optimal mission success. Critical issue is how well both air defense teams integrate the networked information, take initiatives to use the naval capabilities for their purpose, and self-synchronize their actions with the naval component. A broad set of measures is used to assess situation awareness, individual and team performance, personality characteristics, and mission effectiveness.

In the presentation we will discuss the experimentation in this complex, realistic setting, the measurement of networked performance, and effects of experience in realizing effective networked operations.