Manning and Automation, 8 juni 2017

Innovatiemarkt

Met een grote diversiteit aan stands op de innovatiemarkt krijgt u inzicht in wat er aan onderzoeken, studies en projecten gebeurt op het gebied van Manning & Automation bij de verschillende partners. Een blik vooruit naar de mogelijkheden voor de schepen van de toekomst.

Functional Integration for Future Ships	The Royal NL Navy formulated the following challenge: “Research and develop new ways of cooperation between humans and systems and between systems themselves to achieve the mission goals of future ships with reduced complements.”
Goal driven resource scheduling	Based on mission goals, an optimized plan for resources and tasks is generated autonomously using utility functions. The concept of utility based reasoning is demonstrated for engagement management.
Command Advice **Battle Damage Repair Manager**	The BDR Manager supports managing incidents and defects due to damage during operations. Enhancing situational awareness for the internal battle, resulting in a reliable and quick command advice
Mobile Support Tool	Software demonstrator, supporting information exchange between mobile operators and Defect Managers within the BDR chain during repair and blanket search. The mobile tool supports voice command and smart environment interaction.
GAUDI **Gemeenschappelijke Architectuur door Defensie en Industrie**	GAUDI offers an open network and information architecture for integrated combat, platform and bridge management systems.

Exploring Submarine Command Center Layout	Potential opportunities for teamwork when a hull-penetrating periscope is absent. Concept layouts compared for upper and middle deck and innovative ways of information presentation are explored.
Signature Management	Providing real time awareness and generating autonomously advices to the crew to optimize the multi-domain signatures of a naval platform.
Multitouch display - **Electronic Incident Board** - **Automated Decision support** - **W-ECDIS** - **Voyage Planning station** - **IPMS**	• Maximizing internal situational awareness, Real-time incident overview on multi-touch screens, Automatic plotting of smoke, fire and flooding • Adaptive advice for incident management, reducing operator load • Improve planning process efficiency • Intuitive touch operation, plan like using your tablet • Securing maximum residual capability
DINCS **Autonomous, Adaptive, Aware**	Sensor, weapon and command systems have a high dependence on platform support systems. DINCS offers timely and efficient reconfiguration of these platform support systems in case of malfunctions or weapon-induced failures to maintain as much of the ship's fight-through capability.
ASCI **Automated Surface Classification & Identification**	Building on THALES,TNO and Royal Netherlands Navy experience, ASCI investigates novel architectures for classification & identification of surface threats in support of the upcoming RNLN's ship replacement programs.
Technische Security Oplossingen **Demo-highlight Secure Gateway**	Securing any maritime information exchange for future platforms. The realization of the secure gateway enables: • Secure information exchange between systems • Protection of systems against cyber attacks
GUARDION **Integrated Mission Environment**	Guardion integrates information and adds functionality. It supports the foundation of command and control on board and supports the crew to effective and efficient execution of their tasks.

SYNERGIA **Building Software Together**	Common functionalities are developed together by JIVC/SATS and Thales. Both partners benefit from each other's qualities and resulting products can be added to their portfolios.
CORE **Control Organization Research Environment.**	To support customers with initiating innovation, to improve the demonstration of developed concepts, and to facilitate evidence-based research, TNO created CORE.
Augmented Reality – Navigation	Accelerates the buildup of situational awareness on the bridge of future ships by projecting an informative layer over the outside view.
SWACOM **Swarming & Combat Management Integration**	Definition of feasible concepts for integrating drones and combat management
Operation & Maintenance Support	Allow an ever evolving demand, insight and IT development to easily integrate on your asset. Enables a.o. portable devices, navy specific applications, remote support, and condition-based maintenance.
IN4STARS	IN4STARS2.0 speeds up the decision process with greater quality and accuracy. Supporting analysis of complex situations, delivering information products to the users significantly faster, across system boundaries while respecting security requirements.
3D laser scanning & 3D modelling	Measure and model your project in 3D. Using laser scanners and photo equipment, the 3D measured point cloud is processed to 3D models or other end products.
Autonomous Ship	Developing a technical concept for the operation of an unmanned ship at the North Sea with a collision avoidance and situational awareness system
HMI Guideline Library	A shared library is set up to provide developers with the foundation for defining requirements and designing a uniform cross-platform HMI. It contains knowledge of operational demands, human factors aspects and envisioned technologies.