### **HC MARINE – Integrated Navigation and Management system**

Compact solution for both civilian and military small to medium vessels

HC MARINE is a fully integrated platform for Navigation and Management in real time as well as Analyze of collected information

- All functions are seamless integrated in one application with the possibility to split functions over several workstations sharing the same information
- Our Chart engine and Graphic viewer are developed for high speed performance, clarity and reliability
- Standardized and modular architecture permits cost effective scalability, integration with external systems and customizing
- Vector charts according to IHO S-57 Transfer Standard and IHO S-63 Data Protection Scheme secure the supply of charts covering the whole word



## **HC MARINE – Advanced Navigation system**

Safe and reliable navigation in the archipelago and at open sea



HC MARINE is developed for navigation and safety requirements according to the IHO ECDIS standard

- Combination of graphical and alphanumerical presentation together with audio alarms for critical events and exceptions makes the navigation safe
- Multiple sources for own position and ship data as well as multi channel track of AIS and Radar tracks secure safe positioning relative surrounding vessels
- Advanced route tracking with automatic calculation of Wheel Over Position,
  CPA and arrival zones together with the optional use of the autopilot control
- Graphical route planning with automatic warning for hazards in user defined safety zones enable safe, fast and easy planning of the route

### **HC MARINE – Comprehensive Management system**

Compiled situation picture and analyze of collected information

HC MARINE is designed for best visibility and cost effective flexible integration of external sensors and systems

- Tactical Situation Picture built up from collected external sources such as tracked targets, radar, sonars and manual defined targets
- Continuously tracking of targets position combined with visual and audio alarms for individual targets sensor and weapon ranges
- Time controlled user defined objects such as points, lines and areas with individual speed and course as well as alarms for defined safety and CPA range
- Graphical and alphanumerical tools makes it possible to evaluate exercises and other situations from collected information



# **HC MARINE – Complete solution for small and medium vessels**

Scalable and extendable platform for maritime navigation and management

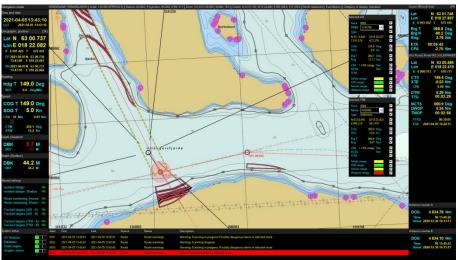
HC MARINE has a flexible architecture suitable for very small up to large environments with several simultaneous users



- From a single laptop up to network based client server solutions which enable users to share information and database but work with different tasks
- Client application is fully configurable at runtime allowing the users to switch tasks without closing down the client
- Server and client application are identical which makes it possible to scale up and extend the system without any need to change existing environment
- Modular and standardized architecture enables a cost effective solution for all needs to interface and connect external systems

# HC MARINE – One application configured and equipped for different needs

Standardized architecture enables low cost and fast development as well as reliable maintenance and support



Example of a Navigation configuration

#### **HC MARINE Workstation – All solutions**

- Microsoft Windows 10 Pro
- Microsoft SQL Server 2012 Express
- Intel (R) Core(TM) i5-6400 CPU
- Intel (R) HD Graphics 630 GPU
- Display resolution, 1920 x 1080
- Display colors, 32 bit
- RAM, 16 GB
- HDD, 500 GB
- Ethernet, TCP/IPv4

#### **HC MARINE Server – Enterprise solution**

- Microsoft Windows Server 2019
- Microsoft SQL Server 2012
- Intel (R) Xeon (R) Silver 4208 CPU
- Intel (R) HD Graphics 630 GPU
- Display resolution, 1920 < 1080
- Display colors, 32 bit
- RAM, 32 GB
- HDD, 1000 GB
- Ethernet, TCP/IPv4

