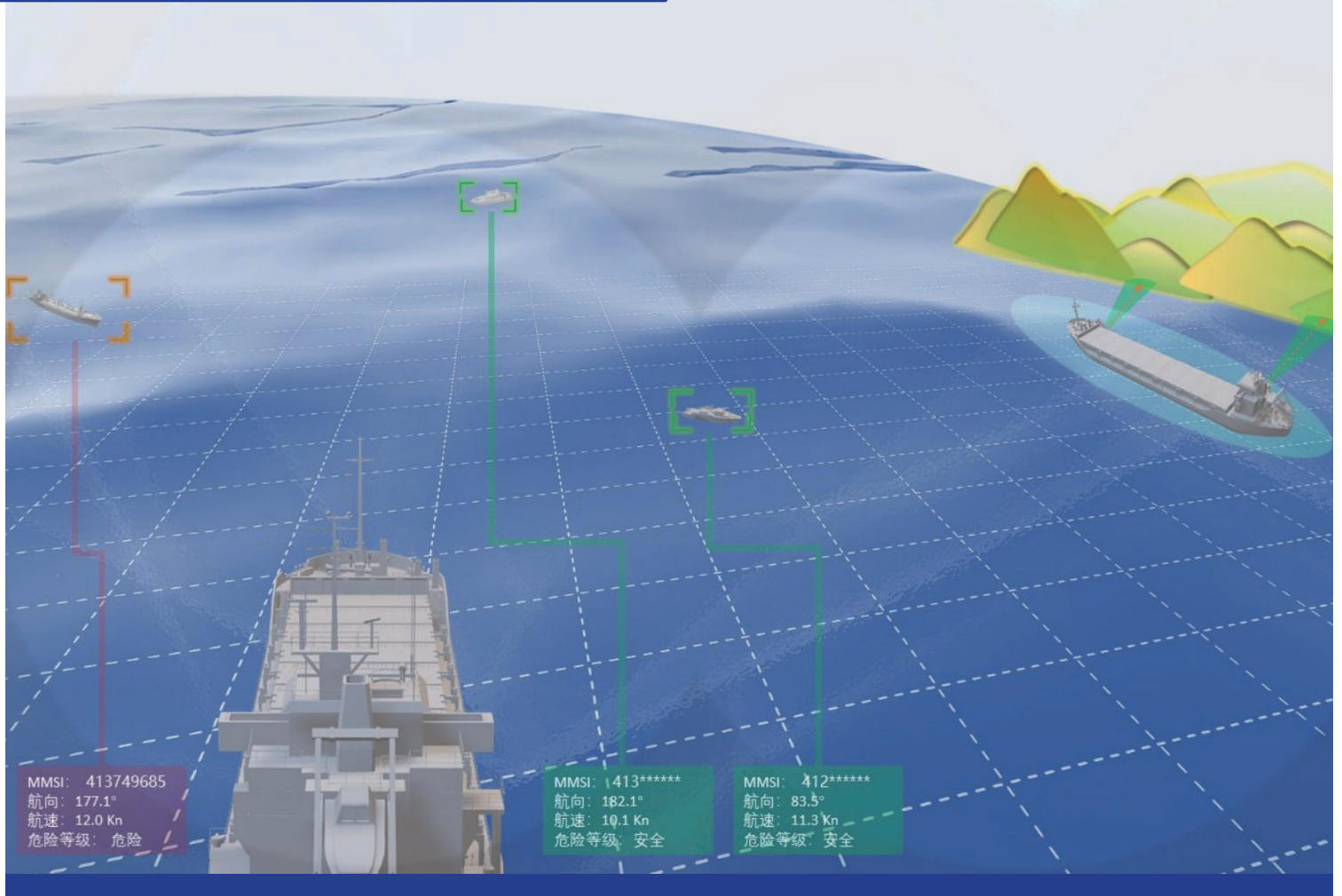


i-COMMANDER V2

HLD-ELS600



MMSI: 413749685
航向: 177.1°
航速: 12.0 Kn
危险等级: 危险

MMSI: 1413*****
航向: 182.1°
航速: 10.1 Kn
危险等级: 安全

MMSI: 412*****
航向: 83.5°
航速: 11.3 Kn
危险等级: 安全

INTELLIGENT NAVIGATION ASSISTANCE SYSTEM

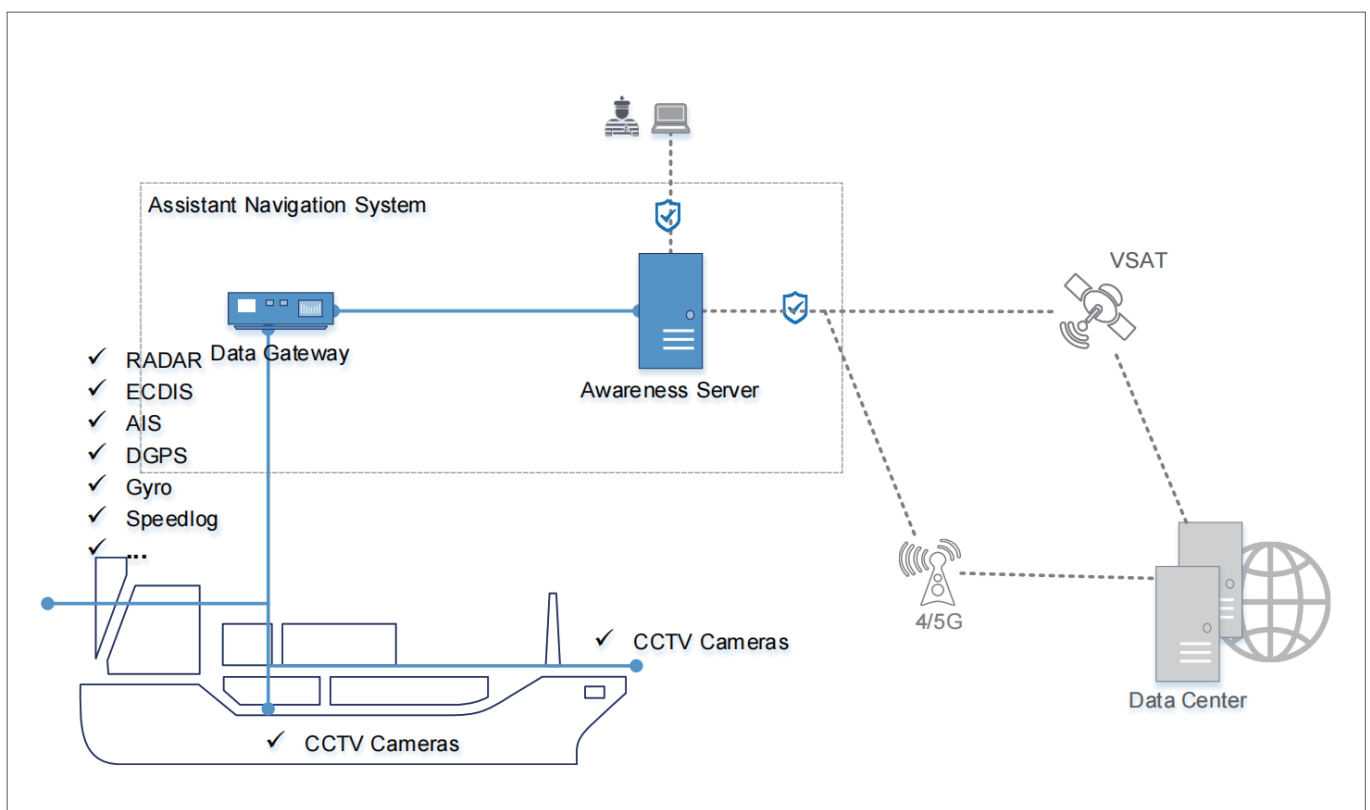
INTELLIGENT NAVIGATION ASSISTANCE SYSTEM

A. ARCHITECTURE

Intelligent navigation assistance provides enhanced lookout features. The system collects real-time data of navigation equipment and propulsion system through data gateway equipment. Enhance environmental awareness through data fusion technology; Observation and collision avoidance warning were enhanced by perception and recognition technology.

The system mainly accesses the lookout camera at the ship end and integrates information: ARPA target, electronic chart route information, AIS, position, heading, heading, ground/water speed, water depth, draft at four corners, wind speed and direction, etc. The system supports the access of microwave radar, infrared camera and other devices, which can expand more sensing capabilities.

The system can be seamlessly integrated with the Highlander intelligent integration platform, and after integration, the network and server computing resources of the platform can be shared to meet the requirements of digital security.



B. FUNCTIONS



H264
H265
IEC 61162-1 NMEA0183
other network protocols

- The system supports H.264/H.265 video streaming.
- The system can be integrated with radar, AIS and other multi-source target data.
- The system supports access to infrared cameras to expand more perceptual capabilities.
- The system supports operations in both Chinese and English to meet the user's usage habits.

ASSISTANCE LOOKOUT

The system accesses the video images of the cameras deployed around the ship, carries out target identification on the video images, and integrates with multi-source target data such as radar and AIS to provide target and information matching and dynamic superposition, so as to enhance navigation observation.

- The system supports a wide viewing angle of 180° horizontal.
- The system supports the identification of moving and static objects, such as ships, beacons, piers, etc.
- The system supports collision risk assessment and warning of surrounding ships.
- The system supports audio broadcast to remind crew to pay attention to collision risk.
- The system supports navigation assistance to assist the crew to judge the distance near the target.
- The system supports the picture-in-picture function and can track the locked target.



■ C. CONFIGURATION

Device	Description
Hardware	
Lookout camera	
Data acquisition unit	Supports data collection for interfaces such as NMEA0183
Switch	Fullgigabit,24 ports
Awareness server	8-Core CPU, 16GB RAM, 256GB SSD, 24" Monitor
Surveillance Camera	
Software	
HLD-ELS600	Enhanced Lookout



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