

Safety at sea – collision avoidance.

Digital Ship 2023 - Athens



Let's talk about improving safety at sea.



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Head of Surface Vessel Solutions

Hensoldt Optronics

We develop & deliver highly customized systems for military environment.



Space.



Air.



Land.

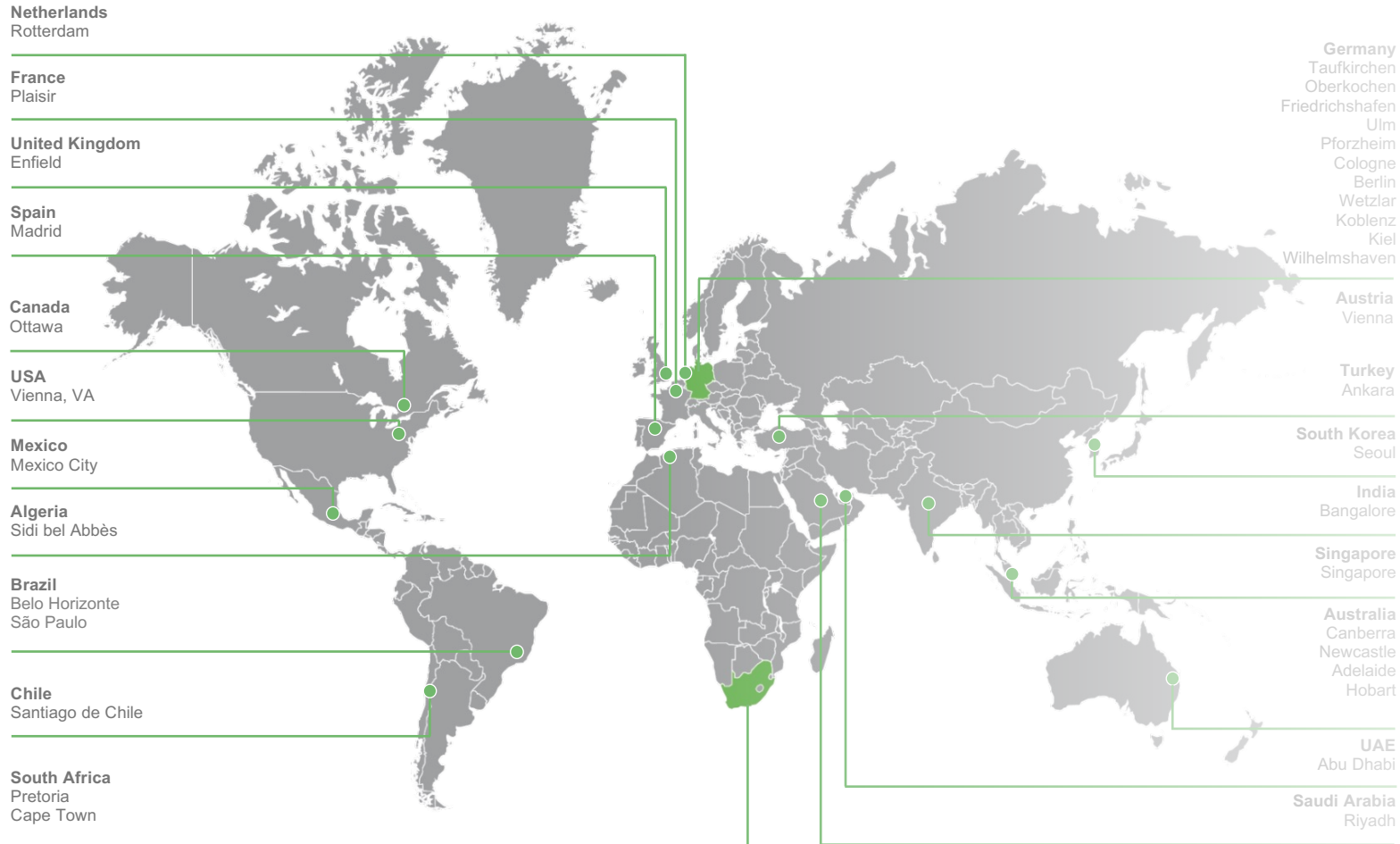


Sea.



Cyber.

We collaborate worldwide with the best partners in class.



Our business unit
for civil needs
at the sea

Agenda

1. I am on a MISSION
2. The power of military
situational awareness systems
3. Future perspective for civil systems
4. Get on board

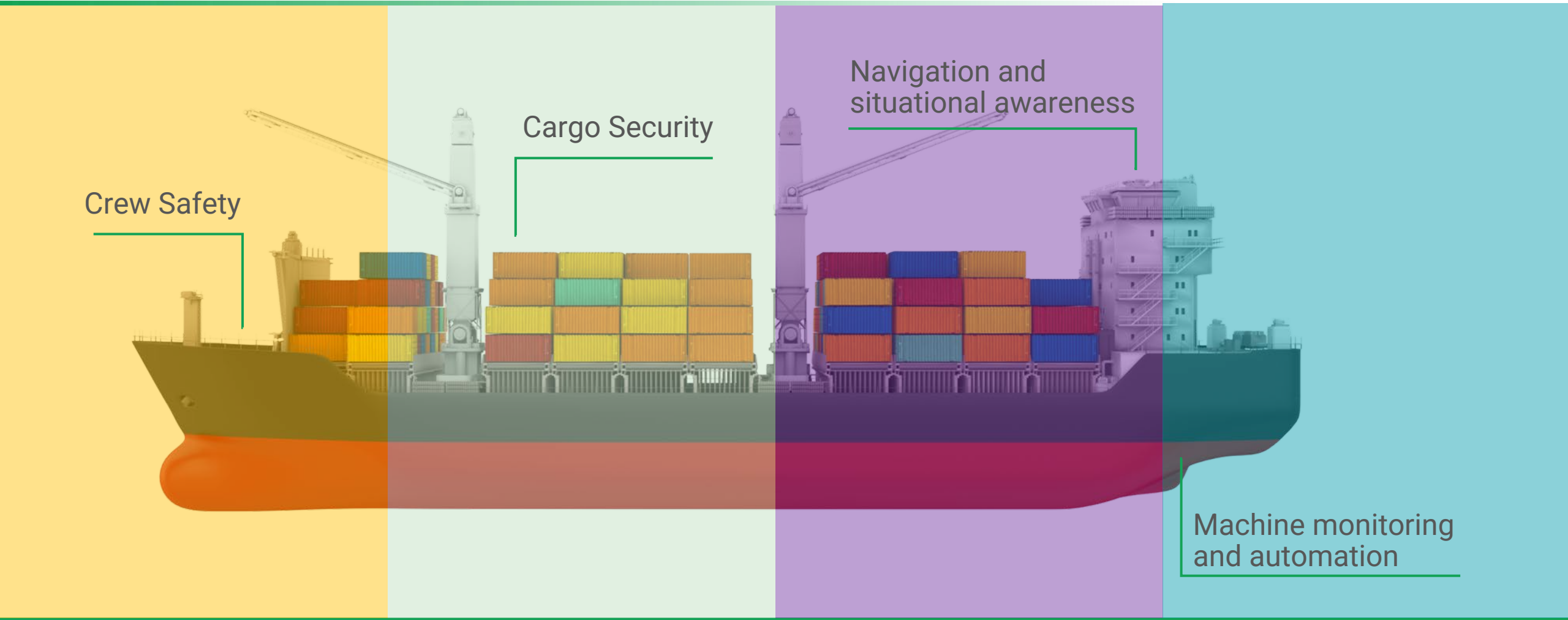


I am on a Mission.

Adapting military systems to civil needs.



Safety by digitalization & AI.



The sea is more crowded than ever.

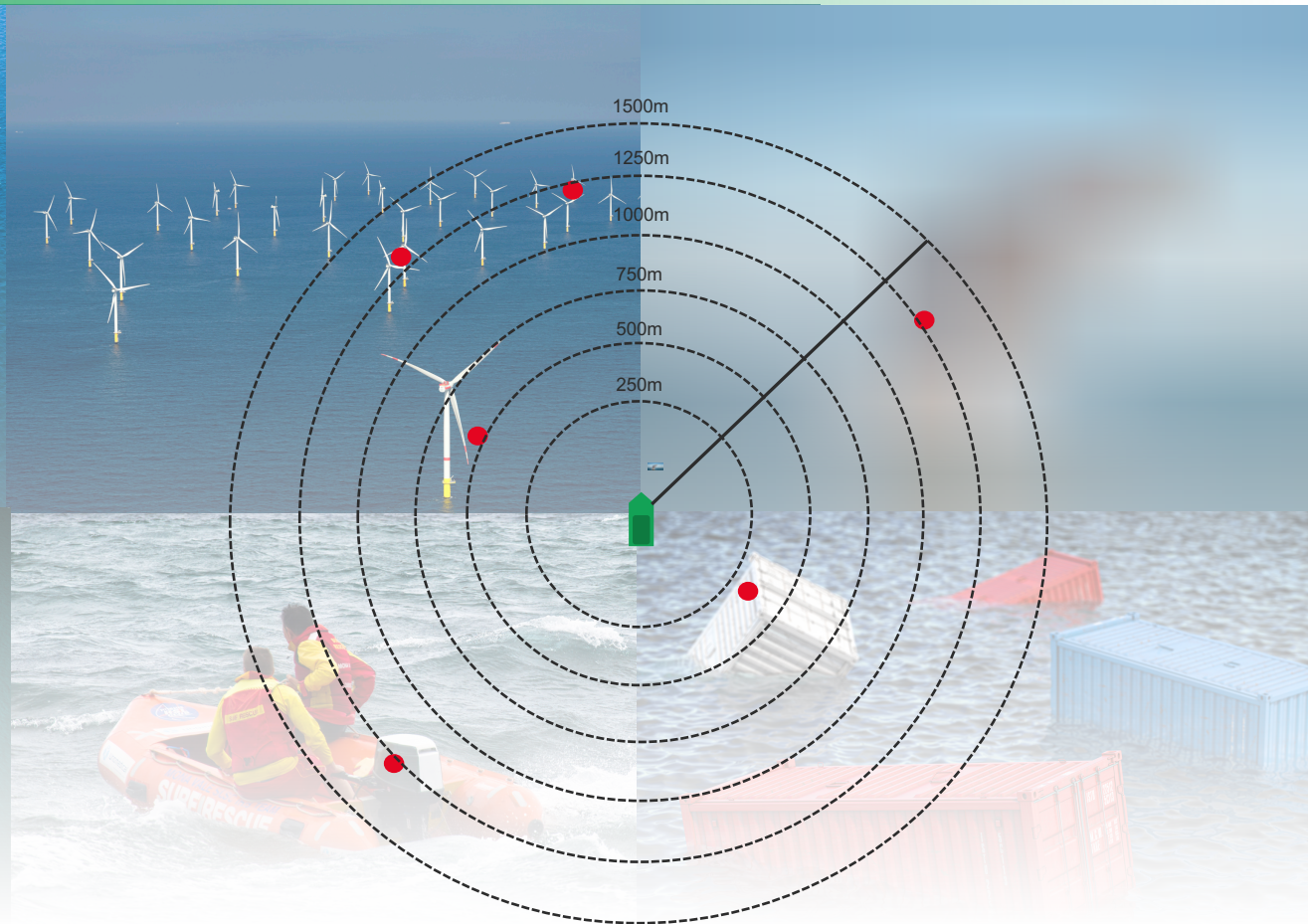
102,899 ships

according to


UNCTAD STAT 2022



Various objects can become a danger – or get in danger.

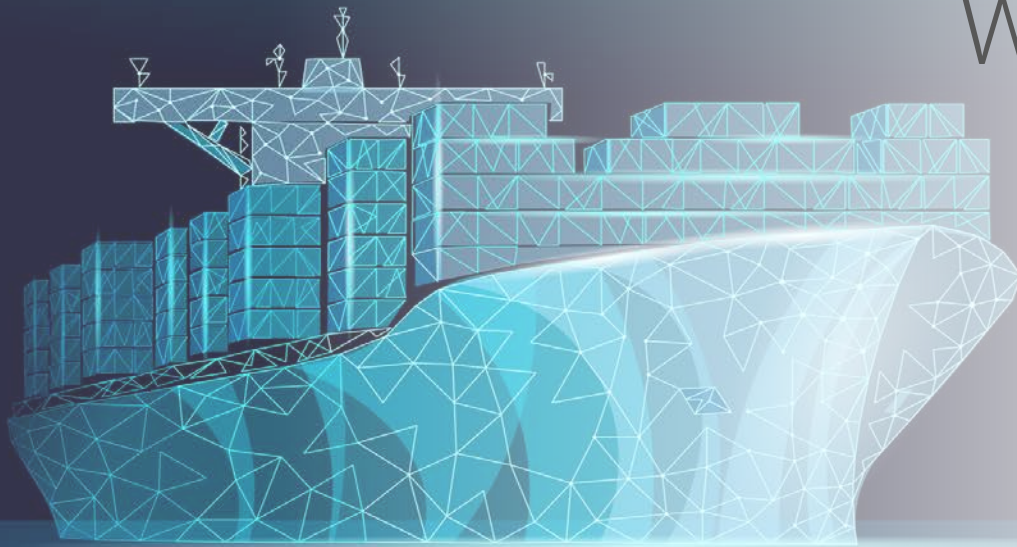


Status quo.



Operators spend most of their energy in observing and classifying objects on the radar 24/7.

Make a change.



We believe in the combination of optical systems and the power of AI for safe navigation.

Situation awareness systems by HENSOLDT.

MONITOR



DETECT/EVALUATE



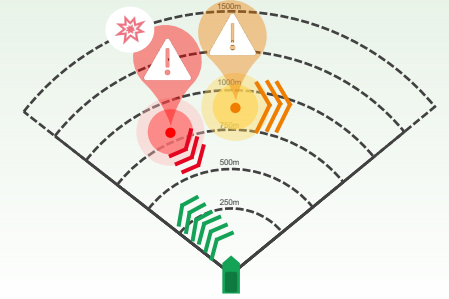
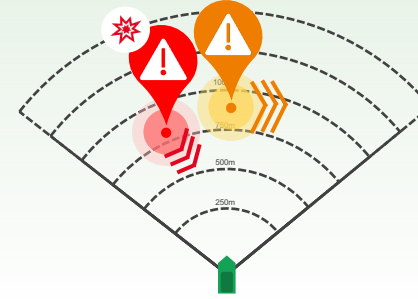
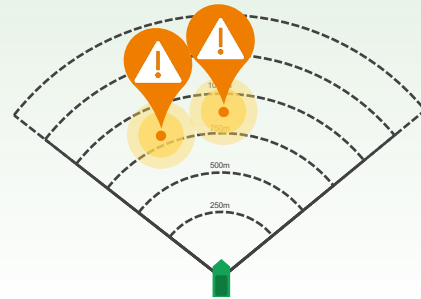
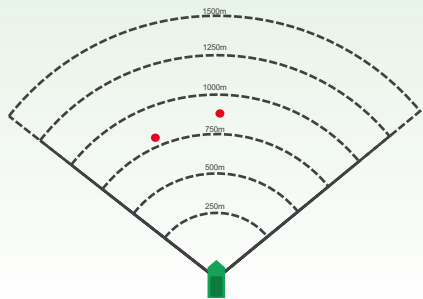
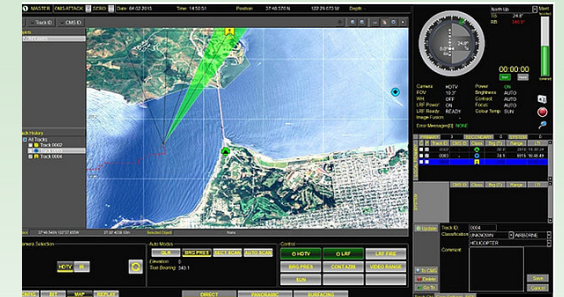
EVALUATE/RECOGNIZE



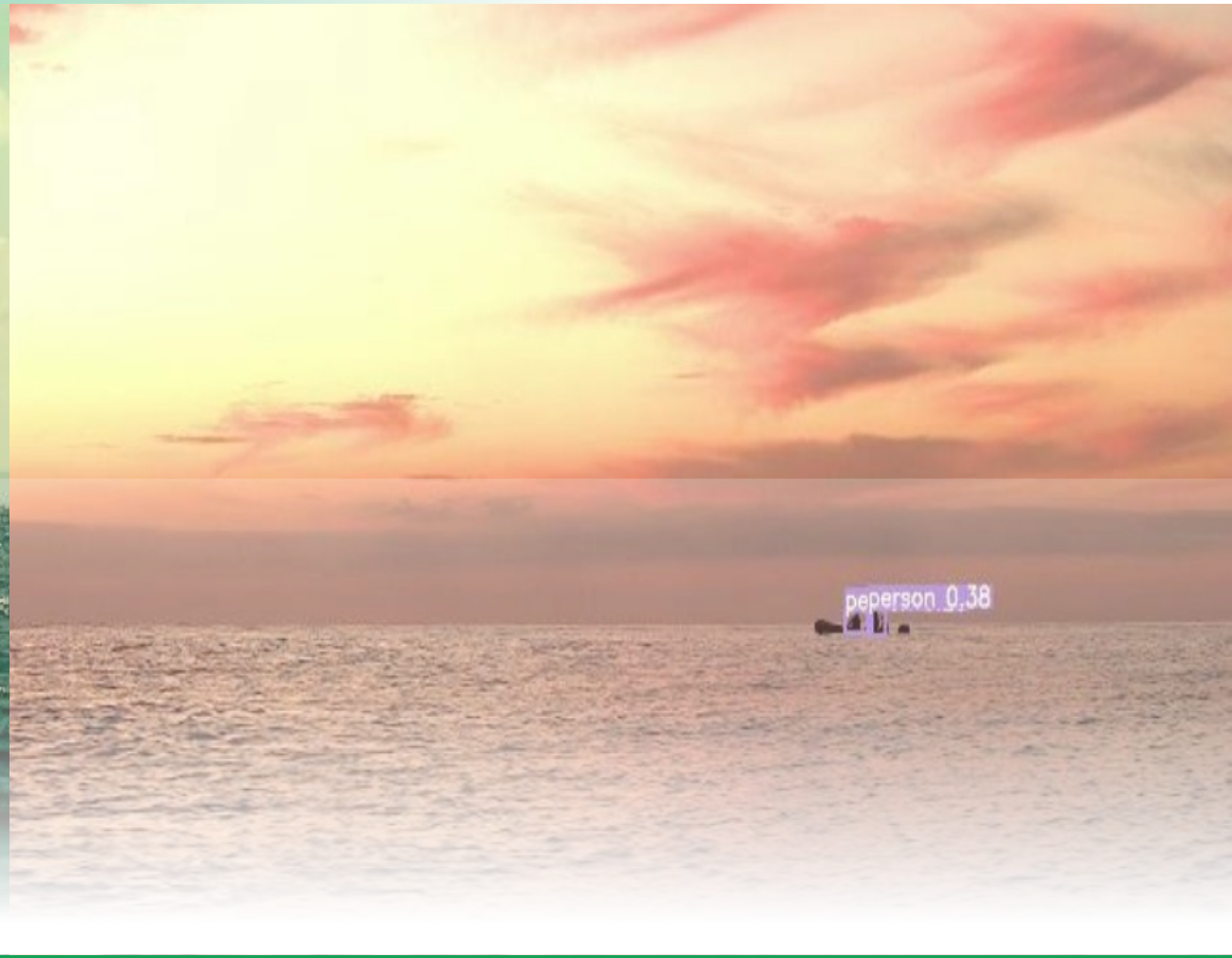
ADVISE



AI



Situation awareness systems by HENSOLDT.



Situation awareness systems by HENSOLDT.

Day-TV Camera



SWIR Camera



Infra Red Camera



Date: 2019-10-10 Time: 09:35:58 Position: 12.573868°, 175.352057°

System

SWIR	Power	On		
Error Messages	1	FOV	22.73°	
Cooler	Off	Brightness	Auto	
LRF	LRF Power	On	Contrast	Auto
LRF Ready	Charged	Focus	Manual	
Alpha Blending	Off	Color Temperature	---	

Line of Sight

TB	61.07°
RB	61.07°
Elevation	-10.32°

00:00:00

Start Reset

Auto Modes

LOOK ROUND	BEARING PRESET	SEARCH	SCA
Camera	HDTV	FOV	FOV
Elevation Start	- 2.00° +	Elevation Stop	- 10.00° +

Recording

Control

Cooler	Digital Zoom
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Config BITE Replay Direct Panoramic

Camera Settings Advanced Settings

Brightness Contrast Focus Focus 1

Gain Grey Inverse Edge Enhancement Histogram Equalization

Focus

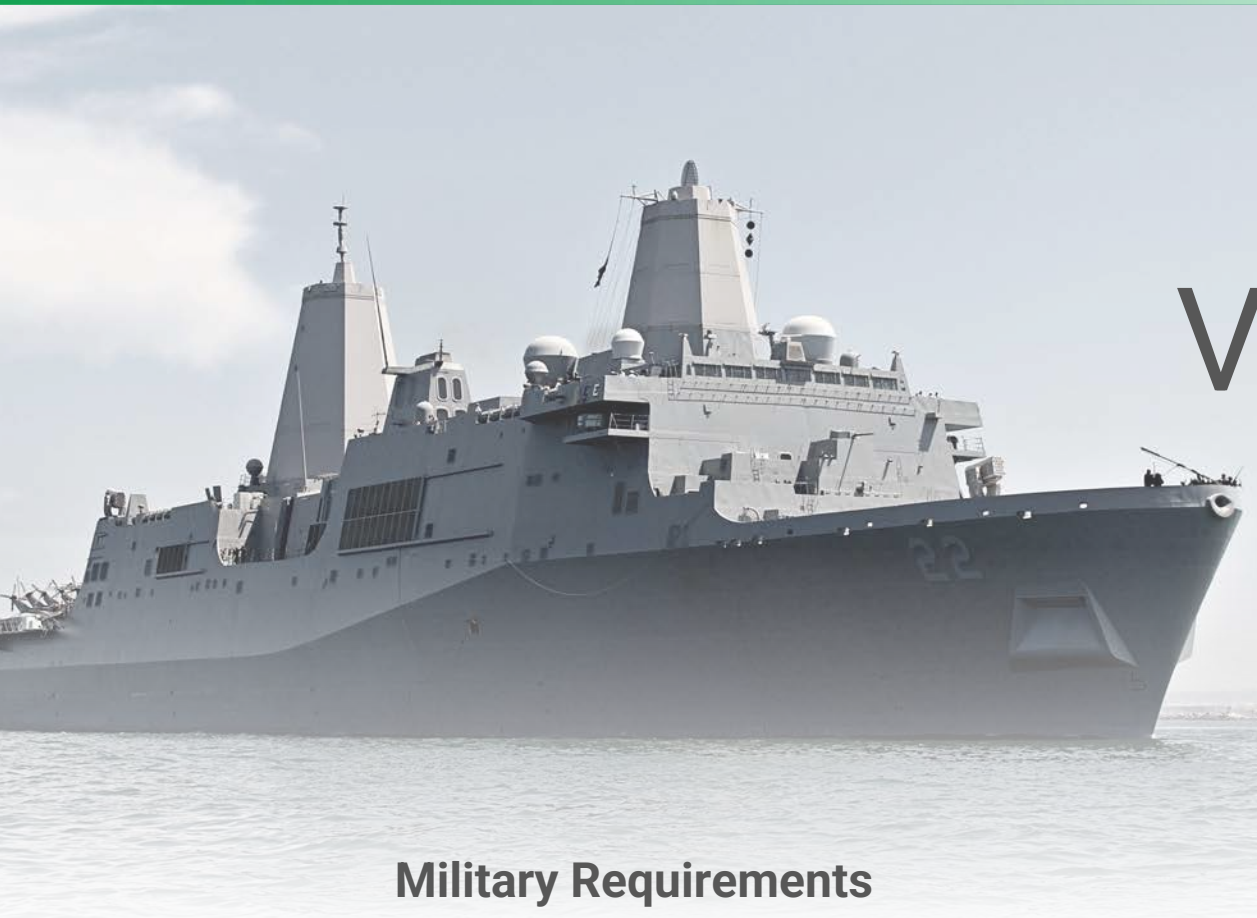
Alpha Blending Ratio	Reticle Illumination
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...Seeing is believing...



**Sensors + AI =
Realtime recognition & classifying of objects.**

The Challenge.



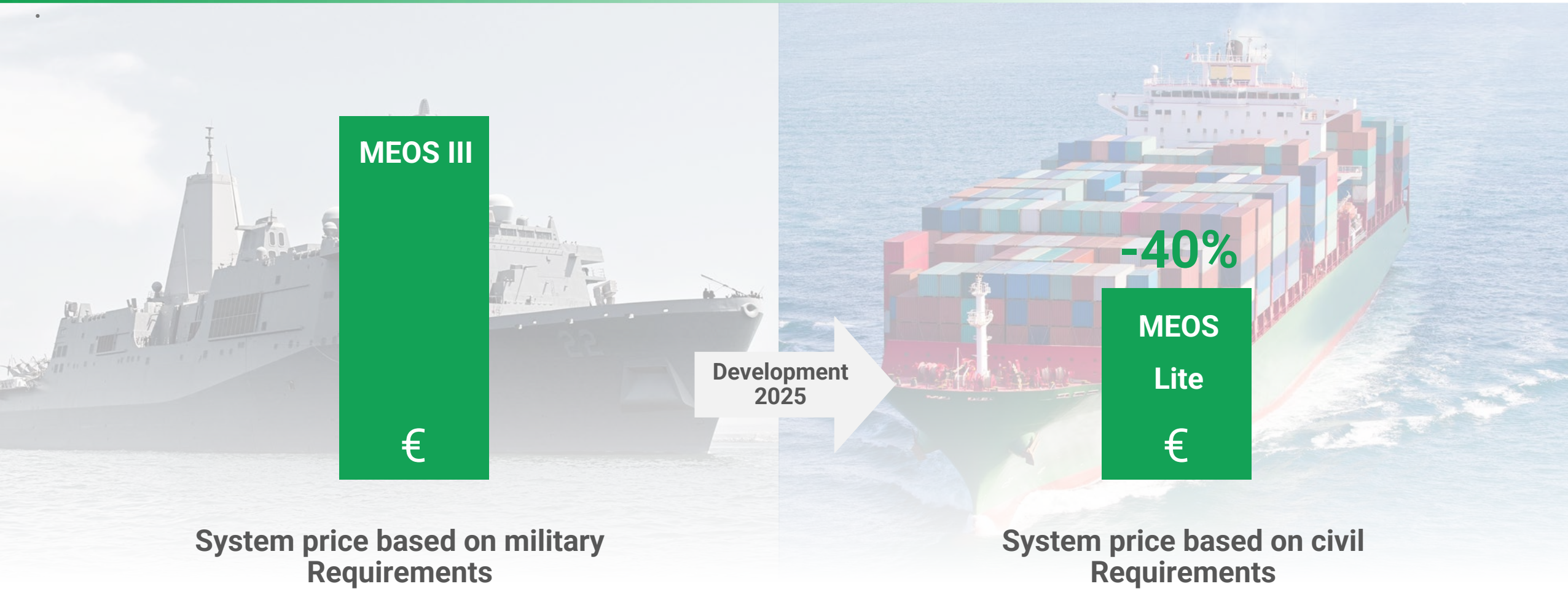
Military Requirements

vs.



Civil Requirements

Price perspective for civil awareness systems.





**Are you ready to collaborate,
and test the first civil prototype?**

Thank you for your attention!

