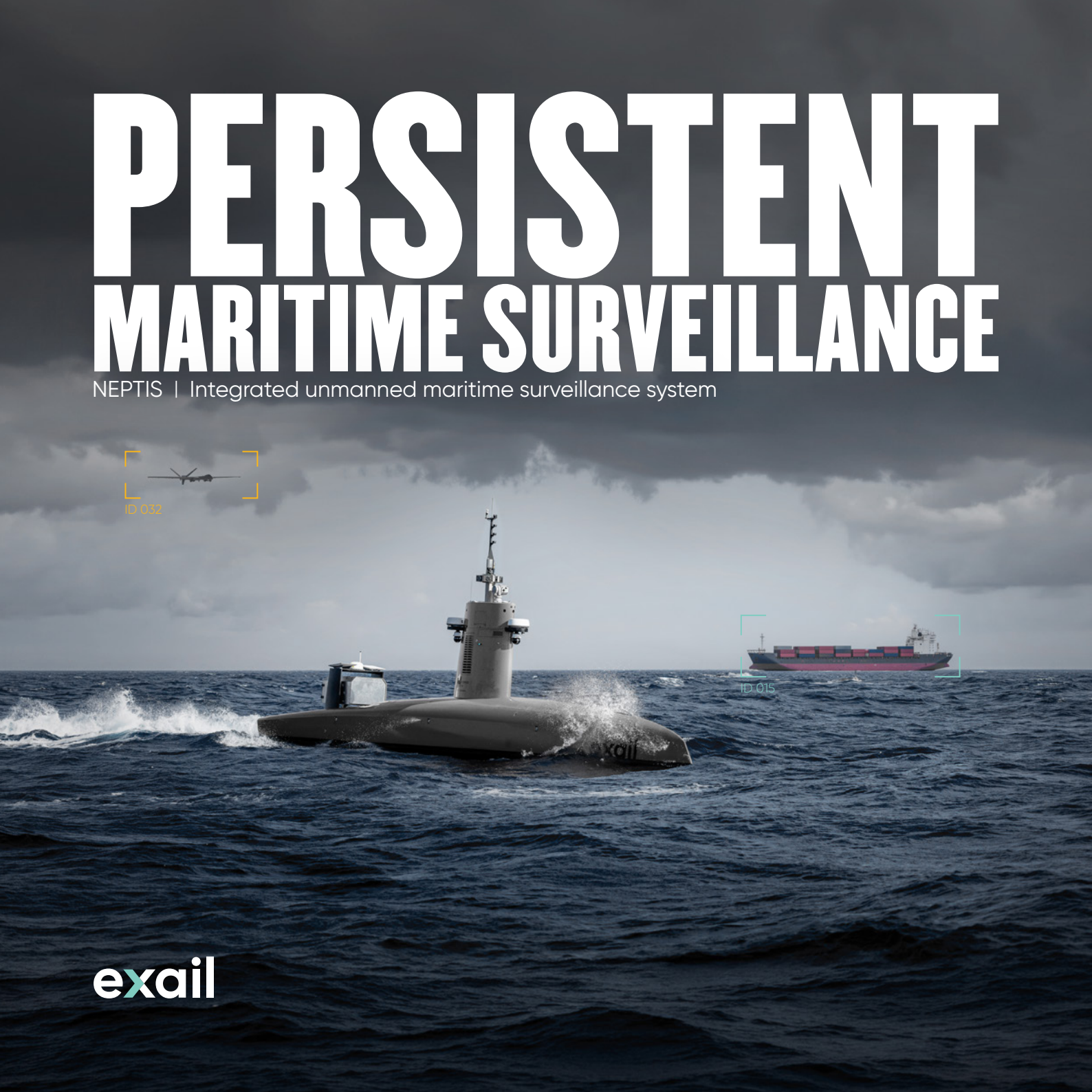
PERSISTENT MARITIME SURVEILLANCE

NEPTIS | Integrated unmanned maritime surveillance system



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A NEW MODEL OF MARITIME SURVEILLANCE

Modern naval operations demand persistent awareness across vast and increasingly contested maritime areas, above, on and below the surface.

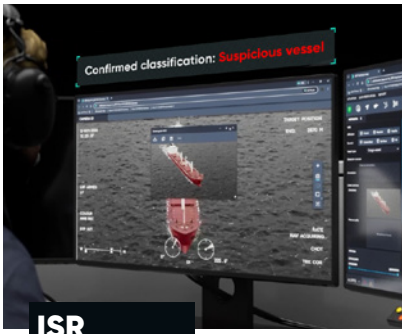
Neptis is a modular system-of-systems designed to deliver persistent maritime surveillance in contested environments. Combining long-endurance Uncrewed Surface Vessels (USVs), defense-grade payloads and a unified C2 software suite, it extends surveillance reach. By connecting distributed sensors into a coordinated capability, Neptis maintains persistent awareness and turns collected data into actionable intelligence — enabling faster, better-informed decisions while allowing crewed platforms to focus on higher-value missions.

EXTEND SURVEILLANCE REACH

DEPLOY SENSORS ACROSS MULTIPLE DOMAINS

Deploy single or coordinated Oryx USVs with defense-grade sensors to monitor large maritime areas simultaneously, above, on and below the surface.

CONFIGURE YOUR FORCE AROUND THE MISSION



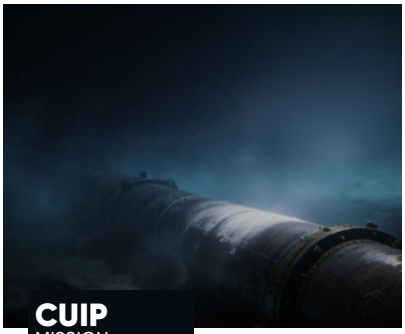
ISR
MISSION

Monitor maritime activity and detect suspicious behavior.



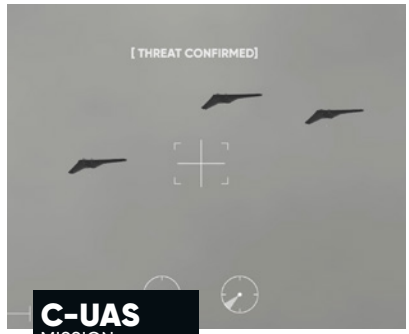
ASW
MISSION

Detect and track underwater threats across extended maritime areas.



CUIP
MISSION

Monitor activity around critical undersea infrastructure.



C-UAS
MISSION

Detect and track low-flying aerial threats.

MULTI-DOMAIN SENSOR PAYLOADS

- Radar
- EO/IR
- AIS
- Electronic Warfare (EW)
- Active sonars
- Towed acoustic arrays
- Underwater sensors

PERSISTENT AWARENESS

BUILT FOR RESILIENCE. KEEPING SENSORS ON TASK.

Oryx USVs combine long endurance, resilient navigation and supervised autonomy to sustain surveillance over extended periods, including in degraded operational conditions, while freeing crewed assets for high-value missions.



KEY CAPABILITIES

UP TO 30 days endurance

SEA STATE 7 demonstrated navigation and survivability

GNSS-DENIED
High-grade INS for resilient navigation

LOW DETECTABILITY
Reduced signature for discreet naval surveillance

SUPERVISED AUTONOMY
Autonomous mission execution under operator supervision

BUILT FOR CONTINUITY

ONBOARD REDUNDANCY
Redundant onboard systems supporting platform availability

RESILIENT COMMUNICATIONS
LOS/BLOS radio and satellite links supporting operations within and beyond line of sight

DISTRIBUTED RESILIENCE
Distributed sensing across multiple USVs helps maintain surveillance if an individual platform or sensor becomes unavailable

ACTIONABLE INTELLIGENCE

TURN SENSOR DATA INTO TACTICAL INSIGHT

Neptis' unified mission C2 suite coordinates multiple autonomous platforms and fuses sensor data into a Common Operating Picture (COP), enabling operators to assess threats and make faster, better-informed decisions. Interoperability with compatible C2 and Combat Management Systems (CMS) allows mission data exchange.



MISSION CONTROL
Wherever you operate

Supervise missions from shore, onboard ships or remote operations centers, while retaining human control over critical decisions.

PLAN & COORDINATE
Supervise multiple Oryx USVs, plan missions and dynamically retask assets as operational priorities evolve

FUSE & CLASSIFY
Combine multi-sensor data into a unified Common Operating Picture for contact classification and tracking

UNDERSTAND & ANALYZE
Leverage onboard processing and AI-assisted analysis to identify relevant events and support faster decisions

SHARE & RETASK
Share actionable intelligence with naval command systems and retask autonomous assets as the operational situation evolves

MISSION ADAPTABILITY

Select the Oryx platform, payloads and integration options best suited to your operational requirements, from coastal surveillance to complex offshore missions.



Oryx H-8
Medium range USV



Oryx H-9
Long range USV



Oryx O-16
Transoceanic range USV

Length	7.71 m	9 m	15.75 m
Displacement	1.6 t	2.1 t	10.5 t
Endurance*	< 10 days	< 20 days	< 30 days
Speed	< 14 kts	< 13 kts	< 16 kts
Fuel capacity	250 L	550 L	2,300 L (dual hybrid propulsion)
Range	1,000 NM	2,000 NM	3,500 NM
Towing / Deployment	towing capabilities	SSS L&R and towing capabilities	ROTVs, ROV, UAV, AUV L&R

* Endurance depends on speed, gondola size, towing capabilities
(All specifications depend on payload configuration)

OPEN & SCALABLE ARCHITECTURE

- Mission-specific payloads
- Customer-selected sensors
- Flexible communications
- Progressive integration of additional assets

BUILT FOR NAVAL OPERATIONS

- Tactical mission patterns
- EMCON capabilities
- Military communication interfaces
- Defense-grade cybersecurity

OPERATIONAL BENEFITS

SEE MORE

Extended surveillance coverage

EXTEND FORCE CAPACITY

More surveillance without proportional crew requirements

STAY ON TASK

Persistent maritime presence

UNDERSTAND & DECIDE FASTER

Actionable operational intelligence

DISRUPTIVE MODEL. PROVEN FOUNDATION.

1.5M+ Nautical miles navigated

90+ USVs sold worldwide

SYSTEM-LEVEL EXPERTISE

Through UMIS, Exail's integrated autonomous MCM system

Exail USVs have supported missions and exercises

US NAVY
NATO
FRENCH NAVY

Products subject to arms export regulations