Frequently Asked Questions for evaluation, pilot scoping, procurement, and deployment

On-board processing | Human-in-the-loop | Privacy-first

72h	98.7%	2.4 s	0.08 / h
continuous run	uptime	P95 latency	false Critical

Product role and operating logic

What is Aware Mate, and what problem is it solving?

Aware Mate is an on-board, human-in-the-loop vigilance and watchkeeping support system. It is designed to help the officer of the watch stay alert, engaged, and operationally effective before risk escalates into a safety event. In practical terms, it addresses a gap on increasingly screen-led and automated bridges: presence and acknowledgement do not reliably tell you whether watchkeeping is still strong.

How is Aware Mate different from BNWAS?

BNWAS remains important, but it mainly confirms acknowledgement and response. Aware Mate complements that baseline with earlier on-board vigilance support aimed at sustained signs of reduced alertness, distraction, or attention drift. Where agreed, it can work alongside existing alerting and optional BNWAS tie-in, but it is not positioned as a BNWAS replacement.

Does Aware Mate automate navigation or replace bridge judgement?

No. Aware Mate is advisory only. It does not control navigation, is not designed to automate navigational decisions, and is not intended to replace bridge judgement or command authority. The officer of the watch and the vessel's command team remain responsible, and the operating concept includes human oversight and override.

Is it a fatigue detector, a posture monitor, or a disciplinary tool?

No. Aware Mate is not just a fatigue detector, not a posture-policing system, and not a tool for automated HR or disciplinary action. It supports vigilance and watchkeeping performance by looking for sustained patterns consistent with reduced alertness, distraction, or attention drift, while keeping human interpretation and follow-up within the operator's procedures.

Does it depend on seated watchkeeping rather than standing watchkeeping?

No. Aware Mate is not built on the assumption that crews are seated. It is built around vigilance and operational engagement, and visible posture is treated as a weak proxy for real watchkeeping effectiveness. A standing watchkeeper can still be disengaged, and a seated watchkeeper can still be fully effective.

Alerting behaviour and operational fit

Will Aware Mate add to alarm fatigue on the bridge?

Aware Mate is not intended as another generic bridge alarm box. Its operating logic is different: it is designed for the quieter, more monotonous periods of watchkeeping where vigilance can drift without obvious warning, not for already noisy, high-intensity bridge situations where alarms are already demanding attention. The system is built around earlier, proportionate intervention rather than a rigid timer-based interaction model. In pilot deployment, the operating structure can include a silent calibration phase in which lower alert tiers are evaluated internally without audible nudges, while higher-severity states remain active for safety. The practical objective is to reduce surprise and support earlier correction, not to increase nuisance alarming.

How does Aware Mate manage nuisance alerts and false positives?

Aware Mate is not intended to be deployed as a fixed, untuned alert source. Commissioning includes bridge survey, camera placement, and threshold tuning for the real operating environment, with pilot structure allowing an initial silent calibration phase before full operation. Crew feedback is part of that tuning loop. For owners and HSQE teams, the real measure of operational fit is not only whether the system detects events, but also whether nuisance rate stays manageable, override behaviour is sensible, and the product supports the watch without creating avoidable bridge friction. In the December 2025 operational bridge trial, the measured false Critical alert rate was 0.08 per hour in the tested conditions. That figure is useful as operational evidence, but it should still be read as deployment-specific evidence rather than a universal guarantee.

What happens if the system fails or becomes unavailable?

Aware Mate is advisory only, so standard bridge responsibility remains with the officer of the watch and vessel command team. Human oversight is built in, and the bridge team can mute, disable, or override alerts. Where optional BNWAS integration is used, fail-safe behaviour is intended not to interfere with standard BNWAS operation. The product should be understood as a support layer, not as a new dependency that displaces core bridge responsibility.

Data, privacy, and oversight

What data does the system process, and what leaves the vessel by default?

By default, processing happens on board on the vessel edge unit. Standard off-vessel outputs are designed around derived safety signals, anonymised event metadata, and aggregated operational review outputs rather than continuous raw video. This keeps the core function local while still allowing structured review where the operator enables it.

Does Aware Mate identify crew members or analyse emotions?

No. The system is designed without identity recognition and without emotion recognition. That boundary is part of the product design, and it matters for crew trust, governance, and deployment acceptability in workplace settings.

Is any video retained at all?

By default, retention is structured around derived indicators and limited logs rather than continuous raw video storage. If enabled under operator policy, a short encrypted on-device buffer may be kept for Critical alerts solely for post-incident review, with access and retention governed through operator policy and the agreed DPA framework.

Can it work offline, and how is human oversight handled?

Yes. The core function is designed to work on board without internet dependency. Human oversight is built in: the bridge team can mute, pause, or disable alerts, and pause, override, and review flows should be defined in the operator’s SOP so the system remains a support layer rather than an uncontrolled automation feature.

How are privacy, lawful basis, and governance handled in a typical deployment?

In a typical deployment, the vessel owner or operator acts as controller and is responsible for lawful basis, crew information or notice, and onboard SOP. ELNAV.AI supports this with the data-handling summary, deployment documentation, compliance materials, and DPA framework so governance is clear from pilot scoping onward.

Deployment and pilot structure

What does deployment or a pilot typically involve?

A typical deployment begins with bridge survey, camera placement, local network and device setup, commissioning, and threshold tuning for the vessel's operating environment. A typical pilot is scoped around a limited number of vessels or bridges, a defined evaluation window, clear success criteria, an initial calibration period, active operation, and close-out review, with minimal disruption to routine operations. Current pilot documentation assumes retrofit installation and initial commissioning on board, typically within one day.

What equipment and interfaces are typically required?

A typical setup includes a camera, edge unit, local network or switch, and power. Optional components can include local speaker or buzzer output and optional BNWAS dry-contact integration where agreed. The exact setup depends on the bridge layout, operating environment, and pilot scope.

What operational value does Aware Mate provide beyond alerts?

Beyond bridge alerting, Aware Mate can provide privacy-bounded operational insight such as alert trends, watch occupancy context, unattended or long-absence patterns, comparative review views, and, where enabled, traffic-adjusted risk context. The goal is not to create a surveillance archive or score individuals. The goal is to support earlier intervention on board and better-informed operational review over time.

Quick reference

- Advisory only: Aware Mate does not automate navigation or displace bridge command authority.
- Built for quiet watch periods: the system is intended to support earlier intervention before a low-stimulus drift becomes a safety event.
- Privacy by design: on-board processing by default, no identity recognition, no emotion recognition, and no ship-to-shore raw video by default.
- Pilot structure is meant to be practical: retrofit installation, commissioning, silent calibration, active operation, and close-out review.