

BOUNDED EDGE SUBSYSTEM FOR INTEGRATED BRIDGE ENVIRONMENTS

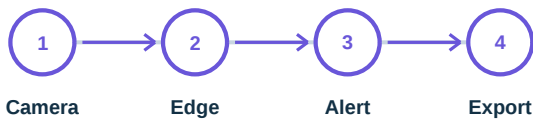
Aware Mate integration evaluation

Bounded on-board vigilance module beside bridge automation.

Aware Mate connects to defined bridge video input, edge compute, local alerting, optional alarm I/O and customer-approved reporting/export. Designed for testable deployment, commissioning discipline and clear interface boundaries.

Integration path

Module view - defined interfaces



Signals support the watch. Human review stays in context.

Interface matrix

IP camera	bridge video input
Edge unit	local inference and logs
Local alert	speaker / buzzer output
Dry contact	optional alarm-chain signal
BNWAS-adjacent	customer/class approval

Integrator role

Mounting, cabling, local network, alert device placement, optional I/O wiring and first-line installation work.

ELNAV.AI role

Software configuration, calibration support, second-line technical review, reporting and close-out input.

Customer role

Vessel access, SOP boundaries, privacy notices, acceptance sign-off and approval for optional integrations.

Integration boundary

No navigation control. No autopilot control. No ECDIS/radar decision-making. No remote CCTV stream by default. Optional I/O only under approved pilot or integration scope.

Operational evidence

72h live bridge run

Operational evidence supports technical evaluation and pilot readiness - not certification proof.

98.7%

uptime

2.4 s

P95 latency

0.08/h

false critical

93%

coverage

4.6/5

crew acceptance

Discuss an integration evaluation or demo-kit path

Integrator and OEM enquiries: hrm@elnav.ai | +385 91 443 3348 | elnav.ai/aware-mate

Annex I / BNWAS-adjacent integration decision tree

Integrator screening note | v1.0 | Legal status checked 31 May 2026

Use before connecting Aware Mate to BNWAS or any mandatory safety / alarm chain.

This is an engineering and compliance screening tool. Final classification and approvals remain customer, legal, class, flag and OEM responsibilities.

AI Act Article 6(1) trigger - two cumulative conditions

Escalate if Aware Mate is a regulated product or safety component of a regulated product covered by AI Act Annex I AND the product / AI system requires third-party conformity assessment. If uncertain, stop before activation.

Q1. Local Aware Mate alerting only, with no BNWAS or regulated-equipment link?



Q2. Does the scope touch BNWAS or another mandatory safety / alarm function?



Q3. Is Aware Mate only optional, fail-safe, non-interfering dry-contact or listen-only I/O?



Q4. Could Aware Mate perform, replace or impair a regulated safety function?



Q5. Does customer, OEM, class, flag or sectoral law require conformity review before use?

Route A - standalone advisory

Local speaker / buzzer only. BNWAS untouched. No Annex I trigger identified in the integration scope. Document as advisory support. Proceed with normal commissioning.

Route B - controlled BNWAS-adjacent pilot

Optional dry-contact or listen-only interface. Fail-safe open. No inhibit. No held reset. Customer/OEM/class approval where required. Prove non-interference.

Route C - stop: safety-component / certified route

Escalate for Annex I / product-safety review. Do not treat as simple pilot wiring. Separate certified configuration may be needed.

Route D - reject / redesign

Outside current boundary: BNWAS replacement, navigation control, ECDIS/radar/autopilot decision-making, hidden monitoring, identity/emotion or automated HR/fitness use.

Minimum hold points before energising

- ☐ Route A/B/C recorded in installation note or SOW.
- ☐ Terminal map checked against installed BNWAS manual.
- ☐ Relays are dry, isolated and fail-safe open on Aware Mate power loss.
- ☐ Aware Mate disconnected -> standard BNWAS operation verified.
- ☐ K2/K3 momentary only; K3 disabled unless explicitly approved and rate-limited.
- ☐ As-built sketch, labels, fuses, config ID, SOP and sign-off captured.