

Annex 1: Visitor Mooring Installation and Management Plan – Isle of Eigg

Submitted in support of License Application no.:

Marine Directorate – Licensing Operations Team

Organization: Marine Conservation Society (MCS)

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Phone: [Redacted]

1. Introduction

This annex sets out the installation methodology, outlines how this proposal aligns with Scotland's National Marine Plan, addresses environmental mitigation measures, wildlife disturbance controls, biosecurity protocols, navigational risk, justification, consultations and management arrangements, for the installation and operation of 5 environmentally sensitive Advanced Mooring System (AMS) **visitor moorings** within coastal waters of the **Isle of Eigg**, Small Isles, Scotland. In partnership with the Isle of Eigg Heritage Trust (IEHT) and mooring contractors Blue Parameters. Our intention is to install these 5 AMS units in August/September 2026.

The proposal has been designed to:

- Reduce seabed damage from unmanaged anchoring
- Improve navigational safety
- Support sustainable marine tourism
- Minimise disturbance to Protected Marine Features (PMFs)
- Deliver a net environmental benefit relative to baseline anchoring activity

The moorings will be installed using low-impact systems outlined below to minimise seabed disturbance.

2. Project Description

2.1 Mooring Type

The Mermaid-K is an advanced Mooring System (AMS) that typically consists of the following four parts:

- A sinker (also known as a gravity anchor) - comprised of non-leaching concrete with connecting points for the riser lines, and a dedicated lifting point.
- Riser lines – Dyneema or equivalent material. Dyneema riser lines have an exceptional break load, do not stretch and float due to the composition of the

materials. Floats are spaced horizontally along the length of riser line for lift and visibility during low tidal states.

- Seaflex tensile unit – this component elongates under load, reducing the effect of wind and waves on vessels.
- Surface mooring buoy – this is guaranteed not to sink even if damaged, and comes with a reflective strip for visibility at night.

All of these main components are connected using marine-grade stainless steel fittings.

Mermaid-K moorings are designed specifically for the local weather conditions and sea states, in addition to the vessel sizes using the mooring. As there is no chain in the system, the components do not touch the seabed, even at low tides, and therefore areas with seagrass / sensitive habitats are not damaged due to scouring.

2.2 Installation Methodology

All components of the Mermaid-K system are manufactured and subsequently delivered to site. There are two methods of deployment used by our contractors - Blue Parameters:

- 1) If a vessel with a lifting crane is being utilised the moorings are loaded on board. Once in position the units are lifted from the vessel and lowered onto the seabed using a dedicated lifting point. Once the sinker is on the seabed the crane line is released, and the mooring is ready to be used.
- 2) The second method uses a Multi-Purpose Lifting Unit (MPLU), which floats the sinkers to the correct position under tow by vessel. Once in position, the sinker is lowered to the seabed.

N.B: Neither installation methods require divers in the water.

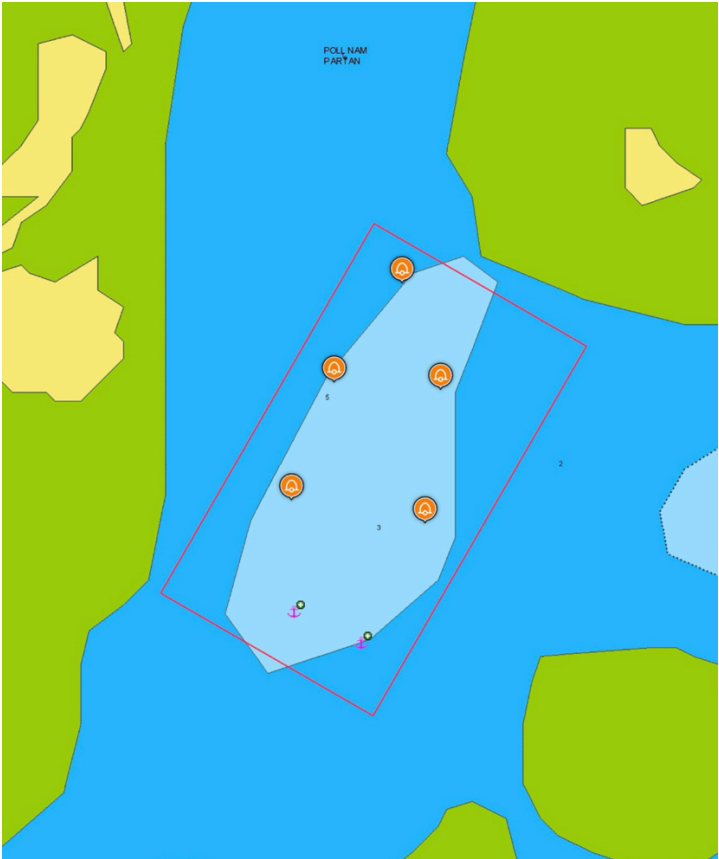
2.3 Mooring locations

Name of water: Kildonnán Bay

Mooring	Vessel length	Latitude (DDM)	Longitude (DDM)	Vessel Owner
1	50 ft	56° 53.077 N	6° 7.378 W	Visitor
2	50 ft	56° 53.050 N	6° 7.364 W	Visitor
3	50 ft	56° 53.019 N	6° 7.370 W	Visitor
4	50 ft	56° 53.024 N	6° 7.426 W	Visitor
5	50 ft	56° 53.052 N	6° 7.408 W	Visitor

The above moorings are intended for use by visitors to the island, with a maximum length of 50 ft / 15.24m. The maximum vessel size will be communicated to visitors via the Isle of Eigg website, notices to local marinas, notices to sailing organisations and notifying the HMPO.

Isle of Eigg mooring locations:



3. Scotland's National Marine Plan

The proposed installation of Advanced Mooring Systems (AMS) within the waters surrounding the Isle of Eigg is considered to be consistent with the objectives and policies of Scotland's National Marine Plan (2015), particularly in relation to sustainable development, marine tourism and recreation, national heritage protection, and the sustainable management of Scotland's marine environment.

The proposal aligns with the General Planning Principle (GEN 1), which established a presumption in favour of sustainable development and use of the marine environment where consistent with the policies and objectives of the National Marine Plan. The AMS installations are intended to support sustainable marine access and recreation while reducing environmental pressures associated with unmanaged anchoring activity. The project seeks to balance environmental protection with the social and economic needs of the local community and visiting marine users.

The proposal is also considered consistent with GEN 9 (Natural Heritage), which requires that development and use of the marine environment comply with legal requirements for protected areas and protected species, avoid significant impacts on PMFs, and protect, and, where appropriate, enhance the health of the marine area. The AMS mooring units have been selected specifically to minimise seabed disturbance when compared to traditional block-and-chain moorings and unmanaged anchoring. The project has been designed with consideration of sensitive habitats and species present within and adjacent to designated areas including the Inner Hebrides and the Minches SAC and the Sea of the Hebrides MPA. Appropriate mitigation measures, installation methodologies, and operational management approaches will be implemented to minimise ecological disturbance (see sections 4 – 7).

The project further aligns with the Recreation and Tourism sector policies of the National Marine Plan. REC & TOURISM 1 supports opportunities to promote sustainable development of marine recreation and tourism, while REC & TOURISM 2 requires consideration of impacts on recreational access, navigational safety, and marine user experience. The proposed AMS installations are intended to provide safer and more environmentally sustainable visitor mooring infrastructure for recreational vessels visiting the Isle of Eigg, reducing pressure from anchor damage in sensitive coastal habitats, while supporting sustainable marine tourism and local economic activity. The proposal is expected to improve management of visitor vessel activity and enhance navigational organisation within frequently used anchorage areas.

The proposal is also consistent with the wider objectives of the National Marine Plan to support coastal communities, sustainable economic activity, and responsible stewardship of Scotland's marine environment. The installations are intended to contribute positively to local marine tourism, community resilience, and environmental protection objectives through the provision of managed low-impact mooring infrastructure.

4. Designated site considerations

Several European and national designations surround the Isle of Eigg:

- **Inner Hebrides and the Minches SAC**
 - Designated for Harbour porpoise (*Phocoena phocoena*)
 - Conservation objectives: avoid significant disturbance and maintain population distribution and supporting habitat
 - Key considerations: Avoidance of disturbance that could undermine site conservation objectives
 - Mitigation measures (Section 4): ensure risk of disturbance is minimised
- **Sea of the Hebrides MPA**
 - Designated for Minke whale (*Balaenoptera acutorostrata*), Basking shark (*Cetorhinus maximus*), Risso's dolphin (*Grampus griseus*) & Fronts and associated pelagic features
 - Conservation objectives: Protect high densities of Basking sharks and Minke whales; protection of important areas where Basking sharks feed and show social, group and courtship-like behaviours; recognition of Fronts as an important feature that provides benefits to both Basking shark and Minke whale populations by enhancing primary productivity and prey availability; Conservation of the Inner Hebrides Carbonate Production Area ensures that important biogenic habitats such as maerl beds and seagrass are protected.
 - Key considerations: Avoidance of disturbance that could undermine site conservation objectives
 - Mitigation measures (Section 4): ensure risk of disturbance is minimised

The mooring locations listed above **do not** fall within nearby designations, as demonstrated below:



However, the proposed moorings are adjacent to previously unmapped seagrass meadows. As stated, the proposed moorings are designed to reduce pressure on these seagrass meadows, where personal and anecdotal evidence states that unmanaged anchoring is taking place. AMS units reduce anchor scour and chain sweep by traditional block-and-chain moorings, relieving seagrass meadows and areas adjacent from anchoring pressures, with the expected recovery of seagrass in these areas which are heavily used, both in Kildonnán Bay and Galmisdale Bay. It is suspected that, as this large area of seagrass has not been recorded with Scottish government agencies (NatureScot, 2026), a significant area of seagrass may have been lost due to the installation of the ferry terminal in 2004. Previous recording of seagrass within the northern side of Galmisdale Bay seagrass (NBN, 2001) and the current distribution of seagrass gives the impression that a significant proportion of seagrass may have been disrupted by works carried out. As such, this application for the reduction of anchoring pressure on the southern side of the Isle of Eigg, alongside seagrass regeneration activity, hopes to regain some of the seagrass habitat that may have been lost.

5. Marine Mammal Mitigation & Soft-Start Procedures

Installation works **do not** anticipate generating underwater noise, however our contractors will follow recognised UK best practice, including:

- JNCC (2010, updated 2017) marine mammal mitigation protocol
- NatureScot advice
- Scottish Marine Wildlife Watching Code

5.1 Pre-Start Observation

- Dedicated Marine Mammal Observer (MMO) present
- 30-minute pre-start watch
- Minimum 500m mitigation zone
- Delay of 20 minutes after last sighting within zone

Works will not commence in poor visibility conditions.

5.2 Soft-Start Procedure

Where powered equipment is used:

- Initial low-power activation (minimum 5 minutes)
- Gradual ramp-up over at least 20 minutes
- Continuous MMO observation
- Full restart of procedure if works cease for >10 minutes

5.3 Shutdown Protocol

If cetaceans or Basking sharks enter the mitigation zone:

- Works will pause or cease (where safe to do so)
- Restart only after 20 minutes without sightings

Given the short duration and non-piling nature of works, risk of injury is considered negligible.

6. Operational Wildlife Disturbance Controls

To reduce cumulative disturbance during mooring use:

- All users will be required to comply with the Scottish Marine Wildlife Watching Code
- Vessel speeds to be reduced in nearshore waters (<6 knots)
- No intentional wildlife approach
- No drone use near marine mammals
- Clear guidance provided via signage and digital platforms

Fixed moorings reduce erratic vessel behaviour and anchor deployment, improving disturbance management relative to baseline conditions.

7. Biosecurity Plan

7.1 Installation phase

All contractors will:

- Implement 'Check, Clean, Dry' protocol
- Inspect and clean equipment prior to mobilisation
- Confirm presence of invasive non-native species (INNS)
- Provide biosecurity declaration

7.2 Operational phase

Visitor guidance will promote:

- Hull cleanliness awareness
- Avoidance of ballast/bilge discharge
- Biosecurity best practice messaging

The small scale and fixed nature of infrastructure limit INNS transfer risk.

8. Seabed & Seabed Protection

The nature of the seabed in location of moorings is primarily mixed sand. Moorings have been located to avoid seagrass beds, maerl, biogenic reef and PMFs. Where required on-site inspections at time of installation confirm suitable substrate prior to installation.

Environmentally sensitive mooring systems significantly reduce seabed abrasion compared to unmanaged anchoring.

9. Justification & Stakeholder Support

A structured boater survey (2025 season) carried out by IEHT demonstrated a clear demand for managed visitor moorings, safety concerns during adverse weather, awareness of anchoring impacts and supported the installation of environmentally responsible infrastructure.

The survey ran for early May to mid-September 2025, with 51 responses obtained using a QR code advertised within amenities on the island. A total of 351 visiting yachts were recorded in this period. Some key points:

- 16% of respondents had travelled from Arisaig, with Oban, Mull and Loch Linnhe all repeat departure points
- 68% of respondents had travelled to Eigg due to new facilities
- 32% of respondents suggested 'moorings' as suggested additional services

The project has strong community and stakeholder backing. 6 letters of support have been received from community representatives, island businesses, marine users, environmental organisations and application consultees. Support emphasizes environmental protection, visitor safety, and alignment with sustainable tourism objectives. Letters of support are provided with this Annex, and more will be added to this application as an addendum.

The current baseline conditions include repeated anchor deployment, chain drag scour and unpredictable vessel distribution. Post-installation we hope to see anchoring pressure reduced, vessel density managed – particularly close to the oyster farm in Kildonnan Bay, overall impact localised to engineered systems (AMS units) and wildlife disturbance controls embedded. This proposal delivers a net environmental benefit relative to unmanaged anchoring. The community has also referenced the possibility of instigating a voluntary no-anchor zone (VNAZ) within sensitive areas, this will be investigated over the coming months.

10. Consultation

Consultations regarding the installation of AMS units within the southern waters of the Isle of Eigg have been carried out with relevant stakeholders, community members, NGOs and governing organisation from August 2025 until recent communications (May 2026).

In-person and online events were held with the community on Eigg and the IEHT on the following dates, with activities outlined:

- August 2025: initial visit to the Isle of Eigg by MCS staff. During this time seagrass mapping began
- October 2025: Project introduction: Conservation Projects Lead, Community Engagement Lead and AMS engineer presented and answered questions around seagrass, moorings and AMS. Workshop was held to understand the community's opinions on risks & challenges and opportunities & benefits around installing visitor moorings. Drop-ins & 1:1 sessions were also conducted.
- February 2026: Project progress update at Eigg community hall, Eigg Primary School visit, 1:1s and drop-in sessions were held.
- April 2026: In-person meetings regarding AMS project progress
- Ongoing: Monthly catch-up meetings

Due to this community engagement we have multiple letters of support / no objection, and will add more to this application in due course.

Stakeholder consultations have been carried out via email, phone and online meetings, details below (evidence can be supplied if necessary):

- MD-LOT: online meeting 19/11/2025
- RYA Scotland: online meeting 13/11/2025
- MCA: online meeting 13/11/2025
- Scottish Wildlife Trust: in-person drop-in attendance by SWT staff, 24/02/2026
- Mallaig Harbour Authority: online meeting 13/11/2025
- CalMac: Multiple communications have not resulted in response as yet.
- NatureScot: online meeting 18/11/2025
- Crown Estate Scotland: online meeting 18/11/2025
- Kildonnán Bay Oysters: online meeting 27/11/2025
- Arisaig Marine: phone conversation 12/12/2025
- RNLI: awaiting response
- Mallaig & North-West Fishing Association: awaiting response
- Canna Harbour Master: online meeting 24/11/2025
- Highland Council: online meeting 19/01/2026
- Northern Lighthouse Board: online meeting 20/11/2025
- Isle of Eigg Brewery: in-person discussion 10/09/2025
- Western Isles Cruises: awaiting response
- Milligan Transport: awaiting response.

Upon completion of this application, stakeholders will be sent a version of this document for input and approval/objection of this proposal.

11. Navigational Risk Assessment

11.1 Navigational baseline

Commercial traffic includes the CalMac ferry (MV Loch Nevis), which approaches the large ferry terminal below, and the Arisaig Marine foot passenger service (MV Sheerwater) operating daily (daytime) in summer between Eigg and Mallaig, which utilises the old slipway. Fishing vessels (mainly creelers under 12m), recreational yachts and kayaks use the area seasonally. Environmental conditions are influenced by prevailing SE winds and strong tidal streams near the Sound of Eigg.

The 'MV Loch Nevis' Calmac ferry approach and departure routes are outlined below:



The 'MV Sheerwater' Arisaig Marine foot passenger ferry approach and departure routes are outlined below:



11.2 Risk Identification

Hazard	Likelihood	Consequence	Risk rating	Mitigation
Vessel collision with AMS unit	Possible	Moderate	Medium	Marking with approved buoys per IALA; update charts and notices to Mariners
Ferry interaction due to proximity	Possible	Major	High	Liaise with Calmac, Arisaig Marine and harbour authority; define exclusion zone; mark clearly on charts
Fishing gear snagging	Possible	Minor	Low	Engage with local fishers; install marker buoys with contact details
Loss of buoy / visibility issues	Possible	Moderate	Medium	Use high visibility buoys, radar reflectors and AIS AtoN if required

Vessel grounding near AMS area	Unlikely	Moderate	Low	Maintain clear distance from navigation routes; signage at slipway or within amenities.
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11.3 Mitigation and control measures

- Buoys to conform to IALA Region A standards (yellow special marks or as directed by NLB)
- Installation of radar reflectors and reflective tape on each surface buoy
- Consideration of AIS Aids to Navigation (AtoN) for units closest to ferry routes
- Liaise with Northern Lighthouse Board (NLB) for approval of buoy type and light characteristics
- Issue Notices to Mariners through UKHO, Clyde Cruising Club and marinas used by visitors to the Isle of Eigg
- Notify Calmac, Arisaig Marine and harbour authority prior to deployment
- Conduct annual maintenance inspections for mooring integrity and buoy visibility

11.4 Residual risk evaluation

Following mitigation, all identified navigation risks are reduced to Low or ALARP (As Low As Reasonably Practicable). Ongoing stakeholder engagement and routing monitoring will ensure continued navigational safety.

12. Monitoring & Review

The applicant will:

- Conduct annual inspection of mooring integrity
- Record wildlife disturbance incidents (if any)
- Review user compliance
- Adapt management measures if required.

Records will be made available on request.

13. Conclusion

The proposed installation of 5 environmentally sensitive AMS visitor moorings within the coastal waters of the Isle of Eigg represents a small-scale, proportionate intervention designed to address existing pressures from unmanaged anchoring. The proposal

incorporates appropriate marine mammal mitigation measures, aligns with the conservation objectives of the Inner Hebrides and the Minches SAC and the Sea of the Hebrides MPA, and embeds biosecurity best practice during both installation and operation. It responds directly to evidenced local demand identified through boater surveys and is supported by strong community backing. Taking these factors together, and given the limited spatial footprint and temporary nature of installation works, it is considered that the proposal will not adversely affect the integrity of either designated sites.

Habitats Regulations Appraisal (HRA) Considerations

Likely Significant Effect (LSE) Screening

Potential pathways considered:

Impact Pathway	Risk	Mitigation
Underwater noise during installation	Temporary, localised	Short installation window, soft-start procedures
Vessel disturbance to cetaceans	Low – moderate	Compliance with Scottish Marine Wildlife Watching Code, MMO procedures
Seabed abrasion	Reduced relative to anchoring	Eco-mooring systems / AMS
Increased vessel presence	Managed	Controlled capacity (5 fixed points)

By managing installation mitigation using soft-start procedures, Scottish Marine Wildlife Watching Code and Marine Mammal Observer protocols (Section 4, above), the proposal is not expected to adversely affect site integrity.

Letters of Support to follow

[Redacted]

Name:

Address:

Email:

Date:

To Whom It May Concern,

Re: Letter of Support / No Objection – Advanced Mooring System (AMS) installation on the Isle of Eigg.

I am writing in relation to the proposed installation of AMS units on the Isle of Eigg.

We have been informed of the scope, purpose and placement of the proposed AMS installation, which is intended to support the safe, efficient, and sustainable mooring of visitor vessels on Eigg, whilst protecting the seabed and seagrass beds present in the area. We understand that the system is designed to improve operational reliability, reduce environmental impact, and enhance marine safety, in line with local and regional maritime objectives.

Having reviewed the information provided, we confirm that **we have no objection to the proposed Advanced Mooring Systems installation** as described. We are supportive of the project and its aims, subject to all relevant regulatory, environmental, navigational, and community considerations being appropriately addressed.

This letter is provided in good faith to indicate our support / no objection to the project and may be used for the purposes of obtaining licenses and consents to carry out the work, or other project approval processes as required.

Should you require any further information or clarification, please do not hesitate to contact us using the details above.

Yours sincerely,
[Redacted]

Name:

Signature:

Name:

Address

Email:

Date:

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Yours sincerely,

[Redacted]
Name:

Signature:

[Redacted]

Organisation / Stakeholder Name: -

[Redacted]

Address:

Email address:

Date: 24 / 2, --

To Whom It May Concern,

Re: Letter of Support / No Objection – Advanced Mooring System (AMS) installation on the Isle of Eigg.

I am writing on behalf of EIGG GUIDING CO in relation to the proposed installation of AMS units on the Isle of Eigg.

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[Redacted]

Name:

Signature:

[Redacted]

Name:

Address

Email:

Date: 24/02/2026.

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[Redacted]

Name:

Signature:

[Redacted]

Letter of Support /
No Objection

AMS installation on
The Isle of Eigg

Name:

Address

Email:^{IR}

Date:

21/4/2020

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Yours sincerely,

[Redacted]

Name:

Signature:

[Redacted]

Name:

Address [Redacted]

Email:

Date:

24/2/26

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