

FOI – EIR request 202300376397 Orkney independence and Zero emission vessels David Walker – Responses to question 3 and 4

Local Authority Ferries - OIC - ZEVI 2023 - background note for Roddy Macdonald - 18 April 2023

EMAIL:

Orkney Islands Council application to UKG ZEVI competition - background note - 20230418

From: REDACTED @transport.gov.scot>
Sent: Tuesday, April 18, 2023 9:59 AM
To: Roddy Macdonald REDACTED
cc: REDACTED
REDACTED
REDACTED
Subject: Orkney Islands Council application to UKG ZEVI competition - background note - 20230418

Roddy

As requested please find attached a short background note regarding Orkney Islands Council's proposal to apply for funding from the UK Government's Zero Emission Vehicle and Infrastructure (ZEVI) competition. I have also attached the original email from OIC for context. Please note that the deadline for OIC to submit an application is tomorrow (Wednesday 19 April) at 11:00.

Kind regards

REDACTED

REDACTED
Ferries Strategy
Ferries Directorate

REDACTED

Attachment:

Orkney Islands Council application to UKG ZEVI competition – Background Note – 18 April 2023

The [Zero Emission Vessel and Infrastructure \(ZEVI\) competition](#) is part of a suite of interventions being launched by the UK Shipping Office for Reducing Emissions (UK SHORE), part of DfT. They aim to transform the UK into a global leader in the design and manufacturing of clean maritime technologies.

The aim of the competition is to fund:

- 100% battery electric vessels
- alternative fuel vessels
- vessel energy efficiency technology, such as wind assistance
- vessel charging infrastructure
- shore power and corresponding vessel technology
- alternative fuel refuelling infrastructure for vessels

The Zero emission vessel and infrastructure competition is funding multi-year demonstrations across 3 strands:

- Strand 1: Battery electric vessels and charging infrastructure (this strand)
- [Strand 2: Shore power technologies, shore-side and vessel-side](#)
- [Strand 3: Alternative fuel vessels and refuelling infrastructure](#)

To be eligible, the project must:

- have total costs of between £3 million and £40 million unless agreed with Innovate UK (see below)
- not exceed a grant request of £20 million
- start by 1 October 2023
- claim all grant funding by 31 March 2025
- complete a 3 year demonstration of all funded vessels and supporting infrastructure
- carry out all of its project work in the UK
- intend to exploit the results from or in the UK

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Details on eligibility can be found in the 'Eligibility' section within the link provided above.

Orkney Islands Council and Artemis

OIC approached TS on 29 March 2023 with a proposal to make an application to the ZEVI fund (in partnership with Artemis Technologies) to procure and operate two innovative passenger vessels:

[Artemis EF-24 Passenger Ferry](#)
[Artemis EF-12 CTV](#)

If successful OIC would expect to receive up to 80% of the required funding from the ZEVI competition. OIC have asked TS to consider making a contribution towards the remaining 20% of the required funding.

According to OIC:

'The estimated cost of the vessels would be in the region of £12m not including any additional charging infrastructure or modifications to piers/harbours. The 20% non-grant-funded element of the project would need a capital contribution towards the boats, charging infrastructure and berthing arrangements of £3m - £4m'.

Artemis Technologies

[Artemis Technologies](#) are a maritime engineering firm focussing on decarbonisation within the maritime industry. They have a background in specialist maritime design and innovation – notably in high-performance yacht racing – and have also developed their own designs for electric propulsion. In 2022 they launched the world's first commercially viable zero emission electric foiling workboat.

Recommendation

You may wish to note the following observations:

- OIC have stated that they expect the cost to procure the vessels to be in the region of £12m. Based on the limited information given we understand this to include the purchase of one of each of the vessels noted above.
- The vessels noted above are a crew transfer vessel (CTV) and a passenger ferry. The CTV has a capacity of 2 crew and 12 passengers, with the passenger ferry having capacity of 3 crew and 150 passengers. Based on the information available on the Artemis website it would appear that the passenger vessel is still at design stage and is yet to go into production, although they appear to be open to receiving orders. It is unclear therefore how much real world testing has taken place to date, for example in rougher waters.
- The passenger ferry does not feature any capacity to carry vehicles. There is currently limited requirement for passenger-only vessels on the NIFS and CHFS networks. Therefore any proposed trial of such a vessel would likely have limited direct benefit to TS in the short to medium term (there is no indication that Artemis aim to expand this technology to vehicle-carrying vessels).
- In conclusion, Transport Scotland should welcome the proposal in principle, as it presents an opportunity to gain knowledge and learning from a new form of

technology, albeit with limited short/medium-term benefits to the wider network, as outlined above.

- The deadline for applications to the ZEVI competition is Wednesday 19 April 2023 at 11:00.

2nd Attachment

FW: Application to ZEVI: Battery Electric Vessels and Charging Infrastructure Fund

From: REDACTED @transport.gov.scot>

Sent: Tuesday, April 4, 2023 12:04 PM

To: REDACTED

REDACTED

REDACTED

Roddy

Macdonald REDACTED

Subject: FW: Application to ZEVI: Battery Electric Vessels and Charging Infrastructure Fund

REDACTED

To see below.

Roddy has asked TS colleagues in LCED whether there might be other funds OIC could apply for to get the match funding.

More fundamentally Roddy has asked if you could have a look at this and offer any views you have on whether, aside from the issue of funding, whether this is something we would be interested in supporting in terms of growing our knowledge about low carbon ferries.

Could you prepare a short note on ZEVI, who are Artemis, what are these vessels and any views you have?

REDACTED

REDACTED

Thanks, REDACTED

REDACTED

TS – Ferries Directorate

Best contact via email or Teams

From: Gareth Waterson <REDACTED>
Sent: 29 March 2023 11:54
To: Roddy Macdonald REDACTED
Cc: REDACTED

Subject: Application to ZEVI: Battery Electric Vessels and Charging Infrastructure Fund

Classification: OFFICIAL

Hi Roddy,

The Council has been in discussions with Artemis Technologies and is minded to participate in an application to the UK Government's [ZEVI](#) competition which could provide up to 80% funding for two innovative zero emission vessels 1 x EF24 Passenger Ferry and 1 x EF12 CTV.

The details of the proposed vessels can be seen on the Artemis Technologies website:-

[Artemis EF-24 Passenger Ferry](#)

[Artemis EF-12 CTV](#)

Applications to the ZEVI competition have to be lodged by 19 April 2023 which is a very tight deadline, but Artemis are prepared to put the effort in and submit the bid. REDACTED

The 20% non-grant-funded element of the project would need a capital contribution towards the boats, charging infrastructure and berthing arrangements REDACTED

Would it be possible for Transport Scotland to consider a contribution to the 20% element of the project that would not be picked up by the ZEVI fund, if that application is successful?

REDACTED

We can incorporate these vessels into our Plan B ferry replacement programme and can see that they have real potential to have a transformative impact on service design and the greening of ferry travel.

Kind regards

Gareth

Gareth Waterson
REDACTED

Local Authority Ferries - OIC - ZEVI 2023 - email from Gareth Waterson - 18
September 2023

New Email:

FW: ZEVI - Artemis Technology

From: Gareth Waterson REDACTED

Sent: Monday, September 18, 2023 11:17 PM

To: Roddy Macdonald REDACTED
REDACTED

Subject: RE: ZEVI - Artemis Technology

Classification: OFFICIAL SENSITIVE

Hi Roddy,

REDACTED

The positive Zevi funding announcement has been made in the interim so we now have the real prospect of being able to deliver a really exciting and innovative ferry trial, REDACTED

What I had been hoping you would agree to, was that we would be able to include the match funding requirement in our ask for ferry funding budget in 2024/25 and 2025/26, and that you would be able to provide some assurance to that effect.

I had thought that the Match Funding was required for the running costs for the boats, however I have been advised that there are start up and staff training costs to get the project going REDACTED which is the Match funding ask together with crew costs REDACTED over two years REDACTED

REDACTED

The vessels would remain in our ownership at the end of the trial.

We have exceeded our expectations with the success of the funding from UK Government for the project, but have been a bit slow off the mark in trying to secure the match funding and I really hope you could help us out with a commitment that we will be able to include the Match requirement as part of the ferries budget request for 2024/25 and 2025/26. That should, I hope give our Elected Members the confidence to proceed with the trial REDACTED

Best regards

Gareth

Gareth Waterson
REDACTED

EMAIL:

From: REDACTED

@transport.gov.scot

Sent: Tuesday, September 19, 2023 7:07 AM

To: Minister for Transport REDACTED

Cc: Cabinet Secretary for Transport, Net Zero & Just Transition REDACTED

Chief

Executive Transport Scotland REDACTED

REDACTED

Roddy Macdonald REDACTED

Subject: TS Officials meeting with Orkney Island Council

I would also like to highlight that during the meeting the subject was raised of the recent announcement that OIC were successful in securing £15.5m funding from the UK government's Zero Emission Vessels and Infrastructure Fund which will see the introduction of two fully electric small vessels. One will be capable of carrying 12 passengers, and will travel between Kirkwall, Shapinsay, Rousay, Egilsay and Wyre, and a larger vessel, capable of carrying 50 people and some light cargo, will be on a route between Kirkwall, Westray, Eday, Sanday and Stronsay.

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