

2. Description of project (Attach additional pages as necessary)

2.1 Nature of objectives of the project:

The survey is part of the international IESNS (International Ecosystem Survey in the Nordic Sea), a collaboration between Icelandic, Faroe, Norwegian, EU and UK research institutes, aimed at surveying the whole distribution area of the Norwegian Spring-spawning herring and estimating the total biomass of the herring stock. In addition biomass and distribution of blue whiting and mackerel will also be assessed. This will be done by running acoustic transects and carrying out midwater trawling within the survey area. Additional objectives will be to collect data on plankton and hydrographical conditions in the study area

2.2 Relevant previous or future research Surveys:

The IESNS survey has been conducted in the area since 1996 to assess the spring-spawning herring stock.

2.3 Previously published research data relating to the project:

ICES. 2021. Working Group of International Pelagic Surveys (WGIPS).
ICES Scientific Reports. 3:40. 481pp. <https://doi.org/10.17895/ices.pub.8055>

ICES. 2015. Manual for International Pelagic Surveys (IPS). Series of ICES Survey Protocols
SISP 9 – IPS. 92 pp.

3. Methods and means to be used

3.1 Particulars of vessel:

Name:

Resolute BF50

Nationality:

British

Owner:

Castlehill LLP

Operator:

Castlehill LLP

Overall length: **69.80**

Maximum draught: **9**

Net tonnage: **691**

Gross Tonnage: **2301**

Propulsion: **Diesel-electric**

Cruising speed: **11**

Maximum speed: **16**

Call sign: **MHU05**

Method and capability of communication - (inc. telex, frequencies):
and VHF frequencies.

RT and Telex. All MF, HF

Name of master: **Alexander West, Matthew West**

Number of crew: **16**

Number of scientists on board: **6**

3.2 Aircraft or other craft to be used in the project: **N/A**

3.3 Particulars of methods and scientific instruments:

Types of samples and data	Methods to be used	Instruments to be used
Multi-frequency Fisheries Acoustics	Following acoustic transects during the day steaming at 10 knots	Simrad EK60 scientific split beam echosounder
Biological fish samples (age, length, etc.)	Opportunistic trawling when schools are observed on the echogram	Midwater trawl (Pelagic Jackson Trawl)
Plankton sampling	Vertical cast from surface to above seabed at fixed stations along the transects	WP2 ringnet (180-200 micron mesh)
Hydrography	CTD cast	CTD sonde (SAIV miniCTD)

3.4 Indicate whether harmful substances will be used:

Formaldehyde (4% buffered) will be taken for zooplankton fixing for later processing.

3.5 Indicate whether drilling will be carried out:

No

3.6 Indicate whether explosives will be used:

No

4. Installations and equipment

4.1 Details of installations and equipment (dates of laying, servicing, recovery, exact locations

and depth):

To be confirmed

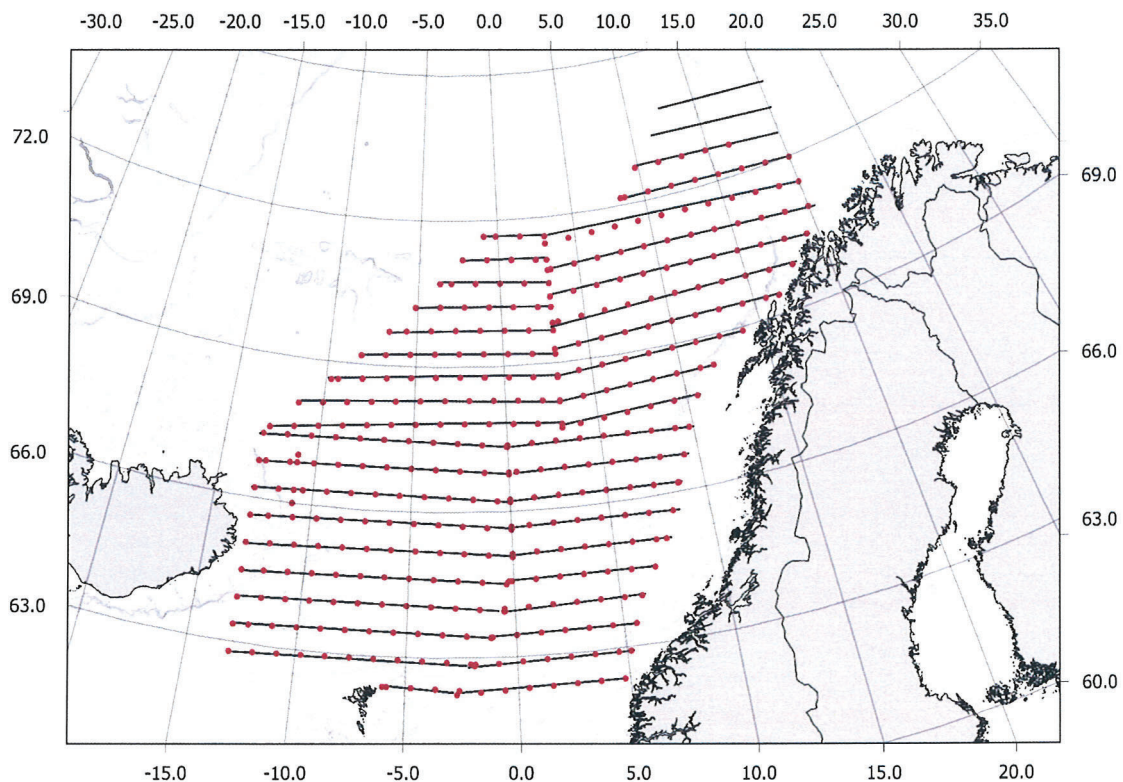
5. *Geographical areas*

5.1 Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude):

Between Latitudes 62° and 73° 5' North and Longitudes 13° 15' West and 20° 40' East

5.2 Attach chart(s) at an appropriate scale showing the geographical areas of the intended work and, as far as practicable, the positions of intended stations, the tracks of survey lines, and the locations of installations and equipment.

The map shows the provisional survey transects (black lines) and hydrographic and plankton stations (red points) for the full IESNS survey. The UK will cover a section of this area likely located in the southern part of the survey area.



6. Dates

- 6.1 Expected dates of first entry into and final departure from research area of the research vessel:

The exact survey dates have not yet been confirmed with international partners but the survey will be a total of 13 days and will be conducted between 15/04/2023 – 31/05/2023. More details will be provided to the relevant authorities as soon as they have been confirmed.

- 6.2 Indicate if multiple entry is expected:

Yes, multiple entry is expected. We will inform the relevant authorities about entry within the time window as outlined in the guidelines.

7. Port calls

- 7.1 Dates and names of intended ports of call in Iceland

None planned in Icelandic waters.

- 7.2 Any special logistical requirements at ports of call:

Not applicable

- 7.3 Name/Address/Telephone of shipping agent (if available):

Not applicable

8. Participation

- 8.1 Extent to which Iceland will be enabled to participate or to be represented in the research project:

"One berth for an observer from each coastal state is offered where possible, in accordance with UNCLOS Art 249 (1a) in accordance with Foreign Office guidelines".

- 8.2 Proposed dates and ports for embarkation/disembarkation:

Embarkation: Fraiseburgh (UK) - Dates to be confirmed

Disembarkation: Fraiseburgh (UK) - Dates to be confirmed

9. Access to data, samples and research results

- 9.1 Expected dates of submission to **Iceland** of preliminary reports which should include the expected dates of submission of the final results:

September 2023

- 9.2 Proposed means for access by **Iceland** to data and samples:

Email contact with Scientist in Charge (Fabio.campanella@cefas.co.uk)

- 9.3 Proposed means to provide **Iceland** with assessment of data, samples and research results or provide assistance in their assessment or interpretation:

Email contact with Scientist in Charge (Fabio.campanella@cefas.co.uk)

- 9.4 Proposed means of making research results internationally available:

Data will be made available after quality control at the relevant ICES Working Groups (WGIPS)

FCO SUMMARY FORM

COASTAL STATE

Iceland

**COMPLETE THE FOLLOWING TABLE -
SEPARATE PAGE FOR EACH COASTAL STATE**

PORT CALL: NONE

DATES:

15/04/2023 – 31/05/2023

INDICATE "YES" OR "NO"

<u>LIST SCIENTIFIC WORK BY FUNCTION</u> eg: MAGNETOMETRY: GRAVITY DIVING : SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING: ECHO SOUNDING : WATER SAMPLING U/W T.V.: MOORED INSTRUMENTS : TOWED INSTRUMENTS	WATER COLUMN INCLUDING SEDIMENT SAMPLING OF THE SEABED	FISHERIES RESEARCH WITHIN FISHING LIMITS	RESEARCH CONCERNING THE NATURAL RESOURCES OF THE CONTINENTAL SHELF OR ITS PHYSICAL CHARACTERISTICS	DISTANCE FROM COAST:		
				WITHIN 12 NMS	BETWEEN 12-200 NMS	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
ECHO SOUNDING	Yes	Yes	Yes	Yes	Yes	No
TRAWLING	Yes	Yes	Yes	Yes	Yes	No
CTD SAMPLING	Yes	Yes	Yes	Yes	Yes	No
Zooplankton sampling	Yes	Yes	Yes	Yes	Yes	No

Fabio Campanella

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(On behalf of the Principal Scientist)

Dated: 02 November 2022

NB: IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES/AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED THE COASTAL STATE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY.